STUDENT RESPONSIBILITY

Each student is personally responsible for completing all requirements established for his or her degree by the University, college, and department. It is the student's responsibility to inform himself or herself of these requirements. A student's adviser may not assume these responsibilities. Any substitution, waiver, or exemption from any established requirement or academic standard may be accomplished only with the approval of the student's dean.

This General Catalog represents a flexible program of the current educational plans, offerings, and requirements which may be altered from time to time to carry out the purposes and objectives of the University. The provisions of this publication do not constitute an offer for a contract which may be accepted by students through registration and enrollment in the University. The University reserves the right to change any provision, offering, or requirement at any time within the student's period of study at the University. The University further reserves the right to require a student to withdraw from the University for cause at any time.

LSU assures equal opportunity for all qualified persons without regard to race, color, religion, sex, national origin, age, handicap, marital status, or veteran's status in the admission to, participation in, and treatment or employment in the programs and activities which the University operates. Anyone having questions or complaints regarding equal opportunity at LSU should contact the Office of Equal Opportunity Programs, 244 Thomas Boyd Hall, LSU, Baton Rouge, Louisiana 70803; telephone (504) 388-6654. Persons believing they have been discriminated against contrary to federal law are entitled to make an inquiry or file a complaint with the U.S. Equal Employment Opportunity Commission, 601 South Street, New Orleans, Louisiana 70130; or the U.S. Department of Education, Office of Civil Rights, 1200 Main Tower Building, Dallas, Texas 75202.
The LSU catalog and bulletin series (ISSN 0744-4613) is published by Louisiana State University and Agricultural and Mechanical College four times a year: once in May, once in June, once in July, and once in August. Second class postage paid at Baton Rouge 70803. Publishing office is LSU Publications, E204 Pleasant Hall, Baton Rouge, Louisiana 70803. Copies of this catalog may be obtained from—and change of address, undeliverable copies, and other mail sent to—Office of Student Records and Registration, 112 Thomas Boyd Hall, LSU, Baton Rouge, Louisiana 70803. Louisiana State University and Agricultural and Mechanical College is accredited by the Southern Association of Colleges and Schools.

Effective date of this catalog: Fall 1985

Price: $2 per copy.
This catalog was compiled by Sandra Walker, Office of Academic Affairs. It was edited and produced by LSU Publications—Libby Paxton, Assistant Head; Maradee Cryer, Art Director; Margaret Madere and Veni Harlan, Designers; Jim Zietz, Photography Coordinator; and Prather Warren, Photographer. Photographs taken by the Gumbo staff were also used.

The cover illustration was done by Eric Bennett as a part of the requirements for ART 3564, "Illustration for the Graphic Designer," instructor, Peter Millward; cover design by Margaret Madere.
Contents

Academic Calendar, 1985-86 ................................................................. 4
Campus Map ....................................................................................... 8
Glossary ............................................................................................... 10
Organization Chart ............................................................................ 12
The University ..................................................................................... 15
University Services .............................................................................. 21
Admission to the University ................................................................. 29
Fees, Expenses, Scholarships, and Financial Aid ................................. 37
Student Services and Organizations ...................................................... 57
University Regulations ........................................................................ 65
LSU-Southern University Cooperative Programs .................................. 79
College of Agriculture .......................................................................... 83
College of Arts and Sciences ................................................................. 117
College of Basic Sciences .................................................................. 151
College of Business Administration ...................................................... 165
Division of Continuing Education ......................................................... 179
College of Design ............................................................................... 183
College of Education .......................................................................... 195
College of Engineering ...................................................................... 219
General College ............................................................................... 235
Graduate, Professional, and Research Units ......................................... 245
Junior Division .................................................................................... 259
School of Music .................................................................................. 265
Reserve Officers Training Corps ........................................................... 273
Courses of Instruction ......................................................................... 277
Administration ................................................................................... 421
Faculty ............................................................................................... 425
Index .................................................................................................. 475
Where to Write ..................................................................................... inside back cover
# Academic Calendar, 1985-86

## FALL SEMESTER

### August

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Residence halls open for women students*</td>
</tr>
<tr>
<td>18</td>
<td>Residence halls open for men students*</td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Orientation for beginning students</td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Classes begin</td>
</tr>
<tr>
<td>27</td>
<td>Registration</td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Labor Day holiday begins at 10:00 p.m.</td>
</tr>
</tbody>
</table>

### September

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Classes resume at 7:30 a.m.</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Final date for adding courses for credit and making section changes</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

### October

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Final date for applying for undergraduate degrees to be awarded at fall commencement</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Midsemester examination period</td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

### November

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

*Closing dates for residence halls will be announced when the final examination schedule is issued.*
### December

2. Classes resume at 7:30 a.m.
2-6. Dead week—no meetings, social activities, athletic events, or other extracurricular activities which require student participation will be scheduled
6. Classes end
7. Concentrated study day
9-14. Final examination period
18. Fall commencement, 9:30 a.m.

### SPRING SEMESTER

#### January 1986

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Residence halls open*</td>
</tr>
<tr>
<td>14</td>
<td>Orientation for beginning students</td>
</tr>
<tr>
<td>15-17</td>
<td>Registration</td>
</tr>
<tr>
<td>20</td>
<td>Classes begin</td>
</tr>
<tr>
<td>27</td>
<td>Final date for adding courses for credit and making section changes</td>
</tr>
</tbody>
</table>

#### February

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Final date for dropping courses without receiving a grade of “W”</td>
</tr>
<tr>
<td>7</td>
<td>Mardi Gras holidays begin at 10:00 p.m.</td>
</tr>
<tr>
<td>12</td>
<td>Classes resume at 7:30 a.m.</td>
</tr>
<tr>
<td>21</td>
<td>Final date for applying for undergraduate degrees to be awarded at spring commencement</td>
</tr>
</tbody>
</table>

#### March

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14</td>
<td>Midsemester examination period</td>
</tr>
<tr>
<td>18</td>
<td>Midsemester grades due in Office of Student Records and Registration</td>
</tr>
<tr>
<td>21</td>
<td>Spring vacation begins at 10:00 p.m.</td>
</tr>
<tr>
<td>22</td>
<td>Residence halls close for spring vacation</td>
</tr>
<tr>
<td>31</td>
<td>Residence halls open after spring vacation</td>
</tr>
</tbody>
</table>

#### April

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Classes resume at 7:30 a.m.</td>
</tr>
<tr>
<td>7-11</td>
<td>Preregistration for summer term and fall semester</td>
</tr>
<tr>
<td>11</td>
<td>Final date for resigning from the University and/or dropping courses</td>
</tr>
</tbody>
</table>

#### May

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>Dead week—no meetings, social activities, athletic events, or other extracurricular activities which require student participation will be scheduled</td>
</tr>
<tr>
<td>9</td>
<td>Classes end</td>
</tr>
<tr>
<td>10</td>
<td>Concentrated study day</td>
</tr>
<tr>
<td>12-17</td>
<td>Final examination period</td>
</tr>
<tr>
<td>21</td>
<td>Spring commencement, 9:30 a.m.</td>
</tr>
</tbody>
</table>

---

*Closing dates for residence halls will be announced when the final examination schedule is issued.*
Tentative Academic Calendar, 1986-87

SUMMER TERM

June

1986
8  Residence halls open*
9  Orientation for beginning students
10-11 Registration
12  Classes begin
17  Final date for adding courses for credit and making section changes
20  Final date for applying for undergraduate degrees to be awarded at summer commencement
24  Final date for dropping courses without receiving a grade of "W"

July

3  Independence Day holiday begins at 10:00 p.m.
5  Classes resume at 7:30 a.m.
7-9  Midterm examination period
11  Midterm grades due in Office of Student Records and Registration
14-17 Preregistration for fall semester
18  Final date for resigning from the University and/or dropping courses
31  Classes end

August

1-4  Final examination period
7  Summer commencement, 9:30 a.m.

Tentative Academic Calendar, 1986-87

FALL SEMESTER, 1986

Orientation for beginning students.................................................................August 19
Registration.................................................................................................August 20-22
Classes begin...............................................................................................August 25
Holiday (Labor Day)......................................................................................September 1
Holiday (Thanksgiving).............................................................................November 27-28
Classes end.................................................................................................December 5
Concentrated study day..............................................................................December 6
Final examination period............................................................................December 8-13
Fall commencement, 9:30 a.m.................................................................December 17

*Closing dates for residence halls will be announced when the final examination schedule is issued.
SPRING SEMESTER, 1987

Orientation for beginning students ......................................................... January 13
Registration ............................................................................................. January 14-16
Classes begin ........................................................................................... January 19
Holiday (Mardi Gras) .............................................................................. March 2-3
Spring vacation begins at 10:00 p.m ..................................................... April 10
Classes resume at 7:30 a.m ................................................................. April 21
Classes end .............................................................................................. May 8
Concentrated study day ......................................................................... May 9
Final examination period ....................................................................... May 11-16
Spring commencement, 9:30 a.m ......................................................... May 20

SUMMER TERM, 1987

Orientation for beginning students ......................................................... June 8
Registration ............................................................................................. June 9-10
Classes begin .......................................................................................... June 11
Holiday (Independence Day) ................................................................. July 6
Classes end ............................................................................................... July 30
Final examination period ...................................................................... July 31-August 3
Summer commencement, 9:30 a.m ..................................................... August 6
Glossary

Academic Load: The total number of semester hours for which a student is registered in one semester or summer term.

Academic Year: The period comprised of fall and spring semesters.

Advanced Standing: A procedure by which a student not formally enrolled in a course may receive credit for the course by passing an examination.

Approved Elective: Elective which is not open to the free choice of the student.

Audit: To enroll in a course for no credit.

Colleges and Schools: The academic units of the University, administered by deans or directors and staffed by faculty members, which provide the University’s academic programs. The type of training and the degree anticipated determine the student’s choice of school or college.

Concentration: An intensive study of a subject within the major field of study.

Corequisite: A concurrent requirement; usually a course or some other condition which must be taken at the same time as another course.

Credit: (1) The recognition awarded for the successful completion of course work—credits are based on the number of times a course meets in one week during a regular semester; (2) the quantitative measure of recognition given to a course stated in semester hours.

Cumulative or Overall Average: A student’s grade-point average based on the total number of quality points earned and the total number of semester hours attempted.

Curriculum: A program of courses comprising the formal requirements for a degree in a particular field of study.

Department: The academic units of the University within colleges or schools; administered by heads or chairmen.

Elective: Course chosen by the student, as opposed to required course. The term “elective,” without a qualifier, will be understood to be a free elective, chosen by the student at his or her option from all the courses offered by the University for degree credit, with due regard for prerequisites.
Equivalent: When used in a course prerequisite (e.g., "Prereq: SOCL 2001 or equivalent"), this term means either credit in a comparable course or adequate preparation by other experience. Determination of equivalency is left to the discretion of individual departments.

Good Standing: The typical status of a student who is not on probation and is eligible to continue in or return to the University.

Grade-point Average (gpa): A measure of scholastic performance; the ratio of quality points earned to semester hours attempted.

Junior Division: Division in which all freshman students enroll. The freshman year in Junior Division and the following three years in one of the senior colleges represent the normal time required for completion of a baccalaureate degree program.

“This is Junior Division”: A publication of Junior Division.

Major: The major field of study; students will take the majority of their required courses in this area.

Matriculation: The state of being registered for credit and working toward a specific degree.

Minor: The student’s field of secondary academic emphasis.

Nonmatriculated: The state of being registered for credit but not working toward a specific degree. Both graduate and undergraduate students may register as "nonmatriculated."

Preprofessional Curriculum: A nondegree program of study in preparation for entry into a professional degree program at another institution or another division of the University; normally takes from one to three years to complete.

Prerequisite: The preliminary requirement, usually credit in another course, that must be met before a course can be taken.

Quality Point: Numerical value assigned to each letter grade from "A" to "F," when given as the final grade in a course; provides a basis for quantitative determination of a grade-point average. At LSU, "A" = 4, "B" = 3, "C" = 2, and "D" = 1 quality point.

Registration: The process by which a duly admitted student, upon payment of required fees, is enrolled in classes.

ROTC: The Reserve Officers Training Corps program.

Semester Hour: The unit by which course work is measured. The number of semester hours assigned to a course is usually determined by the number of hours the class meets per week.

Senior College: A college or school which establishes requirements for an undergraduate degree.

Student Schedule: The courses in which a student is enrolled.

Transfer Student: A student who terminates enrollment in one college or university and subsequently enrolls in this University.
The University

Louisiana State University and Agricultural and Mechanical College—the oldest and largest institution in the LSU System—exerts a major influence on the economic, social, and cultural life of the state through an extensive, multipurpose program encompassing instruction, research, and service.

The purpose of Louisiana State University* is to provide for Louisiana a comprehensive university wherein teaching, research, and service are of the highest quality. This purpose embodies two critical elements—comprehensiveness and preeminence.

LSU has been designated by the Louisiana Board of Regents as the state’s only comprehensive university. This comprehensiveness is recognized nationally by LSU’s classification as a research university (in the Carnegie Commission taxonomy) and by its unusual status as one of only nine universities in the country designated as both a land grant and sea grant institution. Its instructional programs include approximately 250 curricula eventuating in both undergraduate and graduate/professional degrees. In the agricultural disciplines, the University’s instructional effort is articulated with the noninstructional specialized missions of the LSU Agricultural Center through over 200 joint faculty appointments and funding and research opportunities for graduate students with the Louisiana Agricultural Experiment Station. In addition to those degree programs offered on its own campus, LSU maintains resident centers at System campuses in Alexandria and Eunice.

Preeminence, the second element of LSU’s purpose, was promulgated by the Board of Supervisors in 1980 in “Quest for Quality—A Charter for the 1980’s.” This document clearly sets forth LSU’s aim to build upon its comprehensive foundation and to emerge as one of the nation’s and world’s distinguished centers of learning, teaching, research, and service. These dual objectives imply that LSU must capitalize on and respond to the unique opportunities afforded by its Louisiana constituency. But these objectives also imply broader responsibilities—to the nation and to the world.

Hence, LSU’s goals require (a) recruiting and retaining faculty, staff, and students of the highest calibre; (b) providing an environment that allows students and faculty to develop their capabilities to the fullest; (c) continuing emphasis on graduate programs and continued strengthening of undergraduate curricula; and (d) developing new frontiers of knowledge through research and scholarly activity.

*All references in this catalog to “Louisiana State University,” “LSU,” or “the University” are to be understood as meaning the institution in Baton Rouge (whose official full name is Louisiana State University and Agricultural and Mechanical College). Any reference to the LSU System or to any other institution(s) within the System is clearly indicated.
PHYSICAL FACILITIES

The University is located on a 1,944-acre tract of land—a former plantation site—on the southern edge of the city, bordering on the Mississippi River. The University’s more than 190 principal buildings are grouped on a 300-acre plateau that constitutes the main part of the campus.

Original architectural treatment on the campus was based on the Renaissance domestic style of northern Italy (tan stucco walls, red tile roofs), with buildings that house most of the classrooms and administrative offices grouped around a double quadrangle and connected by colonnaded passageways. Architects for more recent campus structures have succeeded in blending contemporary design with the older style of architecture.

The city of Baton Rouge—capital of the state of Louisiana, an inland port, and a major petrochemical center—has a metropolitan-area population of more than 500,000. According to history, the city’s name is derived from a tall cypress tree which once stood at the present site of Louisiana’s Old State Capitol marking the boundary between the hunting grounds of the Houma and the Bayou Goula Indians. The early French explorers called the tree le baton rouge (the red stick). The city’s historic warehouse district, located on the Mississippi River, has recently been renovated and now houses “Catfish Town”—a collection of shops, offices, and restaurants—as well as the U.S.S. Kidd and a riverside plaza with a modern sculpture depicting le baton rouge.

Geographically, Baton Rouge is the center of South Louisiana’s main cultural and recreational attractions. New Orleans is about 80 miles to the southeast. Less than an hour’s drive north lie the gently rolling hills of the antebellum country of the Feliciana parishes. The fabled French-Louisiana country of bayous, marshes, and lakes—about an hour’s drive from the campus—offers opportunities for fishing, hunting, and other recreation.

HISTORY

Louisiana State University and Agricultural and Mechanical College had its origin in certain grants of land made by the United States government in 1806, 1811, and 1827 for the use of a seminary of learning. In 1855, the Legislature founded the Louisiana State Seminary of Learning and Military Academy, locating it at Pineville, Louisiana. The institution was opened January 2, 1860, with Col. William Tecumseh Sherman as Superintendent. Its exercises were suspended June 30, 1861, because of the Civil War. It was reopened on April 1, 1862, with Col. William E. M. Linfield as acting superintendent, who was succeeded in office, April 1, 1863, by Professor William A. Seay. It was again closed on April 23, 1863, due to the invasion of the Red River Valley by the Federal Army. The losses sustained by the institution during the war were heavy.

The Seminary reopened October 2, 1865, with Col. David F. Boyd as Superintendent. The college building was burned October 15, 1869, and on November 1, 1869, the institution resumed its exercises in Baton Rouge, where it has since remained.

In 1870, the name of the institution was changed to Louisiana State University.

Louisiana State Agricultural and Mechanical College was established by an Act of the Legislature, approved April 7, 1874, to carry out the United States Act of 1862, granting lands for this purpose. It temporarily opened in New Orleans, June 1, 1874, where it remained until it merged with Louisiana State University. On January 2, 1877, the Act, as passed by the Legislature in 1876, uniting the State University and the Agricultural and Mechanical College, and locating them temporarily at Baton Rouge, became a law; it was duly promulgated June 1, 1877. The two state institutions began their first joint session on October 5, 1877, under the name and legal title of the Louisiana State University and Agricultural and Mechanical College—the name it retains today.

First Baton Rouge home of LSU was in the quarters of the School for the Deaf. In 1886, the federal garrison grounds (now the site of the state capitol) were formally declared the domicile of the University. Land for the present campus was purchased in 1918, construction was begun in 1922, and the move was begun in 1925; it was not, however, until 1932 that the move was finally completed. Formal dedication of the present campus took place on April 30, 1926.

After some years of enrollment fluctuation, student numbers began a steady increase, new programs were added, curricula and faculty were expanded, and a true state university emerged.

The major academic divisions were founded as follows: Law School, 1906; the Colleges of Agriculture, Arts and Sciences, Education, and Engineering, 1908; the Graduate School, 1909; the Division of Continuing Education, 1924; the College of Business Administration, 1928; the Graduate School of Library Science (renamed the School of Library and Information Science in 1981), the College of Chemistry and Physics (renamed the College of Basic Sciences in 1982), and the School of Music, 1931; Junior Division, 1933; the School of Social Welfare (renamed the School of Social Work in 1983), 1937; University College (incorporated into General College in 1974),
1951; the School of Environmental Design (renamed the College of Design in 1979), 1965; the School of Veterinary Medicine, 1968; the Graduate Division of Education (merged with the Graduate School in 1982), 1970; and General College, 1974. In 1977, the Hebert Law Center (formerly the Law School) was made an autonomous division of the LSU System.

In 1978, LSU was named a sea grant college—the 13th university in the nation to be so designated and the highest classification attainable in the program.

**THE LSU SYSTEM**

By the 1960's LSU was no longer just a single university. The LSU System, composed of eight institutions on ten campuses in five cities, was established by an act of the Louisiana legislature on February 6, 1965. Other components of the System are the LSU Agricultural Center (headquartered in Baton Rouge and including the Louisiana Agricultural Experiment Station and the Louisiana Cooperative Extension Service); the Hebert Law Center, Baton Rouge; the LSU Medical Center (with two campuses in New Orleans and one in Shreveport and including the Schools of Allied Health Professions, Medicine, Dentistry, and Nursing, as well as a Graduate School); the University of New Orleans and LSU in Shreveport, both four-year institutions; LSU at Alexandria and LSU at Eunice, both two-year institutions.

The governing body of the LSU System is the Board of Supervisors, composed of 18 members. Chief administrative officers of the University System are the President, Vice-President for Administration, and Vice-President for Academic Affairs.

**ORGANIZATION**

The chief administrative officer of LSU is the Chancellor; directly responsible to the Chancellor are the Vice-Chancellor for Academic Affairs and Provost, the Vice-Chancellor for Administrative Services, the Vice-Chancellor for Business Affairs, the Vice-Chancellor for Research, the Vice-Chancellor for Student Affairs, the Vice-Chancellor for University Relations and Development, the Athletic Director, and the Director of Budget and Planning and Comptroller.

The academic organization consists of the following undergraduate divisions: the College of Agriculture, the College of Arts and Sciences, the College of Basic Sciences, the College of Business Administration, the College of Design, the College of Education, the College of Engineering, General College, Junior Division, and the School of Music.

The Division of Continuing Education offers instruction for persons who are not in residence on any LSU campus through off-campus classes, correspondence-study courses, shor courses, conferences, seminars, and other specialized instructional programs.

Post-baccalaureate and professional divisions at LSU are the Graduate School, School of Library and Information Science, School of Social Work, School of Veterinary Medicine, and Center for Wetland Resources.

For a more-detailed outline of the organization of LSU see the “Organization Chart” on page 12 of this catalog.

**FINANCES**

As a state-supported institution, LSU receives most of its funds from legislative appropriations. The budget for 1984-85, including the School of Veterinary Medicine, totaled $210,982,922. These funds, expressed in millions of dollars, came from:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State appropriations</td>
<td>$104.1</td>
<td>49.37%</td>
</tr>
<tr>
<td>Federal appropriations</td>
<td>0.1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Student fees</td>
<td>31.9</td>
<td>15.10%</td>
</tr>
<tr>
<td>Sales and services (educational)</td>
<td>3.2</td>
<td>1.50%</td>
</tr>
<tr>
<td>Sales and services (noneducational)</td>
<td>12.5</td>
<td>5.92%</td>
</tr>
<tr>
<td>Sales and services (auxiliary enterprises)</td>
<td>59.2</td>
<td>28.07%</td>
</tr>
</tbody>
</table>

The 1984-85 LSU campus dollar was budgeted for:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>29.03¢</td>
</tr>
<tr>
<td>Research</td>
<td>8.97¢</td>
</tr>
<tr>
<td>Public service</td>
<td>3.36¢</td>
</tr>
<tr>
<td>Academic support</td>
<td>8.81¢</td>
</tr>
<tr>
<td>Student services</td>
<td>1.86¢</td>
</tr>
<tr>
<td>Institutional support</td>
<td>7.67¢</td>
</tr>
</tbody>
</table>
Operations and maintenance ......................................................... 9.43¢
Student aid .................................................................................. 2.78¢
Debt service and transfers ............................................................ 0.02¢
Auxiliary enterprises .................................................................. 28.07¢

Not included in the above is approximately $23 million of grant and contract funds which are restricted in their use. These funds are received from federal, state, and private sources. Capital construction for auxiliary operations (residence halls, food service, LSU Union, Athletic Department) is funded through the issuance of bonds liquidated through the operation of such units. General-use buildings are usually funded by the Legislature through the Office of Facility Planning and Control of the state government.

FACULTY

The University has approximately 1,250 full-time and part-time faculty members. The Boyd Professorship—named in honor of two early University presidents, David and Thomas Boyd—is the highest professorial rank awarded. The William A. Read Professorship of English Literature and the Nicholson Professorship of Mathematics are comparable to the distinguished Boyd Professorships. Other awards for outstanding achievement are the LSU Foundation Professorships, Alumni Professorships, Campanile Charities Professorships, Distinguished Faculty Fellowships, and the annual Distinguished Research Master Award. Recognized authorities in various fields are appointed as consulting professors or visiting lecturers.

DEGREES OFFERED

The Louisiana Board of Regents, in its "Master Plan for Higher Education," has designated LSU as Louisiana's single "comprehensive university." In accordance with this plan, LSU functions as a full-scale university, with increasing emphasis on senior division, graduate, and professional programs. Accredited by the Southern Association of Colleges and Schools, the University offers a great number and variety of courses of study. Bachelor's degrees are offered in 134 major fields, master's degrees are offered in 78 major fields, and doctoral degrees are offered in 49 major fields. Two degrees are offered through the University's two professional schools.

First Degrees

<table>
<thead>
<tr>
<th>College of Agriculture</th>
<th>College of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science</td>
<td>Bachelor of Fine Arts</td>
</tr>
<tr>
<td>Bachelor of Science in Forestry</td>
<td>Bachelor of Music Education</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Arts and Sciences</th>
<th>College of Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Arts</td>
<td>Bachelor of Engineering Technology</td>
</tr>
<tr>
<td>Bachelor of Arts in Journalism</td>
<td>Bachelor of Science in Agricultural Engineering</td>
</tr>
<tr>
<td>Bachelor of Science</td>
<td>Bachelor of Science in Chemical Engineering</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Civil Engineering</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Electrical Engineering</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Engineering Science</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Industrial Engineering</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Mechanical Engineering</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Petroleum Engineering</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Sugar Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Business Administration</th>
<th>General College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science</td>
<td>Bachelor of Criminal Justice</td>
</tr>
<tr>
<td></td>
<td>Bachelor of General Studies</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Construction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College of Design</th>
<th>School of Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Architecture</td>
<td>Bachelor of Music</td>
</tr>
<tr>
<td>Bachelor of Fine Arts</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Interior Design</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Landscape Architecture</td>
<td></td>
</tr>
</tbody>
</table>
### Graduate School
- Master of Applied Statistics
- Master of Arts
- Master of Arts in Humanities
- Master of Business Administration
- Master of Criminal Justice
- Master of Education
- Master of Engineering
- Master of Fine Arts
- Master of Forestry
- Master of Journalism
- Master of Landscape Architecture
- Master of Library Science
- Master of Music
- Master of Music Education
- Master of Natural Sciences
- Master of Public Administration
- Master of Science
- Master of Science in Agricultural Engineering
- Master of Science in Chemical Engineering
- Master of Science in Civil Engineering

### Professional Degrees
- Master of Science in Electrical Engineering
- Master of Science in Engineering Science
- Master of Science in Hydraulic Engineering
- Master of Science in Industrial Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Nuclear Engineering
- Master of Science in Petroleum Engineering
- Master of Science in Systems Science
- Certificate of Education Specialist
- Doctor of Education
- Doctor of Musical Arts
- Doctor of Philosophy

### School of Social Work
- Master of Social Work

### School of Veterinary Medicine
- Doctor of Veterinary Medicine
University libraries at LSU contained approximately 2,095,683 volumes as of June 30, 1984. Special collections in the Middleton Library include the holdings of the Louisiana and Rare Book Rooms, the E.A. McIlhenny Natural History Collection, and the Department of Archives and Manuscripts, which contains over 4 million items. The Middleton Library is also a depository for state and U.S. government publications and United Nations documents. Other features of the Middleton Library are listening rooms with an extensive collection of recordings and a newspaper and microform collection.

Materials in the fields of chemistry and chemical engineering are located in the Chemistry Library, Williams Hall. The CEBA Reading Room, 2301 CEBA Building, contains a School of Banking Collection, some journals, and reserve materials for business courses above the 3000 level. The School of Library and Information Science Library is located in Coates Hall.

A convenient, open-shelf arrangement of the Middleton Library's main collection makes material completely accessible with assistance offered through a centralized reference service, a central periodicals reading room, and a government documents/business administration reference desk. The Middleton Library maintains a photoduplication department and a copy service where copies of books, articles, or newspapers may be obtained. Self-service photocopying machines are also available.

When material not found in the Middleton Library is needed for research, faculty, staff, and graduate students may borrow it through Interlibrary Loan.

The Middleton Library offers many services, such as an automated literature search service known as BLISS. More information concerning this and other library services may be obtained from the Central Reference Department.

The Middleton Library contains various collections of materials pertaining to the needs of the University. Especially large subject collections may be found on Louisiana, the history of the lower Mississippi valley, Abraham Lincoln, romance languages and literatures, sugar culture and technology, Southern history, petroleum engineering, plant pathology, micropaleontology, ornithology, and various aspects of crawfish life, biology, and culture.
The Middleton Library's holdings have been greatly enriched through the acquisition of several private collections. These include the David S. Blondheim Collection of about 4000 books and pamphlets on the dialects of France, which forms an important part of the romance-language collection; the Richard T. Ely Collection on economics and related subjects, containing over 7500 volumes, 10,000 pamphlets, and several thousand manuscripts, periodicals, and documents, among which are rare deeds illustrating land tenure in England from 1500 to the present; and the Jules M. Burguières Sugar Collection, a fine collection on sugar culture and sugar technology.

The Warren L. Jones Lincoln Collection of approximately 5000 items includes all of the great Lincoln books and pamphlets, special editions of some of the outstanding works, and many publications contemporaneous with Lincoln's own lifetime.

The E.A. McIlhenny Collection of natural history classics was founded in memory of Edward Avery McIlhenny. The original ornithological collection has now been greatly expanded to cover the entire field of natural history. The collection is open to the public and University community alike, and as a research source its value is immense.

The Troy H. Middleton Collection of Memorabilia includes various items depicting General Middleton's life from boyhood through his retirement in 1962 as president of LSU. A book collection on military history and strategy is also contained within this special room.

The Louisiana Room contains an outstanding research and reference collection devoted to printed materials relating to Louisiana. Included are rare and early imprints pertaining to exploration and colonization of the Lower Mississippi Valley, books on Louisiana subjects, books by Louisianians, journals, maps, sheet music, parish and municipal documents, and an extensive vertical file of clippings of numerous Louisiana subjects. The Louisiana Room is a complete historical depository for Louisiana state documents.

The Rare Book Room contains books and pamphlets from all fields of knowledge and human experience except that of natural history. There are representative works ranging from incunabula to publications of modern special presses. Among its largest special collections are the Bruce Rogers Imprints Collection, the Limited Editions Club Books, and the Richard T. Ely Collection. Other notable groups of items include facsimiles of codices, books published in English before 1720, Confederate imprints, major works on North American Indians, books with fore-edge paintings, and modern first editions.

The research collection of the Department of Archives and Manuscripts—consisting of over 4 million items and volumes of historical manuscripts, University archives, and related unpublished materials—provides a record of contemporary life in the Lower Mississippi Valley for over 200 years. The collection is an important body of primary source material for advanced research in political and social history, cultural geography, agriculture, education, American and Louisiana French literature, speech, sociology, music and other arts, business and economics, steamboat transportation, and other fields in the social sciences and humanities. The collection consists of personal, professional, business, and organizational records, including letters, diaries and other writings, account books, scrapbooks, historical photographs, ephemera, and oral history interviews; personal and official papers of University presidents and related University archives; and unpublished inventories and research materials of two former federal archival projects in Louisiana.

The Middleton Library’s newspaper collection also contains valuable research materials, especially in Louisiana papers.

The documents collection is extensive. In 1907, the Middleton Library was made an official depository for publications of the federal government; it has a substantial portion of the documents issued both before and after that time. In 1964, the Middleton Library was named one of the two regional depositories in the state, thereby increasing the scope of publications received. Since 1946, the Middleton Library has been a depository for publications of the United Nations and the Department of Energy (formerly the Atomic Energy Commission). As a depository for National Aeronautics and Space Administration reports, the Middleton Library has thousands of scientific reports on microfilm. In 1981, the Library was designated an official depository for U.S. government patents.

LSU PRESS

Founded in 1935, the LSU Press is one of the oldest and largest presses of its kind in the South and one of the outstanding scholarly publishers in the country. Like other university presses, it exists primarily to publish works of scholarship, and its purposes are, therefore, essentially academic.

The LSU Press publishes approximately 60 books each year. The final decision to publish a manuscript rests with the Faculty Senate University Press Committee, composed of eight faculty
members. Over the years, the books which the Press has published have won many important awards, including the Pulitzer Prize in fiction. It has especially earned an outstanding reputation in the fields of southern literature, biography, and history.

THE SOUTHERN REVIEW

The Southern Review, now in its second series, is an internationally known literary magazine under the coeditorship of Professors James Olney and Lewis P. Simpson. Founded in 1935 by Cleanth Brooks, Robert Penn Warren, Albert Erskine, and Charles Pipkin, The Southern Review publishes poetry, fiction, book reviews, and critical articles with emphasis on modern literature and the literature and culture of the South. Issues appear in January, April, July, and October. Subscriptions are $9 for one year. Manuscripts and subscription orders should be addressed to The Southern Review, 43 Allen Hall, LSU, Baton Rouge, Louisiana 70803.

ARTIST AND LECTURE SERIES

Some of the established series at LSU are the Summer Festival of Arts, the Festival of Contemporary Music, the Thomas Austin Kirby Lectures in the Humanities, the Walter Lynwood Fleming Lectures in Southern History, the William A. Lawrence Lecture, the Edward Douglass White Lectures, the R. J. Russell Lectures, the Hubert H. Humphrey Lectureship in Public Affairs, the Freeport Chemical Company Lectureship in Chemical Engineering, the L.J. Wilbert Memorial Lecture in Geology, the Giles Wilkeson Gray Lecture Series in Speech, and the Performing Arts Series.

ORGANIZATION FOR TROPICAL STUDIES

The Organization for Tropical Studies (OTS), a nonprofit scientific and educational corporation formed in 1963 by researchers at more than 25 eminent American educational institutions, including LSU, is dedicated to developing educational and research programs in tropical science. Emphasis is on tropical biology and closely allied fields. LSU graduate students are eligible to apply for the eight-week field courses offered by OTS each winter and summer. OTS courses and research activities are centered in Costa Rica. Central headquarters are in San José in association with the Universidad de Costa Rica; several field stations are located throughout the countryside. OTS offers its facilities, equipment, and staff for support of meritorious programs of tropical research. Limited funds are available through OTS for qualified faculty and graduate participants to initiate projects in tropical research.

Additional information regarding the program and application forms for participation are available from LSU's Center for Latin American Affairs, 146 Lockett Hall, or from the Organization for Tropical Studies, North American Office, P.O. Box DM, Duke Station, Duke University, Durham, North Carolina 27706 (Central American address is Organization for Tropical Studies, Central American Office, Apartado 16, Universidad de Costa Rica, San José, Costa Rica, C.A.).

OAK RIDGE ASSOCIATED UNIVERSITIES

LSU is one of the sponsors of Oak Ridge (Tennessee) Associated Universities (ORAU), a nonprofit education and research management corporation of over 50 colleges and universities. ORAU, which was established in 1946, conducts programs of research, education, information, and human resource development for a variety of government and private organizations. It is particularly interested in energy, health, and the environment.

Among ORAU's activities are competitive programs to bring undergraduates, graduate students, and faculty members to work on research problems at the facilities of the U.S. Department of Energy (DOE). Participants are selected by ORAU and the staffs of the facilities participating in the ORAU programs. The University Programs Division, the Institute for Energy Analysis, the Manpower Education, Research, and Training Division, the Medical and Health Sciences Division, the University Isotope Separator, the Energy Education Division, and its other programs are also open to qualified students and faculty members.

The ORAU Undergraduate Research Training Program offers juniors majoring in the sciences, engineering, and mathematics an opportunity to spend the summer working in directed research programs at one of the participating sites. The ORAU Laboratory Graduate Participation Pro-
program enables a candidate for an advanced degree, upon completion of all residence requirements except research, to work toward completion of a research problem and preparation of the thesis or dissertation at one of the participating sites. LSU faculty members, under the ORAU Faculty Research Participation Program, can go to a DOE facility for varying periods up to three months for advanced study and research. It is also possible to combine a sabbatical with a longer appointment.

Stipends are available. Student stipends are at fixed rates that change from time to time. Faculty stipends are individually negotiated, based upon the faculty member’s current University salary.

Copies of bulletins and announcements of the ORAU-DOE university-laboratory programs are available from Dr. John C. Courtney, who serves as the ORAU Councilor for the LSU System, or Dr. Edward N. Lambremont, who serves as a member of the Board of Directors. Bulletins also may be obtained from the University Programs Office, Oak Ridge Associated Universities, Inc., Box 117, Oak Ridge, Tennessee 37831.

NUCLEAR SCIENCE CENTER

The Nuclear Science Center, originally established as a service facility for the entire University, now has additional roles in research and instruction. Specialized radiation detection and measuring equipment and laboratories accommodate many educational and research activities using nuclear energy technology. Facilities available for experimentation include a variety of ionization, proportional, Geiger-Mueller, semi-conductor, and scintillation detectors with the appropriate power supplies, amplifiers, and scalers; automatic liquid scintillation spectrometers; multichannel gamma spectrometers; automatic gamma counter; a neutron generator; x-ray machines; a kilocurie cobalt-60 pool irradiator; and equipment for nondestructive testing and radiotracer applications. Field studies using the center’s radioecology field laboratory may be arranged.

University personnel must contact the campus Radiation Safety Officer in the Nuclear Science Center before working with radioisotopes or radiation-producing devices on LSU property.

SYSTEM NETWORK COMPUTER CENTER

The System Network Computer Center (SNCC) provides computer resources for instruction, research, and administrative data processing. The staff conducts seminars, maintains a broad selection of software, consults with center clients, assists with and promotes the use of microcomputers and data communications, and manages distributed computer centers.

Computing supported by SNCC includes microcomputers, superminicomputers, terminals, three major I/O rooms, and data communications. An IBM 3081 24 megabyte mainframe computer supported by the MVS/TSO operating system is used for research, administrative data processing, and instruction. An IBM 3033 16 megabyte machine supported by the VM/CMS operating system and a Data General MV/10000 are used predominantly for interactive student support.

MUSEUMS

LSU Museum Complex

The Anglo-American Art Museum, the Museum of Geoscience, and the Museum of Natural Science form the LSU Museum Complex, the purposes of which are research, enrichment of various academic programs, and public service.

Anglo-American Art Museum

The Anglo-American Art Museum, located in Memorial Tower, houses the University’s permanent fine arts collection and shows the cultural relationship between the United States and Great Britain. The museum contains original period rooms from England and America representing the early 17th through the mid-19th centuries, as well as galleries for temporary exhibitions. In addition to the period rooms, there is a strong painting, print, and drawing collection which includes works by Hogarth, Gainsborough, Reynolds, Benjamin West, and Rembrandt Peale, and some of the contemporary masters. The museum’s collection of the graphic works of Caroline W. Durieux, internationally recognized printmaker, is the most comprehensive in existence. The museum also houses outstanding collections of New Orleans-made silverware, Newcomb pottery,
and other crafts made in New Orleans as well as early oil and watercolor paintings depicting south Louisiana subjects, especially Baton Rouge area views.

**Museum of Geoscience**

The Museum of Geoscience, located in the Geology Building, contains the most extensive archaeological and geological collections in Louisiana. Research, teaching, and display collections include more than one and one quarter million items.

The Division of Anthropology and Geography curates archaeological collections including over one million lots from 1800 sites in Louisiana and many other sites in the Gulf Coast and Caribbean regions. The museum conducts a continuing program of archaeological site excavations. The ethnological inventory includes material from North and South America, Africa, Australia, Oceania, Asia, and the Arctic. The Chitimacha Indian basketry collection is unmatched elsewhere.

The Division of Paleontology and Geology has large collections of fossils, rock samples, minerals, and well cores from the Gulf Coast region, Mexico, Central and South America, the Caribbean Islands, and Europe. The H. V. Howe Type Collection of fossil ostracoda and the H. B. Stenzel Collection of fossil oysters are among the best of their kind in the world.

Museum displays include the Louisiana Indian Room, displays on evolution, a Louisiana mastodon, rocks and minerals, dinosaur tracks, and a fifteen-case "Introduction to Geology" sequence. Development of a display featuring a skeletal cast of the carnivorous dinosaur *Allosaurus* is under way.

The museum is a member of the American Association of Museums and the Louisiana Association of Museums. It is an associate member of the Association of Science-Technology Centers. The Museum of Geoscience Associates organization supports museum activities and provides lectures and field trips for members.

**Museum of Natural Science**

The Museum of Natural Science, located in Foster Hall, is open daily to the general public. The museum's exhibits consist of nine major dioramas that depict with meticulous accuracy the flora and fauna of selected scenes from North America, representatives of the state's animal life, and visual aids that explain various biological principles.

The Museum of Zoology, the research division of the Museum of Natural Science, contains vast research collections, numbering over 300,000 cataloged specimens. The bird collections are the fourth largest university-centered assemblage in the U.S. and, for certain parts of the world, the best to be found in any museum. This repository of zoological material provides the basis for a program of organized research and serves as an important aid in teaching biological subjects.

**Other Museums**

**LSU Herbarium**

The LSU Herbarium houses the permanent, scientific collection of algae, lichens, ferns, fern allies, gymnosperms, and flowering plants. It is a research and public service facility, which is also utilized in upper-level courses; its use is arranged through the Curator, 305 Life Sciences Building. The collection includes pressed specimens and botanical materials preserved in liquid. The Gray Herbarium Card Index and other selected literature are housed in the herbarium. The aim of the herbarium is to include specimens of all species in the Louisiana region and other areas. Accession of new material includes that obtained through exchange programs with other institutions and the collections of professional biologists and amateurs. The herbarium serves as a focal point for an array of studies ranging from basic plant identification to studies of entire florals. Its main functions are to document geographic ranges, ecological habitats, and variation within species and to provide materials for teaching and research. Numerous publications are based on the collections. The herbarium, which includes specimens from as early as 1830, was established by Americus Featherman in 1869 and is one of the oldest in the South. It is listed in the world index of the International Association for Plant Taxonomy and is affiliated with the Association of Systematics Collections.

**Mycological Herbarium**

The Mycological Herbarium contains the University’s permanent collection of about 16,000 fungi which are of worldwide geographical distribution. On request, specimens are loaned to other institutions—domestic and foreign—and a research program is maintained in the field of fungus
taxonomy, with emphasis on neotropical groups. The collection is located in the Life Sciences Building.

Rural Life Museum

The Rural Life Museum, a twenty building complex, is located five miles from campus on the University's 450-acre Burden Research Plantation. The museum is divided into three areas. The Barn contains hundreds of artifacts dealing with everyday rural life dating from prehistoric times to the early twentieth century. The Working Plantation consists of a complex of buildings—commissary, overseer's house, kitchen, slave cabins, sick house, schoolhouse, blacksmith's shop, sugarhouse, and grist mill—authentically furnished to reconstruct all the major activities of life on a typical nineteenth-century working plantation. Louisiana Folk Architecture is exemplified in seven buildings—a country church, a pioneer's cabin and corncrib, potato house, shotgun house, Acadian house, and a dogtrot house—whose divergent construction traits illustrate the various cultures of Louisiana settlers.

THE ALUMNI FEDERATION

The LSU Alumni Federation, a nonprofit organization of more than 20,000 active members who are graduates or former students of LSU, is dedicated to helping the University through fund raising, world-wide chapter programs, academic recruiting, student aid, and various information programs. Active membership in the Federation is gained through an annual contribution of $15 or more to the LSU Alumni Federation. Each active member receives a subscription to the LSU Magazine, as well as discounts at the LSU Golf Course, on car rentals, and at the LSU Press. Members are eligible to participate in group travel, life insurance, and hospitalization plans; are eligible for membership in the Campus Federal Credit Union; and are entitled to limited use of some University facilities. All graduates receive a free one-year membership in the Federation. Those who contribute $100 or more are included in the LSU Leadership Legion.

Alumni gifts generated through the federation are used to support the Alumni Scholars Program and other academic scholarships of $250 to $3600 annually, graduate fellowships of $10,000 annually, alumni professorships of $5000 annually, student jobs, various other faculty awards, and seminars, workshops, and meetings.

Homecoming celebrations, reunions, campus visitations, and chapter programs throughout Louisiana and around the world are planned each year by the Alumni Federation. Alumni recognition programs include the LSU Alumnus of the Year, the University's highest alumni honor, and the LSU Alumni Hall of Distinction.

The Alumni Federation is organized on both academic and geographic lines, offering membership in local area chapters and academic affiliate chapters. The Federation also sponsors the LSU Parents Association, an organization of parents of LSU students which serves as liaison between parents and the University, and the Undergraduate Association, a student service organization. The Federation is governed by the Alumni Council which is composed of the national elected officers of the Alumni Federation Executive Committee and the elected presidents and representatives from each affiliate chapter of the Federation. The Federation Executive Committee formulates policy for consideration by the Alumni Council.

Additional information about membership in the Alumni Federation, any of its subsidiaries, or its programs may be obtained from the LSU Alumni Federation, P.O. Box 17170-A, Baton Rouge, Louisiana 70893.

LSU FOUNDATION

Chartered in January 1960, the LSU Foundation is a nonprofit, tax-exempt organization composed of 250 business, professional, and civic leaders who are concerned with the welfare and development of the LSU System. The LSU Foundation solicits financial support from businesses, industries, philanthropic foundations, and individuals to fund programs of educational excellence for the LSU System.

The LSU Foundation has provided the LSU System with many elements of academic enrichment which would not have been available otherwise. Private giving through the LSU Foundation supports professorships, distinguished lecture series, distinguished faculty fellowship awards, and staff incentive awards for nonacademic employees of LSU; scholarships and fellowships; studies in the humanities and professional fields; and acquisitions of library and museum artifacts and many other similar items which usually cannot be supported entirely with state revenues.
The LSU Foundation accepts undesignated gifts to be used in any academic area of the University where need is greatest; restricted gifts, used exactly for the purpose designated by the donor; special gifts such as objets d'art and rare library materials; and planned gifts made through wills, life insurance policies, and trusts.

Additional information about the LSU Foundation may be obtained from the Director of Development, LSU Foundation, P.O. Box 19060-B, LSU, Baton Rouge, Louisiana 70893.

PUBLIC RELATIONS

The Office of Public Relations comprises four divisions whose functions are to inform the public of the University's activities, accomplishments, policies, needs, and plans. The staff of Electronic Media produces radio and television feature material in the form of audio and video tapes for broadcast throughout Louisiana and the adjoining region. The Information Center personnel receive visitors and acquaint them with campus activities; answer telephone inquiries concerning the University; maintain address directories of students, faculty, and staff members; and maintain the official calendar of activities for the LSU campus. The News Service staff prepares and distributes news releases, feature stories, television news films, and photographs to newspapers, wire services, radio and television stations, journals, magazines, and other periodicals. The Publications staff plans, designs, edits, and oversees the production and distribution of more than 500 regular and special publications of the University each year, including this General Catalog. The Director of Public Relations also serves as administrator of the Rural Life Museum.

ATHLETICS

The Athletic Department operates a broad intercollegiate sports program for men and women in 20 sports, more than any other school in the Southeastern Conference. LSU meets teams from other major universities in NCAA competition in football, baseball, track and field, and wrestling; the University competes at the NCAA Division-I level in basketball, golf, tennis, swimming, gymnastics, and volleyball.

Athletic facilities include a football stadium with a seating capacity of 76,869, four lighted practice football fields and one practice baseball field, a lighted metric track with a Chevron 400 surface and seating accommodations for 5,200, a lighted baseball complex seating 2,500, and six lighted tennis courts with an elevated grandstand. Under construction is an eight-lane Olympic-size indoor pool and diving well. The Assembly Center, a multipurpose facility, seats 14,327 and is the home court for the LSU men's and women's basketball teams, women's gymnastics, wrestling, and volleyball. The Field House provides a 220-yard track facility; a gymnastics practice room for women; three regulation handball courts; and a large, unobstructed air-conditioned playing area for basketball, volleyball, indoor tennis, badminton, and other activities. It is available as a competitive indoor track facility and serves as a practice area for varsity football, baseball, track, and tennis teams. It is also used for teaching, organized recreational activity, and leisure-time activity for the University community.

LSU has twice hosted the National College Athletic Association's track and field championships. In addition, the basketball NCAA midwest regionals and first rounds have been played in the Assembly Center. The Association of Intercollegiate Athletics for Women's National Tennis Championships have been held at LSU on two occasions and the NCAA and the AIAW have staged their national gymnastics championships in the Assembly Center. LSU and the city of Baton Rouge will host the 1985 U.S. Olympic Committee's Summer Sports Festival.

POST OFFICE

University Station, Baton Rouge, Louisiana 70893 is a Federal government post office located in the LSU Union Building. Mail service is provided to students, faculty, and others who live in this area of the city. The office is open from 8:00 a.m. to 4:30 p.m. Monday through Friday and closed on weekends and federal holidays; however, the lobby remains open when the office is closed so that mail may be picked up from post office boxes. A post office box may be rented for the school year or for one or more semesters. Post office boxes may be shared only with brothers and/or sisters having the same last name. Rental fee information may be obtained by writing to: Superintendant, University Station, Baton Rouge, Louisiana 70893. General delivery service is also available. Please note that the 70893 zip code is for post office boxes only; all other campus mail should carry the 70803 zip code.
All mail must be addressed to the student’s box number since the University does not provide mail service to dormitories. "Special Delivery" mail will be delivered to dormitories if it is so addressed. Carriers from the main Baton Rouge post office deliver mail to the University-owned apartment complexes on Nicholson Drive and West Roosevelt Street.
Admission to the University

The University operates on a two-semester plan with an additional nine-week summer term. Qualified applicants, except in the School of Social Work and the School of Veterinary Medicine, may register at the beginning of any term.

APPLICATION PROCEDURES

Requests for information and application forms for admission and readmission should be addressed as follows:

Undergraduate Divisions and Graduate School: Office of Admissions.
School of Social Work: Dean, School of Social Work.
School of Veterinary Medicine: Dean, School of Veterinary Medicine.

Undergraduate application forms are also available in many Louisiana high schools. In addition, application packets are sent to students whose scores on the American College Test (ACT) are received by the University.

Application materials consist of an application for admission, a request for an application for campus housing, and a medical history questionnaire. A former LSU student who has not been enrolled for one or more semesters must submit an application for readmission. Arrangements for admission, housing, and financial aid are made separately through the Office of Admissions, the Office of Residence Life—Room Assignments, and the Office of Student Aid and Scholarships. Acceptance of an application for admission does not entitle an applicant to University housing or financial aid; nor is the acceptance of a housing application, the assignment to a room, or the award of financial aid a commitment of admission to the University. For further information, see the sections of this catalog entitled “Housing and Residence Life” and “Scholarships and Awards.”

Applicants who wish to enroll as full-time students should submit a medical history questionnaire as part of the registration process. Information provided on this questionnaire is confidential and is used only by the Student Health Center physicians.

A nonrefundable application fee of $20 (check or money order made payable to Louisiana State University and showing the name of the student for whom payment is made) must accompany the application for admission or readmission. In addition, a late application fee of $15 is charged students who file applications after December 1 for the spring semester, after May 1 for the summer term, and after July 1 for the fall semester. (See also “International Applicants” in this same section.) These service fees are assessed to cover the cost of processing applications. They are not refunded if admission is denied, and they are not applied to the University fee or nonresident fee if the student subsequently enrolls. If applications and official scholastic records needed to determine eligibility for admission are received by the Office of Admissions after the above dates, a decision concerning admission cannot be assured before registration.
Admission decisions and eligibility for classification as a resident of Louisiana are determined in accordance with University regulations and are based on evidence provided in the application for admission and related documents. Residence status is determined by the Office of Admissions after the completed application for admission has been submitted. (See also “Residence Status” in the “University Regulations” section of this catalog.) Residence status is not determined for students auditing only or for students enrolled in correspondence courses of the Office of Independent Study.

CATEGORIES OF ADMISSION

The following are categories of admission to degree and nondegree programs.

Early Admission: Exceptionally well-qualified high school students who have not completed their secondary school work and who meet specified criteria.

New Freshmen: Applicants who have never attended any college or university.

Transfer Students: Applicants who have attended one or more colleges or universities. In certain cases, applicants who have been in the LSU System may be classified as transfer students. See appropriate sections.

Former LSU Students and Transfers from within the LSU System: Students previously enrolled at LSU who have interrupted their attendance for one or more semesters (not including summer term) and students transferring from other campuses within the LSU System.

Summer-Term-Only Students: Applicants who are students at other colleges or universities and who desire to attend LSU for the summer term only.

Program for Adult-Special Students (nondegree program): Applicants who have not participated in formal education for at least three years, who wish to enroll for part-time study, and who are not currently seeking a degree. Acceptance into this program entitles a student to enroll in undergraduate credit courses for which he or she has adequate background.

International Students: Applicants who are foreign nationals on non-immigrant visas.

EDUCATIONAL REQUIREMENTS AND ADMISSION PROCEDURES

Applicants who meet educational requirements as listed below are considered for admission. Students whose native language is not English are required to submit acceptable evidence of English proficiency. The University may deny admission, readmission, or continued enrollment to persons whose behavior is disruptive, dangerous, or abusive.

Freshmen

All freshmen enroll in Junior Division which deals primarily with first-year students—their courses of study and their guidance during the transition from high school to college. The freshman year in Junior Division and the following three years in one of the senior colleges represent the normal time required for completion of a baccalaureate degree program.

To prepare for study at LSU, students should follow a college preparatory curriculum in high school. Reading comprehension and the ability to write clear prose are skills essential to college success. Recommended courses, to the extent that they are available, include the following:

- English (4 years)—at least three years should emphasize composition skills;
- Mathematics (3 years)—Algebra I and II and either geometry, trigonometry, or calculus;
- Natural Science (3 years)—biology, chemistry, and physics;
- Social Studies (3 years)—world history, American history, and civics;
- Foreign Language (2 years in the same language);
- Computer Science (1/2 year); and
- Academic Electives (2 years)—selected from any of the areas listed above.

Effective with the fall semester of 1988, the courses listed above or acceptable substitutes will be required for admission to LSU. Details of this policy will be included in future catalogs and communicated to high school personnel.
High school students should submit their applications as early as possible in their senior year of high school. Applicants who have already graduated from high school should submit applications as early as possible in the semester preceding the date admission is desired.

The American College Test

All freshmen are required to submit scores on the American College Test (ACT). High schools should have application forms for this test. If applications are not available in high schools, they may be obtained by writing to the Registration Department, American College Testing Program, P.O. Box 414, Iowa City, Iowa 52240. The application form is accompanied by a Student Information Bulletin which describes the test, gives dates and places for test administrations, and outlines procedures for registration. Test centers are located throughout the U.S., with tests administered on five specific dates established by the testing service each year. Scores are reported to the colleges and universities as requested by the student.

Applicants are advised to take the ACT in April or June of their junior year of high school or as early as possible in their senior year. Scores on this test constitute a valuable aid in gaining insight into a student's capacity for college work. They are used with other data for placing students at appropriate levels in freshman courses, for counseling, and for selection of scholarship and loan recipients. ACT scores are used for admission decisions for applicants who are not residents of Louisiana, for resident applicants who graduate from nonaccredited high schools, and for applicants to early-admission and concurrent-admission programs.

Louisiana Residents

Louisiana residents who are graduates of state-approved high schools and who have not attended a college or university will be considered for freshman admission when they have submitted applications. Students who have not attended another college or university and who are graduates of unapproved high schools may be considered for admission on the basis of their performance on the ACT. Applicants who have not graduated from high school must be at least 21 years of age and must present satisfactory evidence of education, training, and experience. Applicants should request high schools to send transcripts of their complete scholastic records to the Office of Admissions as soon as possible after completion of their high school course of study.

General Education Development (GED) graduates must submit copies of their high school diplomas, official transcripts, or Louisiana Certificate DE509.

Non-Louisiana Residents

Enrollment of students from states other than Louisiana is limited to those whose academic qualifications in terms of achievement and aptitude are clearly above average. In the admission decision, all available information is considered—grades, subjects taken in high school, rank in class, ACT scores or scores on the Scholastic Aptitude Test of the College Board, appropriateness of proposed field of study in relation to the applicant's apparent ability, principal-counselor recommendations, and motivation. Records of students who qualify for and are awarded athletic grants-in-aid are evaluated according to Louisiana residence criteria. Applicants who have taken only the Scholastic Aptitude Test may be considered for admission upon submission of these scores. Such applicants are required to take the American College Test prior to registration because scores on the ACT are used in counseling and for placement decisions. Nonresidents who meet the above requirements must also have an overall average of 2.00 on any college work attempted prior to the proposed date of enrollment at LSU.

Students should request that their high school send transcripts as soon as grades for the seventh semester are available. Exceptionally well-qualified students may submit transcripts at the end of the junior year of high school. Applicants will be notified concerning acceptance soon after applications and transcripts are received. Applicants who are granted admission are required to furnish final records immediately following high school graduation.

Early and Concurrent Admission Requirements

The Early-Admission Program permits high school students who have not completed all requirements for a high-school diploma to apply for admission to LSU as regular students provided they fulfill these minimum requirements: 15 units of high school credit, including 3 units of English; an overall academic average of 3.00 ("B"); and an ACT composite score of 27. From the students who meet these requirements, a limited number are selected. Among the considerations in selection are maturity, rank in class, grades, recommendation of the high school principal and others, and additional evidence of scholarly achievement.
A Concurrent-Enrollment Program allows well-qualified high school seniors to register in one or more courses at LSU. Requirements for participation in the program are senior classification, a grade-point average of at least 3.00, an ACT composite score of 26, recommendation of the high school principal and certification that the student has completed the high school's most advanced course in the subject area in which the student wishes to enroll (or that in the principal's best judgement, the student is qualified), and the recommendation of the head of the appropriate department of the University. Concurrent enrollment will be permitted only when space, faculty, and other University facilities can accommodate these students.

Special Admission Requirements for the Gifted-Talented

Gifted children of any age who rank in the 99th percentile nationally of their age group on tests administered by an evaluation team certified by the State of Louisiana may be considered for part-time University enrollment. In general, students must meet the following requirements for selection: (1) must have demonstrated outstanding talent in one or more fields of study; (2) must be certified as able to benefit from University-level instruction by appropriate authorities of their school system and the University; and (3) must have completed the school's most advanced courses in the subject area in which enrollment is desired, or must have demonstrated competence at this level. The 99th percentile requirement may be waived by the Vice-Chancellor for Academic Affairs for students who offer convincing evidence of genuinely outstanding talent or accomplishment. Additional information regarding this program may be obtained from the Office of Admissions.

Advanced-Standing Program

Students of superior ability and preparation and students who have already obtained a fundamental knowledge of subjects offered at the University may be permitted to take advanced-standing examinations in specific courses. If the examinations are passed with satisfactory grades, students receive University credit. The Advanced Placement Examinations and certain of the subject examinations of the College Level Examination Program administered by the College Board may be used as a basis for allowing advanced-standing credit. Advanced-standing policies are given in the "University Regulations" section of this catalog. More detailed information may be obtained from the Office of Admissions.

Pre-Enrollment Counseling and Preregistration for Entering Freshmen

Applicants who qualify for admission by July 1 and who have ACT scores on file are invited to participate in a pre-enrollment counseling and preregistration program for the fall semester. Announcements giving dates and complete information regarding this program are sent to applicants and to high schools.

Undergraduate Transfer Students

An undergraduate student with a satisfactory record from an accredited college or university is eligible to apply for admission to LSU as a transfer student. Students desiring such admission should submit an application and transcripts as early as possible in the semester preceding the date admission is desired. Eligibility for admission cannot be determined until the application and complete, official transcripts from each college or university attended have been received. Each college or university attended must be listed on the application form, and official transcripts must be sent from each institution, regardless of whether credit was earned or is desired. Students who fail to acknowledge attendance at any college or university in which they have been registered are subject to dismissal from this University.

Students enrolled in college at the time applications are submitted should have transcripts sent when they apply for admission, to be followed by supplementary records at the close of the semester. Provisional admission, pending receipt of supplementary records, may be given when it is impossible to obtain these records prior to scheduled registration dates. This admission will be cancelled if the required records are not received by the Office of Admissions within 30 days from the first day of classes or if it is determined, upon receipt of records, that the applicant does not qualify for admission.

To be considered for admission, an applicant who is not classified as a resident of Louisiana must have an average of at least 2.00 ("A" = 4) on total semester hours of college credit attempted.

A resident of Louisiana who has attended college less than one semester or who has been enrolled on a part-time basis for less than 12 semester hours of credit may be considered on the basis of the same retention criteria of LSU students with similar records. (See "Scholastic Regula-
tions for Junior Division Students.”) A Louisiana resident who has scheduled from 12 to 55 semester hours of college work must have at least a 1.75 grade-point average on total semester hours of credit attempted. Students ineligible for transfer because of a grade-point average of less than 1.75 may be allowed to enroll in developmental courses only (courses numbered below 1000) for non-degree credit if (1) they have not earned credit in University-level courses in English and mathematics, (2) they have not been enrolled in a college or university for the regular semester immediately preceding the semester for which admission is sought, and (3) the dean of Junior Division approves their enrollment. A Louisiana resident who has scheduled 55 or more semester hours of credit must have a 2.00 grade-point average on total college work attempted to be considered for admission.

Applicants who have failed to earn an overall 2.00 average on courses scheduled in the last two semesters of college attendance or who have a scholastic record which, if earned at LSU, would have resulted in suspension, may be denied admission even though their overall average may meet scholastic requirements for admission. Louisiana residents whose records do not meet transfer requirements and who have not been enrolled in resident study in a college or university during the previous calendar year may be considered for admission if they present evidence of ability to do satisfactory college work. Students admitted on this basis may be placed on scholastic probation.

In computation of the grade-point average, a grade of “A” carries 4 quality points per semester hour; “B,” 3 quality points; “C,” 2 quality points; “D,” one quality point; “F,” no quality points. All courses taken (including repeated and unresolved incomplete courses), except those in which grades of “W” are recorded, are included in the computation of the grade-point average. This policy is followed regardless of the practice of the sending institution or other campuses within the LSU System.

Individual colleges or schools within the University may have specific requirements for admission above the minimums listed here. For these requirements, students should consult the appropriate sections of this catalog.

Acceptance of Credit from other Collegiate Institutions

Evaluations of credits from other institutions are made by the Office of Admissions. These evaluations are not made until the student’s complete application and all official transcripts from each college and university attended are received. In general, credit earned in colleges and universities accredited by regional accrediting associations which by its nature prepares students to continue in baccalaureate programs is given full value. Transfer credit will be allowed for a maximum of 21 semester hours scheduled in any one semester. Only work which is acceptable by the offering institution as baccalaureate degree credit is recognized. Credit earned in two-year technical or terminal degree programs which, when completed, results in an “associate in applied sciences” diploma may be accepted to the extent that the courses parallel baccalaureate degree work here, as determined by the appropriate department and subject to the normally applicable conditions. Students who have earned one-half of the credits required for a degree may not utilize in fulfillment of degree requirements additional credit earned in a two-year college (except in the LSU System) unless specifically authorized by the dean of the college in which enrollment is sought. A maximum of one-fourth of the credit required for the degree may be earned through regionally accredited university correspondence and extension study.

For schools not regionally accredited, the University is guided in its decision regarding acceptance of credit by recommendations of selected institutions in the states in which the schools are located. Credit earned from nonaccredited institutions may not be recognized. Applicants who are admitted are given an opportunity, usually through advanced-standing examinations, to validate some or all of the credit. Each student’s record from a nonaccredited college will be considered on the basis of individual merit.

Nontraditional credit (credit earned in any way other than through resident study) is awarded according to University policy as stated in this catalog and other official LSU publications, regardless of the policy of the sending institution. Credit earned by departmental or institutional examinations at other regionally accredited colleges and universities and listed on an official transcript is recognized in the same way that residence credit earned in those institutions is accepted. Such credit is not computed in the grade-point average. Students who have taken subject examinations in the College-Level Examination Program or who have participated in the Advanced Placement Program of the College Board should have examination scores sent directly to the Office of Admissions for evaluation. (See also “Advanced-Standing Program” in the “University Regulations” section of this catalog.) Credit is not awarded for work or travel experience except as validated by appropriate advanced-standing examinations at LSU.

Credit allowed by the Office of Admissions for transfer is, in all cases, subject to review by the student’s college with reference to its applicability toward a particular degree, and the student is
expected to conform to all requirements of the chosen degree program. Questions relating to the evaluation of credits should be referred to the Office of Admissions; questions relating to the acceptance of credits toward a degree program and the length of time required for completion of degree requirements should be referred to the appropriate college or school.

Former LSU Students and Transfer Students from Within the LSU System

Former students who were not registered at LSU for the preceding regular semester must file a formal application for readmission. As readmission is not automatic, applications should be submitted as early as possible in the semester preceding the date that admission is desired. Although all records may be on file, it is necessary to examine them to determine eligibility. If a student has been suspended for academic or other reasons, or if there is any irregularity in the academic record, it may be necessary to discuss the record with the dean of the appropriate college or with an admissions committee. If sufficient time does not exist for a thorough examination of the record, admission cannot be granted.

Students previously enrolled at LSU who have subsequently enrolled at another campus within the LSU System or at another institution must have official records sent from these institutions before an admission decision can be made. These transcripts are required whether credit was earned or is desired. Failure to acknowledge such attendance and to submit transcripts may result in cancellation of registration.

Students whose last enrollment was in the LSU System or who have scheduled one-half or more of the total semester hours of college credit attempted in the LSU System are considered for readmission if they meet scholastic requirements for continuing students. Students previously enrolled in the LSU System who have subsequently attended another institution must meet requirements for admission as transfer students if more than one-half of the total college credits attempted were taken at other institutions.

Summer-Term-Only Applicants

Students enrolled in another college or university who are eligible to continue in that institution in the fall may register as summer-term-only students. Such enrollment will terminate at the end of the summer term and does not presuppose or constitute admission to the University for a regular semester. Summer-term-only students may submit, in lieu of college records, a statement of eligibility to continue in the fall semester or quarter from the dean or registrar of the last school attended. This statement must include the total number of semester or quarter hours of credit previously earned. Students admitted on a summer-term-only basis who wish to be considered for regular admission in the fall semester must complete a new application for admission and must supply official transcripts of all college-level work previously taken.

Program for Adult-Special Students (PASS)

Adults who wish to schedule undergraduate part-time study, who have not been enrolled in high school or college during the past three calendar years, and who do not plan to work toward a degree, may be permitted to schedule courses for credit without submitting the usual scholastic credentials needed to determine admissibility to the University. An adult-special student may schedule as many as nine semester hours in a semester and may earn as many as 24 semester hours of credit in this status. Students who decide to work toward a degree or to continue their enrollment after having completed 24 semester hours in the adult-special status must apply for regular admission or an extension of PASS enrollment. Students applying for regular admission to the University must submit complete, official scholastic records. Credit and grades earned in this program are used in determination of admissibility as regular students and are included on the official transcript. Students in this program who are over 65 years of age do not pay the University fee.

Students who plan to apply for veterans’ benefits or financial aid and international students must be enrolled in degree programs; thus, they do not qualify for PASS.

International Applicants

International students with superior scholastic records and English proficiency, as demonstrated by acceptable scores on recognized tests, are considered for admission as freshmen and as transfer students. Freshman applicants must be graduates of recognized secondary schools comparable in level to U.S. high schools. Transfer applicants are considered on the basis of secondary school records, as well as records of post-secondary study (university, institute, or technical
schools). Factors considered in making the admission decision are grades earned, subjects taken, and ability to carry a full course of study; scores on college entrance examinations such as the American College Test, the Scholastic Aptitude Test of the College Board, or the Prueba de Aptitud Academica; appropriateness of proposed field of study in relation to the applicant’s general ability; and letters of recommendation.

Applicants whose native language is not English are required to submit a score of 500 or better on the Test of English as a Foreign Language (TOEFL), a test designed to evaluate proficiency in English and administered at testing centers overseas and throughout the U.S. Information regarding this test may be obtained by writing to TOEFL, Educational Testing Service, Princeton, New Jersey 08541.

All students not previously enrolled at LSU will be required to take an English placement test prior to registration and to schedule, beginning in the first semester of enrollment, required courses in English as determined by this test.

Applications for the fall semester are not accepted after July 1, for the spring semester after December 1, and for the summer term after May 1. To be assured of an admission decision prior to registration, the following materials must be in the Office of Admissions at least 90 days before the beginning of the semester in which admission is desired:

1. application for admission;
2. a nonrefundable application fee of $20—check or money order (check must be drawn on a United States bank);
3. complete, official scholastic records;
4. scores on entrance examinations (if required); and
5. scores on the Test of English as a Foreign Language.

When sufficient scholastic records and acceptable evidence of English proficiency are not received early enough to determine admissibility for the semester for which application was made, consideration will be delayed until the following semester.

International applicants are required to offer proof of the availability of sufficient funds to meet all costs while studying at the University.

ACADEMIC BANKRUPTCY

Under specified conditions, undergraduate students who have interrupted their college careers for a period of at least five consecutive calendar years may, at the time of application for admission to the University, declare academic bankruptcy. Under this policy college-level work done at an earlier date is eliminated from computation of the grade-point average and cannot be applied toward a degree at LSU. Such work, however, will not be removed from the students’ scholastic records and transcripts. Students qualifying for academic bankruptcy are admitted on scholastic probation. Details of this policy may be obtained from the Office of Admissions.
Fees, Expenses, Scholarships, and Financial Aid

Student expenses, other than campus room and board and University and nonresident fees, will vary with the individual. A Baton Rouge area student living with parents or a student living on campus spends about $2500 in addition to fees, room, and board per school year. An out-of-town student living off campus can expect to spend at least $5100 per school year for rent, food, clothing, laundry, cleaning, books and school supplies, transportation, entertainment, and incidentals. Married students spend approximately $11,450. Total first-year expenses for sororities, including some one-time fees, average $825; subsequent yearly costs are approximately $530. Monthly dues average $35. Costs for fraternities average $650 for the first year, which includes some one-time fees. Subsequent years average $520, not including room and board. Monthly dues for fraternities average $50.

The Board of Supervisors may modify fees, board, and/or housing rates at any time and without advance warning. Following is an outline of what a student may expect to spend each semester for fees, room, and board:

**Full-Time Fees**

- **Louisiana residents:**
  - Undergraduates, $491; graduates, social work, $494
  - Veterinary medicine, $704

- **Nonresidents:**
  - Undergraduates, $1241
  - Graduates, social work, $1109

**Room Rent**

- Residence halls, $425-935 per semester
- University-owned apartments, $201-273 per month
- Fraternity houses, $428 (average) per semester
- Sorority houses, $1030 (average), including board, per semester

For more information about room rent, contact the Director of Housing, 149 Graham Hall.
Board

Residence hall residents:
- 15-meal plan (Monday-Friday)—approximately $407 per semester
- 10-meal plan (Monday-Friday excluding breakfast)—approximately $387 per semester
- Summer term 15-meal plan—approximately $206
- Summer term 10-meal plan—approximately $196
- Fraternity houses, $404 per semester (average)
- Off-campus meals, $3.65 per meal (average)

For more information about the board plans, see the “Student Services and Organizations” section of this catalog.

APPLICATION FEE

A nonrefundable application fee of $20 (check or money order) must accompany the application for admission. In addition to this fee, a nonrefundable late application fee of $15 is charged students who file applications after December 1 for the spring semester, after May 1 for the summer term, and after July 1 for the fall semester. The University is not responsible for cash sent by mail.

STUDENT HEALTH SERVICE FEE

All full-time students are required to pay a student health service fee at registration. This fee entitles the student to use of the Student Health Center. No charge is made for professional services, while minimum charges are assessed for medicine, x-rays, and laboratory work.

Part-time students have the option of paying this fee which enables them to see a physician at the center without paying the $5 per-visit charge. This fee must be paid at registration.

REGULAR SEMESTER FEES

Included in University fees for full-time students are one subscription to The Daily Reveille, the campus newspaper; one class picture to be placed in the yearbook, the Gumbo, when the fees are paid for the fall semester; a copy of the Gumbo when the fees are paid for the spring semester; an allocation to the Student Government Association; admission to various athletic events; and membership in the LSU Union. Student-imposed allocations in the regular semester University fee include a $12 mass transit fee, a $5 student sports recreation complex fee, and a $2 “The Phone” fee. In addition, graduate students are assessed a $3 organizations relief fund fee in both regular semesters; undergraduates are assessed $3 in the spring semester only. Student-imposed allocations in the summer term include a $6 mass transit fee, a $3 student sports recreation complex fee, and a $1 “The Phone” fee.

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 or more hrs.</td>
<td>10-11 hrs.</td>
</tr>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>University fee</td>
<td>456</td>
<td>355</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$491</td>
<td>$365</td>
</tr>
<tr>
<td><strong>Nonresident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>University fee</td>
<td>456</td>
<td>355</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Nonresident fee</td>
<td>750</td>
<td>610</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$1241</td>
<td>$975</td>
</tr>
</tbody>
</table>

Regular Semester—Undergraduate Students
### Regular Semester—Graduate School and Social Work Students

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 or more hrs.</td>
<td>7-8 hrs.</td>
</tr>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>University fee</td>
<td>459</td>
<td>340</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$494</td>
<td>$350</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 or more hrs.</td>
<td>7-9 hrs.</td>
</tr>
<tr>
<td><strong>Nonresident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>University fee</td>
<td>459</td>
<td>340</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Nonresident fee</td>
<td>615</td>
<td>400</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$1109</td>
<td>$750</td>
</tr>
</tbody>
</table>

Graduate students registering for "exam only" will be assessed a $50 fee. An internship fee of $100 per course must be paid by all students enrolled in Social Work 5505, 5506, 5605, and 5606.

### Regular Semester—Veterinary Medicine Students

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 or more hrs.</td>
<td>7-9 hrs.</td>
</tr>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>University fee</td>
<td>669</td>
<td>245</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$704</td>
<td>$255</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nonresident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>University fee</td>
<td>669</td>
<td>245</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Nonresident fee</td>
<td>1700</td>
<td>1530</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$2404</td>
<td>$1785</td>
</tr>
</tbody>
</table>

A microscope fee of $40 per semester is assessed each student during Years I and II of the professional curriculum. No fees are assessed regularly admitted students in the summer of Year IV, regardless of the elective blocks taken.

Regularly admitted, nonresident students are accepted only from contract states. These students pay the same fees as residents of Louisiana, with respective states paying an additional increment as specified by contract. The nonresident fee is applicable only to visiting students from non-accredited colleges of veterinary medicine and other special nonresident students.
### SUMMER TERM FEES

**Summer Term—Undergraduate Students**

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 or more hrs.</td>
<td>4-5 hrs.</td>
</tr>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$ 10</td>
<td>$ 10</td>
</tr>
<tr>
<td>University fee</td>
<td>248</td>
<td>185</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$273</td>
<td>$195</td>
</tr>
<tr>
<td><strong>Nonresident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$ 10</td>
<td>$ 10</td>
</tr>
<tr>
<td>University fee</td>
<td>248</td>
<td>185</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Nonresident fee</td>
<td>380</td>
<td>275</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$653</td>
<td>$470</td>
</tr>
</tbody>
</table>

**Summer Term—Graduate School and Social Work Students**

<table>
<thead>
<tr>
<th></th>
<th>FULL-TIME</th>
<th>PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 or more hrs.</td>
<td>4-5 hrs.</td>
</tr>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$ 10</td>
<td>$ 10</td>
</tr>
<tr>
<td>University fee</td>
<td>248</td>
<td>185</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$273</td>
<td>$195</td>
</tr>
<tr>
<td><strong>Nonresident students:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$ 10</td>
<td>$ 10</td>
</tr>
<tr>
<td>University fee</td>
<td>248</td>
<td>185</td>
</tr>
<tr>
<td>Student health service fee</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Nonresident fee</td>
<td>250</td>
<td>175</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$523</td>
<td>$370</td>
</tr>
</tbody>
</table>

Graduate students registering for “exam only” will be assessed a $50 fee.

### Zoology Short Course at Gulf Coast Research Lab

<table>
<thead>
<tr>
<th></th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$ 10</td>
<td>$ 10</td>
<td>$ 10</td>
<td>$ 10</td>
</tr>
<tr>
<td>University fee</td>
<td>229</td>
<td>229</td>
<td>229</td>
<td>229</td>
</tr>
<tr>
<td>Camp fee</td>
<td>7</td>
<td>7</td>
<td>130</td>
<td>175</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$246</td>
<td>$246</td>
<td>$369</td>
<td>$414</td>
</tr>
</tbody>
</table>

### Geology Field Courses (Geology 3666 and 7666)

<table>
<thead>
<tr>
<th></th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident students:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration fee (nonrefundable)</td>
<td>$ 10</td>
<td>$ 10</td>
<td>$ 10</td>
<td>$ 10</td>
</tr>
<tr>
<td>University fee</td>
<td>229</td>
<td>229</td>
<td>229</td>
<td>229</td>
</tr>
<tr>
<td>Nonresident fee</td>
<td>380</td>
<td>250</td>
<td>380</td>
<td>250</td>
</tr>
<tr>
<td>Camp fee</td>
<td>7</td>
<td>7</td>
<td>130</td>
<td>175</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$626</td>
<td>$496</td>
<td>$749</td>
<td>$664</td>
</tr>
</tbody>
</table>

### Zoology Short Course at Gulf Coast Research Lab

- Registration fee (nonrefundable) $10
- University fee $229
- Camp fee $7

### Geology Field Courses (Geology 3666 and 7666)

- Registration fee (nonrefundable) $10
- University fee $229
- Nonresident fee $380
- Camp fee $7
SPECIAL FEES

Three-Week Summer Short Courses

Students enrolled in three-week summer short courses must pay the registration fee (non-refundable), University fee, and nonresident fee (if applicable). These fees conform to the summer term fee schedule.

Audit Fees

Fees for auditing courses are in accordance with the “Regular Semester” and “Summer Term” fees. Maximum fee is $437 for the regular semester and $237 for the summer term. Fees for students enrolling for combined credit and audit work will be assessed in accordance with total hours scheduled.

Graduation Fees

1. Bachelor’s degree fee, $30.
2. Master’s degree fee, $40; thesis binding fee, $20.
4. Doctoral degree fee, $60; dissertation binding fee, $45 ($20 for D.M.A. degree).
5. Doctor of Veterinary Medicine degree fee, $40.
6. Duplicate diploma fee, $20 (charged if a diploma is ordered and student does not graduate at that commencement).

Motor Vehicle Registration Fee

All students (full-time, part-time, night, and auditors) who operate or expect to operate a motor vehicle on campus regularly or occasionally are required to register the vehicle with the Office of Parking, Traffic, and Transportation. A registration fee will be charged for each vehicle registered. The exact amount of this fee will be published each year in the Traffic and Parking Regulations issued by the Office of Administrative Services.

Fees for Special Courses

A small number of curricula and courses require the payment of additional fees. These fees are detailed in the college, school, or departmental listings or in the course descriptions.

Other Fees

1. Students registering for “degree only” pay no registration fee. (Such students must register through the Office of Student Records and Registration no later than the beginning of the semester or summer term when the degree is to be conferred.)
2. Graduate registration for examination only, $50. (Candidates for graduate degrees registered for examination only.)
3. Advanced-standing examinations, $20 per course. These examinations are given free of charge to students either planning to enroll as freshmen or enrolled part-time or full-time as first-year students until the beginning of the midsemester examination period of their first regular semester. All other students must pay the $20 fee.
4. Engineering cooperative work-study program, $50.

STUDENT ACCIDENT AND SICKNESS INSURANCE PLAN

A special plan is offered to students through an insurance company approved by the University. This coverage is strongly recommended to relieve students of possible financial strain in meeting expenses for medical services which the Student Health Center program does not provide. The University requires that all non-immigrant international students enroll in the LSU Student Insurance Program at the time of registration. Students enrolled in the School of Veterinary Medicine are required to have sickness and accident insurance coverage through enrollment in the University-sponsored plan, or to have proof of participation in an equal or better insurance program.
PAYMENT OF FEES

All fees and other University charges are due at the beginning of the semester or summer term. To facilitate payment of fees, it is recommended that the student use a cashier’s check, money order, or personal check. In unusual circumstances, deferred payment may be requested for part of the fees.

FEE EXEMPTIONS FOR PERSONS OVER 65

According to the provisions of Act 525 of the 1975 Louisiana legislature, persons over 65 years of age may enroll in college-level courses without paying the University fee. Further information may be obtained from the Office of Student Records and Registration.

FINANCIAL OBLIGATIONS TO THE UNIVERSITY

A student will be subject to being dropped from the University as a result of failure to pay fees and/or other charges when due or when a check offered by the student in satisfaction of an obligation to the University is not honored by the bank on which it was drawn. Due notice of the delinquency shall be given to the student by the Treasurer; there will be an insufficient funds charge of $5 per check.

REFUND OF FEES

1. Refund of the University fee, nonresident fee, and student health service fee will be made on the following basis upon official withdrawal of the student:
   a. before classes begin, 90 percent;
   b. during the first 10 days of classes* (first five days in summer term), 75 percent;
   c. from day 11 through day 24 of classes (day 6 through day 12 in summer term), 50 percent;
   d. from day 25 of classes (day 13 of summer term) to the end of the semester, none.
2. The registration fee is not refundable.
3. No refunds for resignations will be processed for at least six weeks after registration.
4. No refunds will be made to anyone who owes the University. Student-initiated resignations will not be completed until all money owed to the University is paid.
5. Field service and transportation fees will be refunded on an individual basis upon recommendation of the department concerned.
6. Reductions and increases of fees resulting from student schedule changes will be refunded or charged in accordance with the above schedule.
7. All full-time students who become part-time students after the last day to receive refunds will continue to be eligible for all student activity privileges.
8. Students in good standing at the University, registered in any semester or summer term, who volunteer for military service or who are called to active duty in the armed services before the day midsemester examinations begin will have the University fee, nonresident fee, and student health service fee refunded. Students in good standing at the University who volunteer for military service, or who are called to active duty in the armed services after midsemester examinations begin, will be refunded 50 percent of the University fee, nonresident fee, and student health center fee.

See also “Refund of Room Rent” in the “Student Services and Organizations” section of this catalog.

*“Days of classes” are days on which regular classes are scheduled.
SCHOLARSHIPS AND AWARDS

The scholarships and awards listed here are usually awarded on the basis of academic achievement, financial need, character, and citizenship. Only full-time students are eligible to receive or to continue to hold scholarships. Normally scholarship stipends are paid one-half during the fall semester and one-half during the spring semester.

There are two types of scholarships listed below: those restricted to students according to their major or college and those which are open to all students regardless of their major or college. Both types, however, may be restricted to students of specified classification, place of residence, or some other characteristic consistent with the principles of equal opportunity and/or affirmative action.

Requirements for scholarships that historically have been reserved for one sex are currently under review.

Applications for scholarships administered by the Faculty Senate Student Aid and Scholarships Committee may be obtained from the Office of Student Aid and Scholarships, 202 Himes Hall. All other applications, when required, may be obtained from the department or college listed in the description of the scholarship.

The description of each scholarship follows the same format: title; number given and annual amount of each, e.g. "(2:$300)" means that two scholarships are awarded per year at $300 each; any criteria or restrictions; and the group that determines which students will receive the scholarship. The following abbreviations are used in the scholarship descriptions:

<table>
<thead>
<tr>
<th>Description</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>FR</td>
</tr>
<tr>
<td>Sophomore</td>
<td>SO</td>
</tr>
<tr>
<td>Junior</td>
<td>JR</td>
</tr>
<tr>
<td>Senior</td>
<td>SR</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>UG</td>
</tr>
<tr>
<td>Graduate student</td>
<td>GPA</td>
</tr>
<tr>
<td>Grade-point average</td>
<td>GPA</td>
</tr>
<tr>
<td>Faculty Senate Student Aid and Scholarships Committee</td>
<td>EBR</td>
</tr>
<tr>
<td>East Baton Rouge Parish</td>
<td>EBR</td>
</tr>
</tbody>
</table>

Scholarships and Awards Restricted to a Particular Field of Study

**COLLEGE OF AGRICULTURE**

**Agricultural Economics and Agribusiness Alumni Association Scholarship (1:$300)** UG in Dept. of Agr. Econ. & Agribus.; awarded by dept.

**Agricultural Engineering Scholarship (2:$100)** FR in Dept. of Agr. Engr.; awarded by Col. of Agr.

*Agricultural Mechanization Outstanding Senior Award (1:$100)* Outstanding SR majoring in agr. mechanization; awarded by Dept. of Agr. Engr.

**College of Agriculture Honor Student Award (1:$810)** Incoming SO with highest GPA in college; awarded by Col. of Agr.

**Alpha Gamma Rho Outstanding FFA and 4-H Club Awards (2:$100)** Entering FR; outstanding member of high school club.

**Alpha Zeta Outstanding Freshman Award (1:$100)** UG in Col. of Agr.; awarded by Alpha Zeta.

**ASA-Coca Cola Scholarship (1:$100)** UG in Col. of Agr.; awarded by Col. of Agr.

**ASA Outstanding Sophomore Award (1:$300)** Outstanding SO in Col. of Agr.; awarded by Col. of Agr.

**F. O. Bateman Memorial Scholarship (1:$500)** SO in forestry and wildlife; awarded by Sch. of For., Wild., & Fish.

**Baton Rouge Lumber Company Scholarship (2:$500)** UG with 2.00 GPA in ind. and tech. educ. curriculum leading to training in building materials management; awarded by Col. of Agr.

*Funded through LSU Foundation.*

**Sponsored by LSU Alumni Federation.**

**LSU Block and Bridle Club Alumni Association Scholarship (1:$1000)** UG in animal science; awarded by Dept. of Animal Sci.

**LSU Block and Bridle Club Outstanding Sophomore Award (1:$500)** SO in animal science; awarded by Dept. of Animal Sci.

**LSU Block and Bridle Club Scholaristic Award (3:$100)** Awarded to outstanding, active club member; awarded by Block and Bridle Club.

**Building Materials Unlimited Award (1:$250)** UG in curriculum leading to training in building materials management; awarded by Dept. of Ind. and Tech. Educ.

**B. J. Burch Memorial Scholarship (1:$400)** Member of Dairy Products Judging Team; awarded by Dept. of Dairy Sci.

**CAMECO Award in Agricultural Engineering** See College of Engineering.

**Capital Bank & Trust Company Agricultural Scholarship in Honor of Dr. Jack R. Jones (1:$1000)** JR/SR/GR in Col. of Agr.; Louisiana resident; financial need; 3.00 GPA; strong interest in banking profession; awarded by Col. of Agr.

**Charles Stewart Churchill Memorial Scholarship (8:$600)** UG in Col. of Agr.; awarded by SA&SCom. on recommendation of Col. of Agr.

**Dairymen, Inc. Scholarship in Agricultural Economics and Agribusiness (1:$250)** UG in Dept. of Agr. Econ. & Agribus.; awarded by dept.

**Dairymen, Inc. Scholarship in Dairy Science (1:$250)** Student in Dept. of Dairy Sci.; awarded by dept.

**M. N. Davidson Foundation Scholarship (1:$750)** UG in ind.
Fees, Expenses, Scholarships, and Financial Aid

and tech. educ. curriculum leading to training in building materials management; awarded by M. N. Davidson Foundation.

*Sibyl and Joseph Doré Memorial Scholarship in Agriculture (2:$1000) SO/SR in agronomy particularly interested in rice breeding, culture, processing, marketing, or utilization; awarded by Col. of Agr.

Glenn O. Dunmire, Jr., Scholarship (3:$100) SO/JR/SR in Dairy Science Club; awarded by Dept. of Dairy Sci.

*Marc Dupuy, Jr. Wildlife Conservation Scholarship (1:$500) La. high school graduate, preferably from Avoyelles Parish, planning to enter Sch. of For., Wild., & Fish.; awarded by Sch. of For., Wild., & Fish.


Fasting Agricultural Scholarship (1:$500) SO/JR/SR in animal science, dairy production, or preveterinary medicine; SO must have 2.50 gpa, others 3.00 gpa; awarded by Col. of Agr.


Benjamin Forbes Award in Dairy Science (1:$100) US in Dept. of Dairy Sci.; awarded by Dept. of Dairy Sci.

*Murphy J. Foster Scholarship (1:$500) US in agriculture pursuing study in sugar cane/soybeans; awarded by Col. of Agr.

4-H Club Honor Award (varies: $25 fee exemption/sem.) Based on competition at annual 4-H Club Short Course at LSU; awarded by Col. of Agr. on recommendation of state 4-H Club Agent.

J. B. Francioni, Jr., Scholarship (1:$1000) Outstanding Block and Bridle Club member; awarded by Col. of Agr.

*Joseph W. Freeland International Agriculture Scholarship (1:$1000) US with direct interest in international agriculture; awarded by Col. of Agr.

*J. B. Frye, Jr., Scholarship in Dairy Science (1:$1000) Entering FR with interest in dairy science; awarded by Dept. of Dairy Sci.

Future Farmers of America Honor Award (varies: $25 fee exemption/sem.) 1st place winners in state F.F.A. contests; awarded by Col. of Agr.

Future Homemakers of America Scholarship (1:$200) US in Sch. of Home Econ.; awarded by Sch. of Home Econ.

John P. Gray Memorial Award (1:$400) Outstanding JR/SR in Dept. of Agronomy majoring in crop science or closely related field; awarded by SA&SCom. on recommendation of Dept. of Agronomy.

Mr. & Mrs. Norman M. Haigh Scholarship for Vocational Agricultural Education (1:$300) US in voc. agr. educ.; awarded by Dept. of Voc. Agr. Educ.

Mr. & Mrs. Norman M. Haigh Scholarship for Vocational Home Economics Education (1:$300) US in voc. home econ. educ.; awarded by Sch. of Home Econ.


William L. Hawthorne Memorial Scholarship (1:$1000) US in Dept. of Horticulture; awarded by dept.

*Travis P. Hernandez Scholarship (1:$250) US in Dept. of Hort.; awarded by Col. of Agr.

*William Hopkins Memorial Scholarship (1:$200) US in forestry; awarded by Sch. of For., Wild., & Fish.

Dorothy C. Howell Home Economics Alumni Scholarship (4:$600) Entering FR in Sch. of Home Econ.; awarded by sch.

Hubbard Farms Poultry Science Scholarship (2:$600) US and GR majoring in poultry science; awarded by Col. of Agr.

Clyde Ingram Memorial Scholarship (1:$500) US; La. resident in poultry sci.; awarded by Dept. of Poultry Sci.

Tom Keaty Award (1:$500) Outstanding student in Dept. of Ind. & Tech. Educ.; awarded by dept.

Lakeshore Lions Club/LSU Collegiate FFA Chapter (1:$300) US in voc. agr. educ.; awarded by Sch. of Voc. Educ. & Tech.

Dean Lee Memorial Scholarship (2:$400) Entering FR in Col. of Agr.; awarded by Col. of Agr.

Truitt C. Lewis Memorial Scholarship (1:$500) Member of Dairy Products Judging Team; awarded by Dept. of Dairy Sci.

C. A. Lorio Memorial Scholarship (1:$250) Student employee at Dairy Farm; awarded by Dept. of Dairy Sci.


*Louisiana Cowbelles—Emily Fairchild Memorial Scholarship (1:$500) JR in Col. of Agr.; 2.50 gpa; financial need; parent or grandparent must be member of the Louisiana Cattlemen’s Association; awarded by Col. of Agr.

Louisiana Forestry Foundation Scholarship (1:$1000/2:$1200) US in forestry; awarded by Louisiana Forestry Foundation.

*School of Forestry, Wildlife, & Fisheries—Louisiana Land & Exploration Scholarship (1:$900) SR in wildlife option; awarded by Sch. of For., Wild., & Fish.

Louisiana Rural Rehabilitation Corporation Scholarship (12:$800) Entering FR planning to major in agricultural area or home econ.; member of La. farm family; financial need; awarded by Col. of Agr.

*Louisiana Seedsmen’s Association Scholarship (4:$400) FR in some area of plant sciences; awarded by Col. of Agr.


LSU Forestry and Wildlife Alumni Association Scholarship (1:$200) US in forestry; awarded by Sch. of For., Wild., & Fish.

John E. Love Memorial Scholarship (1:$250) US in Dept. of Hort.; awarded by dept.

S. E. McCraine Scholarship (1:$1000) US in agricultural curriculum; awarded by Col. of Agr.

T. K. McKnight Memorial Scholarship (1:$1000) JR/SR/GR in horticulture; La. resident with 3.00 gpa; awarded by Col. of Agr.

John J. Mikell Scholarship (1:$500) US in horticulture; active member of LSU Horticulture Club; awarded by Col. of Agr.

*Julian C. Miller Scholarship (1:$1000) JR/SR in horticulture; awarded by Dept. of Hort. and Col. of Agr.
Laurie S. and Helen Nelson Mobley Scholarship (1:$750) Entering FR from Pointe Coupee Parish; awarded by Col. of Agr.

Moorman Manufacturing Company Scholarship (4:$1000) Entering FR in agriculture; awarded by Col. of Agr.


Phi Upsilon Omicron Binnie Pelle Scholarship (1:$100) SO in Sch. of Home Econ; awarded by sch.

Ratson Purina Scholarship (1:$750) Outstanding UG in agriculture; awarded by Col. of Agr.

*Landrith & Nelda Reynolds Scholarship (1:$500) SO in animal science; academic ability and financial need; awarded by Dept. of Animal Sci.

Ewell P. Roy Memorial Scholarship (1:$300) UG in Dept. of Agr. Econ. & Agribus.; awarded by dept.

Maud G. Ryder Scholarship (1:$300) UG in home economics; awarded by Sch. of Home Econ.

T. H. Scott, Sr., Scholarship (2:$300) JR/SR in agr. mechanization; awarded by Dept. of Agr. Engr.

Seedling and Sapling Club Forestry Scholarship Award (1:$100) Outstanding student in Sch. of For., Wild., & Fish.; awarded by Seedling and Sapling Club.

Southern Farm Equipment Manufacturers, Inc., Scholarship (1:$400) FR planning to major in agr. engr. or agr. mechanization; awarded by Col. of Agr.

Erich Sternberg Memorial Scholarship (1:$300) SO from EBR majoring in merchandising; awarded by Sch. of Home Econ.

Suzanne Thompson Scholarship (1:$250) UG in Sch. of Home Econ.; awarded by sch.

*Tolle-Fredrikson Scholarship (2:$600) SO/JR/SR in Sch. of Home Econ. majoring in family life and environment and/or voc. home economics educ.; 2.00 gpa; financial need; awarded by Scholarship Committee of Sch. of Home Econ.

Morgan W. Walker Memorial Scholarship (1:$250; 1:$500) Student employee at Dairy Farm; member of Dairy Cattle Judging Team; awarded by Dept. of Dairy Sci.

Louis Windham Memorial Scholarship See College of Engineering.

Woods and Water Scholarship (1:$500) JR/SR in Col. of Agr. or Col. of Design, in an ecology-related area; awarded by SA&SCom. on recommendation of Col. of Agr. or Col. of Design.

Xi Sigma Phi Outstanding Sophomore Scholarship (1:$500) UG in forestry; awarded by Sch. of For., Wild., & Fish.

**CHELLE OF ARTS AND SCIENCES**

*Herbert S. Benjamin Memorial Scholarship (1:$500) Male advertising major; awarded by Manship Sch. of Jour.

*Lou Audrey Benjamin Memorial Scholarship (1:$500) Female advertising major; awarded by Manship Sch. of Jour.

Lillian Bourdierr Scholarship (2:$150) JR/SR news editorial major; awarded by Manship Sch. of Jour.

*Chevron USA Journalism-Economics Scholarship (1:$1000) JR or SR journalism student with special interest in business and economics reporting; awarded by Manship Sch. of Jour.

Communications Workers of America Scholarship (1:$750) JR journalism student; awarded by Manship Sch. of Jour.

*Margaret Dixon Journalism Award (1:$100 and silver bowl) SR woman journalism student; media achievement; awarded by Manship Sch. of Jour.

Robert Ewing Scholarship (3:$800 plus fee exemption) JR journalism student who has attended LSU at least one year and has 3.00 gpa; awarded by Manship Sch. of Jour.

*Roberta Gilkison Falk Student Travel Grants (varies) Meritorious journalism students; awarded by Manship Sch. of Jour.

Walter Hitesman Curriculum Award (3:$250) Outstanding students in news-editorial, broadband journalism, and advertising curricula; awarded by Manship Sch. of Jour.

*Walter Hitesman Scholarship (6:$200 per sem.) Journalism student having financial need and showing great promise as a journalist; awarded by Manship Sch. of Jour.

Henry V. Howe Memorial Scholarship Fund See College of Basic Sciences.

*Agatha LaCroix Award (1:varies) Outstanding student in French; awarded by Dept. of French & Italian.

*Benjamin F. Leeper Memorial Scholarship (1:varies) JR in journalism; interest in photography; must have completed JOUR 2090 and 2151 and be taking JOUR 3065; 3.00 gpa; awarded by Manship Sch. of Jour.

Manship Merit Scholarship (8-12:$4000) Entering FR in journalism with superior scholastic record; top five percent of high school class; at least 26 composite score on ACT; status as National Merit Semifinalist or National Achievement Program Semifinalist; renewable; awarded by Manship Sch. of Jour.

*Charles P. Manship Memorial Scholarship (2:$250) SO/JR/SR in journalism with 2.50 gpa in journalism courses; awarded by Manship Sch. of Jour.

Jules L. Mayeux Scholarship (1:up to $3000) SO student in LSU program leading to career in telecommunications; at least 2.50 gpa in specified courses; apply in spring semester of sophomore year; renewable up to $6000; awarded by Louisiana Association of Broadcasters on recommendation of broadcast journalism faculty.

*Emil W. Mehrer Scholarship in Speech Pathology and Audiology (1:$1000) SR in speech pathology and audiology; awarded by the Speech and Hearing Clinic Committee on Scholarships and Financial Assistance.

*Mu Sigma Rho Outstanding Upperclassman Scholarship (varies) JR/SR in College of A&S; 3.50 gpa; awarded by college.

Police Jury Association of Louisiana Scholarship (1:$250) SR in political sci.; La. resident; graduate of La. high school; awarded by Dept. of Political Sci.

Corinne L. Saucier Romance Language Scholarship (1:$870) Graduating SR in French or Spanish, for advanced study at LSU or in foreign country; preference to students planning to teach; awarded by Dept. of French & Ital. and Dept. of Span. & Port.

Scripps-Howard Scholarship (1:$1000) SR in broadcast
journalism or news-editorial who is working to pay educational expenses; financial need; superior academic achievement; awarded by Manshp Sch. of Jour.

• Claude L. Shaver Scholarship (1:varies) FR in theatre; academic ability and theatre talent; awarded by theatre staff.

• Joseph M. Silverberg Memorial Scholarship (1:varies) SR in new-editorial; 3.00 gpa; awarded by Manshp Sch. of Jour.

Sternberg Award (2:book award) SO in Col. of A&S Div. of Honors and Interdisciplinary Studies; awarded by Col. of A&S.

• Mayne Steele and Lester J. Williams Grant (1:$300) UG who has demonstrated outstanding reporting for "The Daily Reveille"; awarded by Manshp Sch. of Jour.

WBRZ Equal Opportunity Scholarship (1:varies) JR in broadcast career field of study; La. resident; administered by broadcast faculty in Manshp Sch. of Jour.

Jean Wheeler Memorial Scholarship (1:$500) UG female with demonstrated interest in journalism and/or theatre; 3.00 gpa; awarded by La'Acadieene Chapter of American Women in Radio and Television, in consultation with faculty of relevant departments.

COLLEGE OF BASIC SCIENCES

• A. R. Choppin Scholarship (3:$1000) SO/JR/SR in Col. of Basic Sci.; awarded by Col. of Basic Sci.

• A. R. Choppin American Legion and American Legion Auxiliary Scholarship (2:$1000) UG enrolled or planning to enroll in Col. of Basic Sci.; La. resident; former citizen of La. Boys' or Girls' State; awarded by Col. of Basic Sci.

Charles E. Coates Undergraduate Honor Award (1:$750 plus nonresident fee exemption) UG enrolled or planning to enroll in Col. of Basic Sci. with at least 3.00 gpa; awarded by Col. of Basic Sci.

• Copolymer Rubber and Chemical Corporation Foundation Scholarship (4:$500) UG in chem. with outstanding academic ability; awarded by Dept. of Chem.

• Monica Donellan Memorial Scholarship (1:varies) Financial need is primary consideration; awarded by Dept. of Geol.

• Dow Chemical Company Scholarship (4:$500) UG in chem.; awarded by Dept. of Chem.

• East Baton Rouge Parish Medical Society Premedical Scholarship (1:$500) JR/SR pursuing career as M.D.; awarded by College of Basic Sci.

Freshman Chemistry Award by Student Affiliate Chapter of American Chemical Society (3) Students with three highest scores on exam given in spring semester; open to all students registered for freshman chemistry.

Getty Oil Company Foundation Scholarship (2:varies) UG in geology; awarded by Dept. of Geol.

I. H. Gottlieb Memorial Scholarship (1:$400) UG majoring in chem. or chem. engr.; La. resident; awarded by Dept. of Chem. and Dept. of Chem. Engr., in alternate years.

Gulf Oil Honors' Scholarship (1:80% of fees, room, and board for JR & SR yrs.) JR in geology; high scholastic achievement; demonstrated leadership skills; awarded by Dept. of Geol.

Joy Holm Memorial Scholarship Fund (2:$500) SR in medical technology; awarded by La. Society of Medical Technologists.

• Funded through LSU Foundation.

Henry V. Howe Memorial Scholarship Fund (1:varies) Needy, outstanding FR in geology or geography; awarded by Dept. of Geol.

• Keen-Morris Prize (1:$500) Outstanding SR in physics in Col. of Basic Sci.; awarded by Dept. of Phys. & Astron.

• Adrian Virginia Lazarus Memorial Scholarship (1:$300) UG in computer science; 3.00 gpa; awarded by Col. of Basic Sci.

• Louisiana Land & Exploration Scholarship in Geology (1:$900 JR/2:$900 SR) JR/SR in geology; awarded by Dept. of Geol.

Marathon Oil Foundation Minority Scholarship (1:$1500) UG in acct., geol., or pet. engr.; awarded by Chancellor.

• National Lead Industries Foundation Scholarship (1:$2500) JR in geology; awarded by Dept. of Geol.

New Orleans Geological Society Scholarship (1:$500) JR geology major; awarded by Dept. of Geol.

Penzoil Exploration and Production Company Scholarship (varies) UG in geology; awarded by Dept. of Geol.

Shell Foundation Undergraduate Aid Scholarship (1:$1000) UG minority student in computer science; awarded by Dept. of Comp. Sci.

• Laurice Sistrunk Memorial Scholarship (1:varies) SO in pet. engr. or geology curriculum; awarded by SA&SCom upon recommendation of Dept. of Geol. or Dept. of Pet. Engr.

Major J. Stewart Slack, Jr., Memorial Scholarship (1:$500) UG in geology or pet. engr.; La. resident; awarded by special committee on recommendation of Dept. of Geol. or Dept. of Pet. Engr.

Sun Exploration and Production Company Scholarship (varies) UG in geology; high scholastic ability; one reserved for qualified female or minority student; awarded by Dept. of Geology.

• W. W. Tison Memorial Scholarship (1:$650) UG majoring or planning to major in chem. in Col. of Basic Sci.; awarded by Dept. of Chem.

• Travis Varner Memorial Scholarship (1:$500) UG in computer science; established by BR Chapter of Data Processing Management Association; awarded by Dept. of Comp. Sci.

• Virginia R. Williams Memorial Scholarship (1:$900) Outstanding female UG in biochem. or chem. male UG in biochem.; minimum 3.00 gpa; awarded by Col. of Basic Sci.

COLLEGE OF BUSINESS ADMINISTRATION

American Bank & Trust Co. Scholarship in Honor of Mr. J. Clifford Ourso (1:$1500) Student enrolled in, or planning to enroll in, Col. of Bus. Adm.; scholarship, financial need, civic or community involvement; resident of EBR or adjacent parishes.

Arthur Anderson & Co. Award (1:$200) Most active member of Beta Alpha Psi; awarded by Dept. of Acct.

• Paul and Ellen Arst Scholarship for the College of Business Administration (1:$1000) JR/SR in risk and insurance curriculum; awarded by Scholarship Committee of Col. of Bus. Adm.

• Association of Government Accountants—Baton Rouge Chapter Scholarship (1:varies) JR/SR majoring in accounting; awarded by Dept. of Acct.
*Bank of West Baton Rouge Banking Scholarship (varies:$750) JR/SR majoring in commercial banking; academic achievement; financial need; awarded by Scholarship Committee of Col. of Bus. Adm.

*Lonnie H. Beary Scholarship (1:varies) SO/JR accounting major; awarded by Dept. of Accct.

Beta Alpha Psi Award (1) Certificate of merit to SR with highest overall gpa; U.S. Savings Bond to top-ranking JR acct. major; awarded by Phi Chapter of Beta Alpha Psi.

*Fred A. Blanche Memorial Scholarship (1:$600) JR/SR in risk and insurance curriculum showing outstanding academic qualifications and financial need; awarded by Col. of Bus. Adm.

*Capital Bank & Trust Co. Banking & Finance Scholarship in Honor of Mr. H. Hamric Holloway, Jr. (1:$1000) JR/SR in finance or commercial banking; 3.00 gpa; Louisiana resident; financial need; awarded by Scholarship Committee of Col. of Bus. Adm.

*Capital Bank & Trust Co. Scholarship in Memory of Allison R. Kolb (1:varies) JR/SR in finance with at least 3.00 gpa; awarded by Col. of Bus. Adm.

*L. A. Champagne Memorial Scholarship (1:$800) SO accounting major; 2.70 gpa; renewable for three yrs.; awarded by Col. of Bus. Adm.

*Quinn M. Coco Scholarship Fund (1:varies) Student in accounting; awarded by Dept. of Accct.

Coopers & Lybrand Award (1:$500) JR showing outstanding academic qualifications, extracurricular activities, leadership, and character; awarded by Dept. of Accct.

*Tommy Doiron and Jimmy Webb Memorial Scholarship (1:varies) SO with 2.50 gpa; financial need; awarded by Col. of Bus. Adm.

*Ted F. Dunham Scholarship (2:$1000) FR from Winn Parish entering Col. of Bus. Adm.; applicants must have a minimum ACT score of 18.

*David Harper Garland Memorial Scholarship (1:varies) UG in bus. adm.; academic ability; financial need; awarded by Scholarship Committee of Col. of Bus. Adm.

Hawthorne, Waymouth, and Carroll Scholarship (1:$250) SR acct. major who indicates ability to succeed in public accounting in the environment of the local practitioner; awarded by Dept. of Accct.

**Emmett Herring, Sr., Memorial Scholarship (1:varies) JR/SR in risk and insurance; awarded by Scholarship Committee of Col. of Bus. Adm.

*Mack H. Hornbeak Scholarship (1:$1000) Outstanding student in Col. of Bus. Adm., preferably majoring in commercial banking or finance; financial need; awarded by Scholarship Committee of Col. of Bus. Adm.

*ABC-Baton Rouge Business Communications Scholarship (1:varies) SR in communications field; awarded by LSU Foundation.

*Russell Lobdell Memorial Scholarship (1:varies) SO with outstanding academic qualifications, financial need, and demonstrated qualities of leadership; graduate of a Baton Rouge high school; awarded by Col. of Bus. Adm.

Louisiana Consumer Finance Association Award (2:$250) JR/SR; awarded by Col. of Bus. Adm.

*Louisiana Land and Exploration Scholarship (1:$1000) Student in petroleum land management; La. resident; awarded by Scholarship Committee of Col. of Bus. Adm.

*Louisiana Motor Transport Association (Baton Rouge Chapter) Award (1:$440) FR planning to major in bus. adm.; awarded by SA&SCom.

Marathon Oil Foundation Minority Scholarship (1:$1500) UG in acct., geol., or pet. engr.; awarded by Chancellor.

*Mike McNeal Memorial Scholarship (1:$300) Entering FR planning to major in bus. adm.; graduate of Tara High School; 3.30 gpa in high school; 2.00 gpa to retain; awarded by SA&SCom. from recommendation by principal of Tara High School.

National Association of Accountants (Baton Rouge Chapter) Award (1:$250) SR/GR in acct.; awarded by Dept. of Accct.

*James M. Owen Memorial Scholarship (varies:$200) UG showing promise of attaining high personal and professional standards of Dr. Owen; awarded by Dept. of Accct.

Peat, Marwick, Mitchell & Co. Award (1:$200) Outstanding student in basic auditing course; awarded by Dept. of Accct.

Price Waterhouse & Co. Award (1:$200) Outstanding JR accounting major; awarded by Dept. of Accct.

Realtor Salesman Organization Scholarship (2:$250) SR in bus. adm. interested in real estate field; EBR resident with minimum 3.00 gpa; awarded by Dept. of Fin.

*R. T. Reckling Memorial Scholarship (1:$440) JR in international trade and finance; financial need; La. resident; 3.00 gpa; awarded by Dept. of Econ.

Shell Companies Foundation, Inc. Award (2:$250) One award to outstanding JR/SR; one award to outstanding student in cost acct.; awarded by Dept. of Accct.

Society of Louisiana CPA's (Baton Rouge Chapter) Scholarship (1:$220) SO in acct.; awarded by Dept. of Accct.

Society of Louisiana Certified Public Accountants Medal (1) Medal presented to top ranking graduating SR in acct.; awarded by Dept. of Accct.

*Kitty B. Strain Endowed Scholarship (1:varies) JR/SR female; 3.00 gpa; awarded by Scholarship Committee of Col. of Bus. Adm.

*Sun Exploration and Production Company Award (1:varies) Female or minority student in petroleum land management; awarded by Scholarship Committee of Col. of Bus. Adm.

*W. Leroy Ward, Sr. Memorial Scholarship (4:$700) JR in finance, banking, or related field; financial need; 3.00 gpa; EBR resident; awarded by Col. of Bus. Adm.

Arthur Young & Company Award (1:$200) Outstanding student in advanced accounting course; awarded by Dept. of Accct.

COLLEGE OF DESIGN

Alpha Rho Chi Medal (1) 5th-yr. student with outstanding service to school and/or profession.

American Institute of Architects Award (varies) Student in arch.; awarded by Nat. Am. Inst. of Architects through Sch. of Arch.

American Institute of Architects Medal (1) 5th-yr. student with outstanding professional abilities; awarded by Nat. Am. Inst. of Architects.
American Society of Landscape Architecture (1: $500) Based on scholarship and financial need; awarded by Sch. of Land. Arch.

Baton Rouge Art League Award (1: $250) JR/SR/GR in art with minimum 3.00 gpa; awarded by Sch. of Art.

Certificate of Merit, American Society of Landscape Architects (1) Outstanding SR in landscape architecture; awarded by Sch. of Land. Arch.

M. N. Davidson Foundation Scholarship (2: $250) Student in Sch. of Arch.; awarded by Sch. of Arch.

Dean's Medals (4) Outstanding graduate in architecture, art, interior design, and landscape architecture; evaluation of portfolio and potential in professional field; nominated by faculty; awarded by dean.

*Terry Devine Memorial Scholarship (1: varies) 4th- or 5th-year student in arch.; awarded by Sch. of Arch.

*Caroline Durieux Scholarship (varies) UG in art; awarded by Sch. of Art.

Interstate Commercial Interiors (Division of Interstate School Supply) Award (2: $50 or $150) Outstanding JR/SR in interior design; awarded by Sch. of Arch.

*Alice Hovey Littlefield Memorial Scholarship (1: varies) Female UG in land. arch.; awarded by Sch. of Land. Arch.

Louisiana Garden Club Federation, Inc. Scholarship (1: $1000) Outstanding student in land. arch.; La. resident; based on scholarship and financial need; awarded by Sch. of Land. Arch.

McKay's Interiors Award (1: $100; 2: $50; 1: $25) Outstanding SO/JR/SR in residential interior design; awarded by Sch. of Arch.

*Helen Adams Reich Memorial Scholarship (4: $500) Preference to nonresident UG in land. arch.; awarded by Sch. of Land. Arch.

Reynolds Aluminum Award (varies) Student in arch. on basis of design competition prize; awarded by Reynolds Aluminum Co. through Sch. of Arch.

*Root and Associates Scholarship in Graphic Design (1: $500) Student in graphic design; awarded by Sch. of Art.

Shenandoah Garden Club Scholarship (1: $500) Outstanding student in landscape arch.; based on scholarship and financial need; awarded by Sch. of Land. Arch.

Dixon Smith, ASID, College of Design Scholarship (1: varies) JR who demonstrates ability for interdisciplinary work and potential in profession; nominated by faculty; awarded by dean.

Woods and Water Scholarship See College of Agriculture.

COLLEGE OF EDUCATION

AWARD

Sophomore Honor Award (1: $270) Outstanding SO in Col. of Educ.

SCHOLARSHIPS

Alpha Delta Kappa Scholarship (1: $250) SO in Col. of Educ. with at least 3.00 gpa; awarded by Col. of Educ. and Alpha Delta Kappa.

*Funded through LSU Foundation.

*Paul and Ellen Arst Scholarship for the College of Education (1: $1000) JR/SR in special education; awarded by Col. of Educ.

*Association of Classroom Teachers of East Baton Rouge Parish Endowed Scholarship (1: varies) JR/SR in education curriculum; graduate of EBR high school; 3.00 gpa; awarded by Col. of Educ.

Marietta Boon Endowment Scholarship (1: varies) SR in Col. of Educ.; 3.00 gpa; unmarried; awarded by Col. of Educ.

Clyde Leslie Madden Memorial Endowment Fund Scholarship (1: varies) UG in Col. of Educ.; awarded by Col. of Educ.

COLLEGE OF ENGINEERING

AWARDS

*Michael A. Clause Memorial Fund Award (1: varies) UG in civil engr.

*Chemical Engineering Junior Award (varies: $100) JR in chem. engr. with highest gpa at end of year; awarded by Dept. of Chem. Engr.

*Jesse Coates Award (1: varies) UG in chem. engr. who shows most outstanding leadership.

Paul M. Horton Award (1: varies) Outstanding LSU chem. engr. graduate who enters LSU Graduate School.

*Pegues Award (1: medal and certificate) UG in civil engr.

*John J. Seip Memorial Scholarship Award (1: varies) UG in Dept. of Chem. Engr.; interest in sugar technology or energy conservation; awarded by Chem. Engr. Awards Committee.

SCHOLARSHIPS

*Ned Adler Memorial Scholarship (1: $1000) UG in mech. engr.; awarded by Dept. of Mech. Engr.

W. R. Aldrich Memorial Engineering Scholarship (varies) UG in engineering; awarded by Col. of Engr.

*Allied Chemical Scholarship (2: $1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Aminoil USA Scholarship in Petroleum Engineering (2: $1250) UG in pet. engr. based on scholarship; U.S. citizen; awarded by Dept. of Pet. Engr.

Amoco Foundation Scholarship (varies: $700, $800, $900, $1000) UG in pet. engr.; renewable; awarded by Dept. of Pet. Engr.

Amoco Foundation Scholarship for Minorities (varies: $700, $800, $900, $1000) UG in pet. engr.; renewable; awarded by Dept. of Pet. Engr.


Baton Rouge Chapter of Louisiana Engineering Society Scholarship (1: $500) UG in engr.; nominated by Col. of Engr.

*Ben Burns Student Fund (varies) For student projects and/or scholarships in the Dept. of Mech. Engr.; awarded by dept.
CAMECO Award in Agricultural Engineering (3:$500) Student in agr. engr. or agr. mech. with a 2.25 gpa; awarded by Dept. of Agr. Engr.

Chevron Oil Company Scholarships in Chemical Engineering (varies:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.


Continental Oil Scholarship in Chemical Engineering (varies:$1000) Minority UG in chem. engr.; awarded by Dept. of Chem. Engr.


B. C. Craft Memorial Foundation Scholarship (varies) UG in pet. engr.; awarded by Dept. of Pet. Engr.

Dow Chemical Scholarship in Chemical Engineering (1:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Eastman Kodak Scholarship (1:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Henry Gilbert Scholarship (3: varies up to $2000) UG/GR in pet. engr.; preferably from New York area; awarded by Dept. of Pet. Engr.

Michael Glassell Memorial Scholarship Fund (varies) UG in engineering; awarded by Col. of Engr., Interfraternity Athletic Council President, and ZAE president; apply to Col. of Engr.

Global Marine Drilling Company Scholarship (2:$2000) SO in mech., elec., or pet. engr. pursuing a career in the petroleum industry; renewable; awarded by Col. of Engr. every three years.

I. H. Gottlieb Memorial Scholarship See College of Basic Sci.

Gulf States Utilities Company Scholarship (1:$1200) UG in electrical engineering; awarded by Dept. of Elec. & Comp. Engr.

R. L. Hartman Scholarship (1: varies) JR in chem. engr.; 3.00 gpa; financial need; native Louisianian; awarded by Dept. of Chem. Engr.

Industrial Engineering Sustaining Scholarship (varies:$100) UG in ind. engr.; awarded by Dept. of Ind. Engr.

Instrument Society of America Scholarship (1:$1000) JR/ SR in chem., elec., or mech. engr.; awarded by Col. of Engr.

Kaiser Aluminum Scholarship in Chemical Engineering (varies:$1000) UG in chem. engr.; minority preference; awarded by Dept. of Chem. Engr.

Kaiser Aluminum Scholarship in Industrial Engineering (varies:$1000) UG in ind. engr.; minority preference; awarded by Dept. of Ind. Engr.

Kaiser Aluminum Scholarship in Mechanical Engineering (varies:$1000) UG in mech. engr.; minority preference; awarded by Dept. of Mech. Engr.

Kerr-McGee Foundation, Inc. Scholarship (2:$1000; 1 for minority or female; 1 for high academic achievement) JR/SR in chem., mech., or pet. engr.; awarded by Col. of Engr.

Louisiana Chemical and Petroleum Industries Freshman Scholarships in Chemical Engineering (20:$500) FR in chem. engr.; awarded by Dept. of Chem. Engr.

*Louisiana Land & Exploration Scholarship in Civil Engineering (1:$900) JR/1:$900) SR) JR/SR in civil engr.; awarded by Dept. of Civil Engr.


Marathon Oil Foundation Minority Scholarship (1:$1500) UG in acct., geol., or pet. engr.; awarded by Chancellor.

Marathon Oil Company Scholarship in Chemical Engineering (3:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Marathon Oil Company Scholarship in Petroleum Engineering (2:$1000) UG in pet. engr.; awarded by Dept. of Pet. Engr.

McDermott Corporation Scholarship (3:$1000) JR/SR in civil engr.; awarded by Dept. of Civil Engr.

Monsanto Company Scholarship in Chemical Engineering (varies:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

National Lead Industries Foundation Scholarship (3:$2500) JR in engr.; one each in elec., mech., and pet. engr.; awarded by Col. of Engr.


Boykin and Mable Pegues Scholarship (varies) UG in engr.; awarded by Col. of Engr.


Phillips Petroleum Scholarship in Chemical Engineering (1:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

*George R. Reymond Memorial Undergraduate Scholarship (2:$500) SO/JR in elec. engr.; awarded by Dept. of Elec. & Comp. Engr.

Schlumberger Foundation, Inc. Scholarship (2:$1500) JR/SR in engr.; 1 awarded by Col. of Engr.; 2 awarded by Dept. of Elec. & Comp. Engr.

T. H. Scott Scholarship in Agricultural Engineering (2:$300) UG with 2.50 average in agr. engr. or agr. mech.; awarded by Dept. of Agr. Engr.

Major J. Stewart Slack, Jr., Memorial Scholarship See College of Basic Sci.


Society of Petroleum Engineers, South Louisiana Section Scholarship (1:$1000) UG in pet. engr.; awarded by Soc. of Pet. Engr.

Standard Oil of Ohio Scholarship (2:$1000) UG in pet. engr.; awarded by Dept. of Pet. Engr.

* Funded through LSU Foundation.
Stauffer Chemical Company Scholarships in Chemical Engineering (varies:$1000) JR/SR in chem. engr., with preference to children of Stauffer employees; awarded by Dept. of Chem. Engr.


Sun Oil Company Scholarship (1:$1100) UG in pet. engr.; U.S. citizen; awarded by Dept. of Pet. Engr.


Tenneco Oil Company Scholarship in Chemical Engineering (varies:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Tenneco Oil Company Scholarship in Petroleum Engineering (2:$600) UG in pet. engr.; awarded by Dept. of Pet. Engr.

*Texaco Philanthropic Foundation Scholarship in Electrical Engineering (varies) Student in elec. engr.; awarded by Dept. of Elec. and Comp. Engr.


Texas Eastern Transmission Corporation Scholarship (2:$2500) UG in civil engr.; awarded by Dept. of Civil Engr.

* Transco Exploration Company Scholarship (1:$1000) UG in pet. engr.; awarded by Dept. of Pet. Engr.

Union Oil Company of California Foundation Scholarship in Chemical Engineering (varies:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Union Oil Company of California Foundation Scholarship in Petroleum Engineering (4:$750) UG in pet. engr. on basis of scholastic achievement; awarded by Dept. of Pet. Engr.

Vulcan Scholarship in Chemical Engineering (1:$1000) UG in chem. engr.; awarded by Dept. of Chem. Engr.

Louis Windham Memorial Scholarship (2:$250) SO in agr. engr. or agr. mech. with 2.50 gpa; awarded by the Dept. of Agr. Engr.

Woman's Auxiliary to the Louisiana Engineering Society (Baton Rouge Chapter) Award (3:$700) UG in engineering from Baton Rouge area; awarded by Col. of Engr.

* Woman's Auxiliary to the Louisiana Engineering Society (New Orleans Chapter)—Samuel McCain Young Scholarship (1:$1000) UG in civil engr. from New Orleans area; apply to Dept. of Civil Engr.

GENERAL COLLEGE

* Associated General Contractors of Louisiana, Inc. (varies:$500/year) SO in construction; selection based on need and association with construction industry; awarded by Dept. of Const.

* AGC Construction Industry Advancement Program of Baton Rouge and Vicinity Scholarship (3:$1000) Resident of the following parishes: East Baton Rouge, West Baton Rouge, Pointe Coupee, Iberville, Ascension, East Feliciana, West Feliciana, Livingston, St. Helena, Tangipahoa, Washington, or St. Tammany; awarded by Dept. of Const.

* AGC Construction Industry Advancement Program of Lafayette and Vicinity Scholarship (2:$500) Full-time student in Dept. of Const. (30 hours completed) with satisfac-

ry scholastic record; resident of the following parishes: Acadia, Iberia, Lafayette, St. Landry, St. Martin, St. Mary, or Vermilion; awarded by Acadia Chapter, AGC of Louisiana, Inc.

* AGC Louisiana Highway, Heavy, M-U Branch Scholarship (2:$1000) UG in Dept. of Const.; La. resident; awarded by Dept. of Const.

* Larry and Barbara Chachere Scholarship (2:varies) Full-time UG in general studies; 36 hours in residence in division prior to receiving award; at least 3.00 GPA; awarded by Div. of Gen. Studies & Com. Educ.

* General Studies Scholarship (2:varies) At least 36 hours in general studies curriculum; full-time; at least 3.00 GPA.

Home Builders Association Ladies Auxiliary Scholarship in Construction (2:$320) Entering FR in construction; graduate of La. high school; awarded by the sponsor.

National Association of Women in Construction Scholarship (1:$500) Full-time female student recommended by professor; must have good scholastic average and plan to pursue a career in construction upon graduation; awarded by Nat. Assoc. of Women in Const., B. R. Chapter No. 6.

* Louis and Lena Peranio Scholarship (2:$250) Student in general studies curriculum; 36 hours in residence in the division prior to receiving award; at least 2.50 GPA; awarded by Div. of Gen. Studies & Com. Educ.

Tribble and Stephens General Contractors Scholarship (1:$1000) Student in construction; awarded by dept.

* Floyd W. Womack, Sr., Scholarship (varies:$1000) Student in construction; awarded by Dept. of Const.

JUNIOR DIVISION

* Elayn Hunt Scholarship (1:$200) Female FR who has completed 15 hrs. with 2.00 gpa; awarded by Review Committee of JD.

* Anthony J. Losavio Scholarship (1:$500) FR in first academic year; composite ACT score of 22-28; awarded by Review Committee of JD.

* Junior Division—Louisiana Land & Exploration Scholarship (1:$1200) FR; awarded by JD.

* Quota Club Outstanding Freshman Woman Scholarship (1:$1000) FR with composite ACT score of at least 25; graduate of La. high school; recommended by Review Committee of JD; awarded by Quota Club Review Committee.

* Tiger Town Mall Association Scholarship (1:$500) FR with composite ACT score of 22-28; graduate of La. high school; awarded by Review Committee of JD.

SCHOOL OF MUSIC

AWARDS

* Lucille J. Blum Award in Music (2:varies) Awarded to vocal and instrumental students receiving B.M. degree with highest GPA at graduation.

LSU Honor Award (1:$270) Awarded each year to student with highest academic record when entering the school from JD; renewable for total of 3 yrs.; must maintain at least 3.00 GPA.

Louisiana Federation of Music Clubs Honor Award (2:$25 fee exemption/sem.) High school student earning superior
rating in voice, piano, or violin in State Competition Festival sponsored by La. Federation of Music Clubs; awarded on recommendation of dean.

Tiger Marching Band Award (varies:$125) Every Tiger Marching Band member eligible for cash service award at end of each fall semester.

ANNUAL SCHOLARSHIPS

Music Activity Scholarship (varies) UG/GR; renewable; based on competitive auditions and academic standing; awarded by dean.

Baton Rouge Music Club, Marshall Peery Scholarship (1:varies) JR voice student, by audition; awarded by Baton Rouge Music Club.

Baton Rouge Music Club, Gertrude Bott Sauzier Scholarship (1:varies) JR instrumental student, by audition.

Baton Rouge Rotary Club Scholarship (1:varies) Female voice student in Sch. of Music; awarded by Rotary Club.

Arthur Manly Culpepper Foundation Scholarship (1:$200) SR member of LSU band; awarded by Sch. of Music.

Galasso-Hermann Scholarship (Pi Kappa Lambda) (1:varies) Outstanding music student; awarded by Pi Kappa Lambda.

*Forrest F. Griffen Memorial Scholarship (varies) Outstanding UG/GR tuba or low brass student(s); awarded by low brass faculty.

D. H. Holmes Co., Ltd., Band Scholarship (1:$200) LSU band member; awarded by director of bands.

LSU School of Music Distinguished Pianists Scholarship (2:varies) UG/GR; awarded to incoming student by annual competition.

Opera Guild of Baton Rouge Scholarship (2:varies) Outstanding voice student who is (or will be) enrolled in opera workshop; awarded by Sch. of Music.

Theodore Presser Foundation Scholarship (1:varies) UG in Sch. of Music who plans to teach music; awarded by Sch. of Music.

Other Scholarships and Awards

*Mark Alcorn Memorial Scholarship (1:varies) Handicapped La. resident; awarded by SA&SCom.

Athletic Grants-in-Aid

The Bicentennial Endowed Scholarship of LSU (varies) Worthy student; awarded by SA&SCom.

Board of Supervisors Scholarship (varies; fee exemption, not to exceed $500 per regular semester and $250 per summer term) UG/GR/professional student; awarded by Board of Supervisors members and President of LSU System.

Boyd-Ewing Post 58 American Legion Scholarship (1:$100) UG entering advanced ROTC program; awarded by executive committee of Boyd-Ewing Post 58, on recommendation of Army or Air Force Commandant of Cadets.

Robert Stevens Butler Award (1:varies) Port Allen High School graduate with highest scholastic average during FR year at LSU; awarded by SA&SCom.

Nathaniel M. Caffee Freshman English Medal (1) Awarded for best theme written by student taking FR English; awarded by Freshman English Committee.

*Funded through LSU Foundation.

Earl Redding Memorial Prize in Musical Theatre (1:$500) UG/GR voice major; awarded by Sch. of Music.

Gertrude Bott Sauzier Scholarship (varies) Academically and musically talented student; awarded by dean.

ENDOWED SCHOLARSHIPS

*Frank Collins Memorial Scholarship (1:varies) UG/GR organ major; awarded by Sch. of Music.

*Helen Libbey Cordiner Scholarship in Violin (1:varies) UG violin student; awarded by annual competition.

*Dr. Michael A. Galasso Memorial Scholarship (1:varies) UG incoming violin student; awarded by Sch. of Mus.

*Polly Gibbs Scholarship (varies) Piano pedagogy student; awarded by Sch. of Music.

*L. Bruce Jones Memorial Scholarship (varies) UG/GR majoring in music education; excellent academic record; awarded by Sch. of Music.

*Kenneth Klaus Viola Scholarship (1:$500) String major in Sch. of Music; musical and academic ability and financial need; awarded by Sch. of Music.

*Allison R. Kolb Music Scholarship (varies) UG/GR in Sch. of Mus.; awarded by Sch. of Music.

*Byron Lamb Memorial Scholarship (1:varies) Outstanding UG/GR tuba or low brass student; awarded by Sch. of Music.

Frank C. Page Memorial Scholarship (1:varies) UG/GR music major; awarded by dean.

Martha Sue Blain Stevens Memorial Scholarship (1:$350) UG in Sch. of Music; awarded by Sch. of Music.

*Barrett and Mae Stout Memorial Scholarship (1:varies) SR music student; distinguished GPA in music theory and literature; awarded by Sch. of Music.

Nathaniel M. Caffee Memorial Scholarship (1:$320) UG; awarded by SA&SCom.

Campus Club Scholarship Award (1:$600) 2nd semester SO with gpa of 3.50 or better; son or daughter of persons eligible for Campus Club membership; awarded by SA&SCom.

*Capital City Kiwanis Club of Baton Rouge Scholarship (1:$600) Entering FR from East Baton Rouge Parish; awarded by SA&SCom.

Capitol Lodge No. 29, Knights of Pythias Memorial Scholarship (1:$800) Entering FR; awarded by SA&SCom.

Chancellor's Freshman Honor Award (varies:$100) Full-time FR in top 10% of high school senior class, with at least 20 composite score on ACT, and leadership qualities; only for fall semester following high school graduation; cannot be renewed; awarded by SA&SCom.

Chancellor's Scholarship (50:$450) SO/JR/SR; awarded by SA&SCom.

George H. Deer Memorial Scholarship (1:$320) Awarded by SA&SCom.

Lucille May Grace Dent Memorial Scholarship (1:$100) Outstanding SO Army ROTC cadet accepted in advanced ROTC; awarded by special military science committee.
International Student Undergraduate Nonresident Honor Award ($5,000) International student; awarded by International Educ. Committee.

* Leslie G. Gruber Scholarship (varies; $1,000) Incoming Tennessee high school graduate; academic need; recommended by SA&SCom.

* Leon Guerin—Al Evans Memorial Scholarship (varies; $1,000) La. high school graduate; academic ability and financial need; awarded by SA&SCom.

* Fannie Guy Memorial Scholarship (varies; $600) Graduate of DeSoto Parish high school; awarded by SA&SCom.

Honor Student Honor Award (13; $270) Based on scholastic record; awarded on recommendation of student’s dean.

*International Alumni Scholarship (varies) UG international student; awarded by International Educ. Com., on recommendation of local alumni chapter.

* James M. Koencke Memorial Scholarship (varies; $500) Entering FR; La. high school graduate; awarded by SA&SCom.

** LSU Alumni Federation Scholarship (Greater Washington, D.C., Chapter) (1; summer internship stipend) JR/ SR in journalism, law, political science, or public adm.; awarded by SA&SCom. on recommendation of Col. of Bus. Adm., Man- ship Sch. of Jour., Law Center, or Dept. of Pol. Sci.

** LSU Alumni Federation Scholarship for Nonresidents of Louisiana (10; $1500 fee exemption plus $400 stipend) Entering FR, resident of state other than La.; awarded by SA&SCom.

LSU Kiwanis Club Scholarship (1; $200) Dependent of LSU faculty/staff entering senior college in fall semester; awarded by SA&SCom.

Louisiana Boys’ State Honor Award; Louisiana Girls’ State Honor Award (12; $25 fee exemption/sem.) Awarded by director, Louisiana Boys’ State and Louisiana Girls’ State.


Louisiana State Science Fair Honor Award (varies; $25 fee exemption/sem.) Awarded by La. State Science Fair.

*Captain John Adrian Martin Memorial Scholarship (varies; $500) Entering FR; graduate of Woodlawn High School (B.R., La.); awarded by SA&SCom. on recommendation of Woodlawn High School principal.

* Ben R. Mayer Memorial Scholarship (1; $250) UG; La. resident; awarded by SA&SCom.

* Mattye F. McGivney Memorial Scholarship (varies; $1,000) SO/ JR/ SR; La. resident; 3.00 GPA; awarded by SA&SCom.

* Anna R. Meyer Memorial Scholarship (1; $750) UG from Ouachita Parish; awarded by SA&SCom.

Ministerial Scholarship (varies; $25 fee exemption/sem.) Dependent children of ordained ministers serving in La.; awarded by Office of S&AS.

Chep Morrison Memorial Scholarship (1; $950) UG in pre-law with 3.00 GPA; awarded by SA&SCom.

National Association of Teachers of French Scholarship (varies; $25 fee exemption/sem.) Awarded by Nat’l. Assoc. of Teachers of French, La. Chapter.

* Governor James A. Noe Scholarship Fund (varies) Academically talented UG minority student; awarded by special committee.

Nonresident Undergraduate Honor Award ($45; $1,500) Outstanding nonresident UG; awarded by SA&SCom.

* Vera Lee and Glen H. Olds, Jr., Scholarship (1; $500) UG; awarded by SA&SCom.

* Juanita Steele Peck Scholarship (1; $800) FR from Catahoula or Concordia parishes; awarded by SA&SCom.

Pasquale Porcelli Undergraduate Scholarship (1; $500) Advanced UG; awarded by Dept. of Math.

ROTC Scholarship See section below.

Gertrude Batt Saucier Scholarship (35; $800) Entering FR; awarded by SA&SCom.

Scholarship for Nonresident Sons and Daughters of LSU Graduates (varies; nonresident fee exemption not to exceed $350 per sem.) Entering FR with composite ACT score of 19 or higher; or UG transfer student with a 2.50 or higher cumulative gpa.

Charles B. Sherrouse Scholarship (1; $500 & $600) Entering FR; Franklin Parish high school graduate; awarded by special committee.

Sigma Xi Award (1; $80) Outstanding graduating SR in science.

State Literary Rally Honor Award (varies; $25 fee exemption/sem.) Awarded to 1st place winners in La. State Literary Rally; winners in two or more events receive larger fee exemptions.

State School for the Blind Scholarship (varies; $25 fee exemption/sem.) Graduates of La. State School for the Blind; awarded by Div. of Academic Serv. on evidence of eligibility.

SGA Research Scholarship (varies) All students, for funding of approved research projects; awarded by special SGA committee.

Undergraduate Scholarship for Children of Louisiana Police Officers or Deputy Sheriffs Killed or Permanently Disabled in Performance of Duty (varies) Recipients exempted from payment of University fee and charges for room and board; cash grants of $125 per semester for books.

* Edna Tate and Harry Halbedel Scholarship Fund (1; $500) UG needing financial assistance; awarded by SA&SCom.

* Collis B. Temple, Sr. Scholarship Fund (varies) Entering needy minority FR who otherwise would not be able to pursue college education; awarded by special committee.

* Dr. Charles Henry Voss Memorial Scholarship (1; $750) UG; La. resident; awarded by SA&SCom.

Horace Wilkinson, III, Memorial Scholarship (1; varies) UG; awarded by SA&SCom.

William H. Zinn Scholarship (1; $120) UG; awarded by SA&SCom.

* Funded through LSU Foundation.

** Sponsored by LSU Alumni Federation.
Graduate-Level Scholarships and Awards

For information on scholarships and awards for students in the Graduate School or professional schools, see the publications issued by those divisions.

LSU Alumni Scholars Program

$14,400 Chancellor’s Alumni Scholarships

Qualifications: Students must have an “A” overall high school average in English, mathematics, social studies, and natural sciences; and in addition, a composite score of 32 or better on the American College Test (ACT) or status as a National Merit Semifinalist with a minimum National Merit Selection Index score of 200.

Awards: The five students selected receive $14,400 over a four-year period and priority in residence hall assignments. Other qualified applicants will be offered the $5000 scholarship described below. Out-of-state recipients are exempt from payment of the nonresident fee; they pay the same fees as Louisiana recipients.

Application Procedure: To be considered for the Chancellor’s Alumni Scholarship, high school students should:

1. Take the ACT no later than the October testing date of their senior year in high school and indicate LSU as one of their college choices. To do this, applicants must register for the test at least one month prior to the testing date. Registration material should be available in the counselor’s office at each high school. Students who took the ACT as juniors do not have to take the test again. Students who are National Merit Semifinalists or National Achievement Program Semifinalists should indicate this fact, as well as their National Merit Selection Index score, when they apply.

2. Submit an LSU “Scholarship Application” and an up-to-date transcript of academic marks by December 1 of their senior year in high school to the Office of Student Aid and Scholarships. These forms are usually available at all Louisiana high schools. They may also be obtained by contacting the Office of Student Aid and Scholarships, 202 Himes Hall.

$5000 Scholarships

Qualifications: ACT scores, National Merit Selection Index scores, and high school academic marks all weigh heavily in the qualifying process. Special consideration is given to National Merit Semifinalists, National Achievement Program Semifinalists, and students with ACT scores of 30 or better.

Awards: The 100 students selected receive $5000 ($1250 per year for four years) and priority in residence hall assignments. In addition, each recipient is offered the opportunity to become a Chancellor’s Student Aide and earn another $1300 per year working at a campus job. Out-of-state recipients are exempt from payment of the nonresident fee.

Application Procedure: To be considered for this scholarship, high school students should follow the procedure described above for the Chancellor’s Alumni Scholarship.

LSU Honor Scholarships

Qualifications: To be automatically eligible, an entering freshman must be a Louisiana resident and must meet at least one of the following requirements: (1) be certified as high school valedictorian by an appropriate school official; (2) be officially designated a finalist or semifinalist in either the National Merit Scholarship Program or the National Achievement Scholarship Program; or (3) be able to show an American College Test composite score of at least 25 and also show an “A” overall high school average in both English and mathematics.

Awards: Five hundred scholarships are awarded, exempting recipients from payment of all University fees (tuition) normally assessed Louisiana residents. At the present time, this amount is approximately $4000 ($1000 per year for four years). In addition, each recipient is offered the opportunity to become a Chancellor’s Student Aide and earn an additional $1300 per year working at a campus job.

Application Procedure: To be considered for this scholarship, high school students should follow the procedure described above for the Chancellor’s Alumni Scholarship.
ROTC Scholarships

Air Force ROTC Scholarships

The Air Force ROTC College Scholarship Program offers assistance to outstanding men and women who enroll in the Air Force ROTC program. Each scholarship provides for full payment of University fee, nonresident fee, student health service fee, textbook expenses, laboratory and associated fees, and also includes a tax-free allowance of $100 each month during the period the student is in school and on scholarship status. (All students who enroll in the last two years of the Air Force ROTC curriculum receive this $100 per month allowance regardless of their scholarship status.) Both male and female high school students are eligible for the four-year scholarship program providing they make application prior to December 15 of their senior year. Interested high school students should write during the summer prior to their senior year to Air Force ROTC, Maxwell AFB, Alabama 36112, for application procedures. Selection is based on results of the CEEB Scholastic Aptitude Test or American College Test, high school academic record, extra-curricular and athletic activities, personal references, and on meeting medical standards for a commission. In addition, all four-year AFROTC scholarship recipients must enroll in specific academic disciplines. (These will be identified to the student when a scholarship application is requested.)

Freshmen who are enrolled in Air Force ROTC may compete for four-year (if in five-year curriculum), three and one-half year, or three-year scholarships. Sophomores who are in or intend to enter Air Force ROTC may apply for two and one-half year or two-year scholarships. These scholarships are available to students on a merit basis for a variety of professional, engineering, scientific, and technical studies at the undergraduate level. Scholarship winners in pre-health receive their professional and graduate training at Air Force expense. Interested students should contact the Professor of Aerospace Studies, Air Force ROTC Detachment 310, LSU.

Army ROTC Scholarships

The Army ROTC Scholarship Program is designed to offer financial assistance to outstanding men and women who are interested in the Army as a career. Each scholarship provides for the University fee, nonresident fee, student health service fee, books, laboratory fees, other educational expenses, and $100 per month subsistence allowance for up to 10 academic months each year the scholarship is in effect.

Scholarships may be awarded for two to four years. Four-year scholarships are open, on a competitive basis, to high school seniors. Applications for four-year scholarships must be completed and returned to the appropriate headquarters prior to December 1 of the student’s senior year in high school. Applications may be obtained by writing Army ROTC Scholarship, P.O. Box 9000, Clifton, New Jersey 07015. The three- and two-year scholarships are open, on a competitive basis, to all qualified freshmen and sophomores. Applications for these scholarships are obtained from the Professor of Military Science.

For most of the scholarships, a student can expect to incur a four-year active duty obligation upon graduation and commissioning.

Navy ROTC Scholarships

The National Competition Navy ROTC Scholarship Program is designed to provide four, three, or two years of financial assistance to outstanding young men and women working toward the bachelor’s degree. NROTC scholarships provide for the University fee, nonresident fee, books, laboratory fees, and $100 per month subsistence allowance.

Interested students should apply to the NROTC Navy-Marine Corps Scholarship Program, P.O. Box 5909, Washington, D. C. 20014 before December 1 or contact their local Navy recruiter.

LSU students who join the Naval ROTC Program at Southern University become eligible to compete for NROTC scholarships while actively participating in the program. These scholarships are awarded following each semester’s performance. The Professor of Naval Science nominates students enrolled in the NROTC college program based on their demonstrated academic performance and aptitude for service as commissioned officers in the U.S. Navy or Marine Corps. Midshipmen may choose the Marine Corps option prior to beginning their junior year.

Additional information may be obtained by contacting the Professor of Naval Science, NROTC Unit, Southern University, Baton Rouge 70813; telephone (504) 771-4370 or (504) 389-0250. Students incur no obligation while participating in the freshman and sophomore years of NROTC. There is no additional cost to LSU students to cross-enroll in the NROTC Program.
STUDENT LOAN FUNDS

The Office of Student Aid and Scholarships administers a number of loan funds created to help deserving students who need financial assistance to continue their education. All such funds are subject to policies and regulations authorized by the Faculty Senate Student Aid and Scholarships Committee. To be eligible, a student must make satisfactory academic progress.

Most notable of these is the National Direct Student Loan Fund. Under the terms of this program, the Federal government provides 90 percent of the fund and the University provides 10 percent. Academic records are considered, and the applicant must justify need for financial assistance. Repayment terms are liberal. No repayments are necessary and no interest is charged as long as the borrower is attending school full time. After leaving the University, the student must begin repaying the loan within six months in principal installments of no less than $30 per month and at an interest rate of 5 percent per year on the unpaid principal balance. The repayment period, depending upon the amount borrowed, might extend up to 10 years. Borrowers who teach in certain specified elementary or secondary schools where there is a high concentration of students from low-income families and borrowers who teach the handicapped may qualify for cancellation privileges. Students interested in applying for National Direct Student Loans should contact the Office of Student Aid and Scholarships for additional information.

Another loan fund is the Hiram Emergency Student Loan Fund. By means of this fund, emergency loans for necessary college expenses in amounts ranging up to $100 may be arranged on a short-term basis for full-time students who have attended LSU for at least one semester.

STUDENT EMPLOYMENT

To be eligible for campus employment, a student must have been admitted by the University to register full-time at the beginning of the term in which he or she seeks employment. A student's pay will be based on the type of work being done, previous work experience, and educational training. The minimum pay rate is at least $3.35 per hour. Most jobs require between 60 and 80 hours of work each month. Some require special skills; others demand only a willingness to learn.

Incorporated into the campus employment program is the college work-study program which is a joint effort by the federal government and the University to provide part-time jobs for students who have a need for financial assistance. Under the terms of this program, high school students showing academic promise whose families have relatively low annual incomes may be guaranteed student jobs before they arrive on campus. Such jobs will pay approximately $1000 per academic year.

STATE ASSISTANCE

T. H. Harris Scholarships valued up to $350 per year are awarded on the basis of at least a 3.00 average in high school and participation in extracurricular activities. These scholarships are available at all state-supported public colleges and universities. Correspondence should be addressed to the Executive Secretary, Scholarship Program, State Department of Education, P.O. Box 44064, Baton Rouge, Louisiana 70804. Veterans' Orphans Scholarships are awarded through the Department of Veterans' Affairs of the State of Louisiana. Vocational Rehabilitation Grants for disabled students are awarded through the Department of Vocational Rehabilitation, 1772 Wooddale Boulevard, Baton Rouge, Louisiana 70806. The State of Louisiana sponsors guaranteed loans for students who meet certain qualifications. Loans are made in amounts up to $2500 per year for undergraduate students and up to $5000 per year for graduate and professional students. To apply, a student must (1) submit an application to and be recommended by the Office of Student Aid and Scholarships, and (2) negotiate with a Louisiana bank or credit union in the student's hometown area. If the lender agrees to grant the loan, the loan is guaranteed by the state. The student pays no interest and is not required to repay the loan until after leaving school. For more information, contact the Office of Student Aid and Scholarships.

OTHER STATE AND FEDERAL ASSISTANCE

Other state and federal assistance includes Pell Grants, which are awarded directly from federal funds; Supplemental Educational Opportunity Grants (SEOG), which range from $200 to $950 a year; and State Student Incentive Grants (SSIG), which range from $200 to $950 a year. SEOG funds are intended to provide partial financial assistance to students from relatively low-income families. SSIG grants are designed for Louisiana students; applicants must have main-
tained at least a 2.00 average and be registered full-time. To be considered for these grants, a student must demonstrate need for financial assistance and must make satisfactory academic progress. Financial need is determined by an analysis of the income, assets, and other resources of the student and his or her family in relation to the educational costs of attending LSU.

Satisfactory Academic Progress

The University normally views any student who is not on academic probation and who meets the requirements for retention in a degree program under the scholastic regulations of the University as being in good standing and making satisfactory academic progress. For the purpose of participating in any of the Federal student aid programs for which the University selects recipients, in addition to not being on academic probation, a student must meet the following requirements:

Undergraduates (freshmen, sophomores, juniors, seniors): The maximum time frame allowed for earning a baccalaureate degree (including any remedial courses) shall be seven years of full-time academic work on the LSU campus. In accordance with this, an undergraduate shall be expected to earn at least an average of nine hours of credit for each semester when classified as a full-time student or a proportionate number of hours (usually 75 percent of hours carried) of credit when classified as a part-time student. This will apply to each academic year in which the student is enrolled as well as to the student's entire academic history on the LSU campus.

Graduate students: Consult the Graduate School Catalog.

Professional school students: Consult publications used by those divisions.

Appeals

If the Office of Student Aid and Scholarships has ruled that an applicant or recipient is not making satisfactory academic progress, that student may appeal if the student believes that the academic record has been incorrectly evaluated or if mitigating circumstances (such as illness or death in the family) have affected the student’s academic performance. Such appeals should be directed to the Office of Student Aid and Scholarships.

Re-instatement

Any student who has been disqualified from participating in student financial aid programs because of academic reasons may re-apply for such aid as soon as that student meets the prescribed standards for satisfactory academic progress.

Social Security Benefits

The federal Social Security law provides benefits to students when a parent on whom they are dependent dies or begins receiving Social Security retirement or disability benefits. Qualiﬁed persons should contact the nearest ofﬁce of the Social Security Administration for details.

Veterans’ Benefits

The Office of Veterans’ Affairs, 112 Thomas Boyd Hall, provides counseling and information for veterans attending LSU. Enrollment certiﬁcations to the VA are handled through this ofﬁce, and all veterans and eligible dependents of deceased or disabled veterans are urged to establish contact with the Ofﬁce of Veterans’ Affairs when they arrive on campus. New students who wish to receive advance pay should notify this ofﬁce at least 30 days prior to registration.
Student Services and Organizations

The University is committed to the concept of student growth and development through active participation in co-curricular activities and organizations. Through participation, it is expected that students will maintain and develop their physical and mental health, their sense of self-worth, their ability to work with and lead others, their understanding of citizenship obligations, their ethical and moral value system, their concern for the campus environment, and a sense of belonging to the University community. In order to foster the development of these qualities, a comprehensive program is offered. Further information may be obtained from the Office of the Vice-Chancellor for Student Affairs, 117 David Boyd Hall.

HOUSING AND RESIDENCE LIFE

Campus housing facilities consist of residence halls for men, residence halls for women, fraternity houses, sorority houses, and University-owned apartments. Three living plans provide students in residence halls with as much flexibility as possible in choosing a plan to suit individual needs and lifestyles. The University has established limits within each living plan, but residents may set up guidelines by majority vote within their buildings.

University housing is available to all full-time and part-time students on a voluntary basis, with specific room assignments based on the date of application for University housing and the terms of the housing contract.

Residence Hall Applications

To apply to live in a residence hall, one must submit a completed application form to the Office of Residence Life—Room Assignments, 98 Garig Hall. One may obtain an application and related information directly from this office or by returning a housing information request form which is included in the admission materials supplied by the Office of Admissions. Acceptance of a residence hall application or receipt of an assignment is not a commitment of admission to the University. Application for admission must be submitted to and approved by the Office of Admissions before a room assignment is valid.
A residence hall application for either a regular semester or the summer term must be accompanied by a reservation fee of $75 payable to LSU Housing in U.S. funds by check or money order. Acceptance of a reservation fee does not guarantee assignment. If the application is for a fall semester, after notification of a specific room assignment, a confirmation form and an additional $75 must be returned. Failure to confirm will result in cancellation. When rent is paid at the beginning of the fall semester, this additional $75 will be applied to fall rent.

Cancellation of an application/assignment must be submitted in writing to the Office of Residence Life—Room Assignments. If the cancellation is received by July 1 for the fall semester, December 15 for the spring semester, or May 15 for the summer term, a processing fee of $10 will be deducted from the reservation fee, and the remainder will be refunded. For fall semester, if the cancellation is received after July 1 but by August 1, $25 will be refunded, and the remainder of the reservation fee ($50 or $125 depending on whether the assignment has been confirmed) will be forfeited. If the cancellation is received after August 1 for fall, December 15 for spring, or May 15 for summer or if the assignment is not claimed during registration, the entire reservation fee will be forfeited unless all requirements for evaluation of the application for admission have been met, and admission has been denied.

The University reserves all rights in connection with assignment of rooms, inspection of rooms with notice, and termination of occupancy of rooms. Reservations are not transferable. If the room is not occupied by the last day of registration, the reservation is forfeited unless notification stating the time of late arrival has been received. Other terms of residence hall occupancy are provided in the housing contract. Room reservations in fraternity or sorority houses are limited to eligible members of those organizations, and are made directly with the organization.

Residence Hall Rates

Student living quarters are provided for approximately 3265 men and 3575 women in both air conditioned and non-air conditioned residence halls. Rates for the 1984-85 academic year ranged from $425 to $935 per semester for each occupant of a room occupied to its normal capacity. A student living in a room which is not filled to normal capacity will be expected to pay an additional rental charge based on the capacity of the room and the number of occupants or to move to another room at the same rental charge in the same residence hall. Students occupying rooms filled over normal capacity will have a refund made depending on the type of accommodation. Rooms are available for single occupancy. The charge for single occupancy of a two-student room is 1.5 times the semester rate for full occupancy. Semester rental rates are subject to change at the beginning of a regular semester or summer term.

Residence hall rent is payable at registration. Further information concerning residence hall accommodations may be obtained from the Office of Residence Life—Room Assignment, 98 Garig Hall.

University-Owned Apartments

Housing facilities for married students and single parents with minor children consist of 578 unfurnished two and three-bedroom apartments. Rental rates for the 1984-85 academic year range from $201 to $273 per month. Information on this type of housing is available from the Office of Housing—Married Students, 100 Graham Hall.

REFUND OF RESIDENCE HALL RENT

Students contract for space in a residence hall on a semester basis. The contract is effective as of the date the student pays fees or defers payment of fees during registration for classes at the start of a semester or summer term. Refund of room rent will be made according to the guidelines below. For further details, contact the Office of Housing, 149 Graham Hall.

1. A student who moves from one space to another in a residence hall or from one residence hall to another will be refunded or charged the difference, if any, between the unused prorated portions of rent for the two spaces.

2. A student who moves out of a residence hall upon resigning from the University will be refunded 75 percent of the unused prorated portion of rent for the space he or she was occupying.

3. A student who moves out of a residence hall without resigning from the University will be refunded the difference, if any, between the unused prorated portion of rent for the space he
or she was occupying and the corresponding prorated portion of rent for the least expensive space being offered to students that term. (The student will forfeit this prorated portion of rent for the least expensive space.)

4. A student who moves out of a residence hall into a fraternity or sorority house before the close of business on the last day of the regular registration period will be refunded all of the unused prorated portion of rent for the space he or she was occupying. If such a move is made after the last day of regular registration, the student will be refunded as in Item 3, above.

5. A student who is required to move out of a residence hall as a result of disciplinary action will be refunded as in Item 3, above.

6. A student who is required to move out of a residence hall for the convenience of the University or is withdrawn for psychiatric reasons will be refunded all of the unused prorated portion of rent for the space he or she was occupying.

**BOARD PLAN**

Students are offered the choice of a 15-meal-a-week plan (Monday breakfast through Friday dinner on class days) or a 10-meal-a-week plan (any two of the three daily meals). The cost of the 15-meal plan is approximately $407 per semester; the 10-meal plan costs approximately $387. The cost of the 15-meal plan during the summer term is approximately $206; the 10-meal plan costs approximately $196. Board plan rates are subject to change at the beginning of a semester or summer term. Special diet services are offered at Highland Cafeteria at an additional charge for students requiring diet modifications. A physician’s prescription is necessary.

**Students with less than 30 semester hours of credit who choose to live in University residence halls are required to participate in a University board plan, except as provided below:**

1. Part-time students as defined by this General Catalog.
2. Students who are released to participate in a fraternity or sorority board plan on the basis of fraternity or sorority membership.
3. Students who have been employed full-time, including military service, for a period of 18 months prior to enrolling in the University and following high school graduation.
4. Students who have a conflict with work and class schedules which does not permit taking meals at the regular serving times and who cannot be otherwise accommodated by the Office of Residence Food Services.
5. Students with specialized medical diets prescribed by a physician which cannot be provided through the University therapeutic diet kitchen.

Requests for exemptions on the bases described above should be submitted to the Director of Residence Food Services.

As a special service for students who need a place to eat on weekends, the LSU Union offers a Weekend Discount Meal Card which entitles the holder to a 10% discount on food purchased in the Union Tiger Lair (main floor) or Side Pocket (games area) on Saturdays and Sundays. A punch card can be purchased during registration or in 310 LSU Union at any time during the semester. Additional punch cards can be purchased as necessary. Call (504) 388-5124 for additional information.

**Board Plan Refunds**

All students who sign up for the board plan at registration will be required to participate for 10 class days. At the end of the 10 days, students qualifying for board plan refunds can be released, and the 10 days of participation will be deducted from any refund. An assessment of three days' board will be made if notice is not provided the cafeteria management prior to the end of the first 10 class days of the semester. Cancellation after midsemester will be subject to an assessment of half the unused portion of the board plan charge. No release will be processed once dead week begins.

**DEAN OF STUDENTS OFFICE**

The Dean of Students Office, located in 114 David Boyd Hall, functions to assist students with their growth and development in all aspects of their college experience. Its four primary functions are counseling, discipline, student organizations, and student problems.
HANDICAPPED STUDENTS

Students with a physical or mental impairment which requires special accommodation on the part of the University should contact the Assistant Vice-Chancellor for Student Affairs, 117 David Boyd Hall, (504) 388-8607, so that necessary arrangements can be made. Students who are Louisiana residents may also contact the Louisiana Office of Vocational Rehabilitation, P.O. Box 44371, Baton Rouge 70804, to inquire about benefits offered by the state to handicapped persons.

INTERNATIONAL STUDENT OFFICE

The International Student Office is located in the International Center (Agnes Morris House) on Raphael Semmes Road. The office staff provides advisory services to international students regarding their educational, financial, immigration, personal, and social concerns; it also assists with campus intercultural activities which contribute to the cultural environment of the community. The office coordinates the University's international student services and programs with community organizations, faculty and student groups, and governmental and private agencies. Emergency loans for international students are also administered by this office.

The International Student Office provides information and counseling to LSU students who are interested in study, travel, or work overseas. The office also administers the International Student Exchange Program, administers grants for graduate study abroad (Fulbright Program), and issues international student ID cards.

STUDENT HEALTH CENTER

The Student Health Center is staffed and equipped for treating illnesses and minor accidents that may occur while students are in residence at the University. Facilities consist of an out-patient medical clinic, a mental health clinic, a pharmacy, a laboratory, and an x-ray department. Medical care is available for most conditions likely to affect students. In addition, students may consult with center physicians regarding special diets that are available in one of the residence dining halls. Students with serious conditions will be put under the care of a local physician and transferred to a Baton Rouge hospital; in such cases, parents or guardians will be notified immediately.

Charges are made for medicines and for x-ray and laboratory work done at the center. Medical expenses incurred outside the center must be paid by the student.

All facilities are closed on Saturday afternoons, Sundays, and most student holidays.

OFFICE OF STUDENT MEDIA

The Office of Student Media oversees the operation of KLSU-FM, The Daily Reveille, and The Gumbo. These provide information and entertainment to students, faculty, and staff while providing training for students interested in all areas of publishing and broadcasting.

The Daily Reveille, the University's student-edited newspaper, is published Tuesday through Friday during the fall and spring semesters and on Tuesdays and Thursdays as The Summer Reveille during the summer term. Students also edit and publish the LSU yearbook, the Gumbo, which is distributed on campus at the end of each spring semester. KLSU-FM is a 5000-watt educational FM station operated by students 24-hours a day, 7-days a week.

OFFICE OF LEISURE SPORTS

The Office of Leisure Sports functions under the auspices of the Office of Student Affairs. This office provides all members of the University community with access to participation and involvement in a variety of leisure sports activities. To meet the diverse needs and interests of the University community, a multifaceted recreational sports program is offered which includes intramural sports, drop-in recreation, special interest activities, and club sports. In addition, a wide variety of leisure sports equipment is available for use on a check-out or rental basis.

The intramural sports program provides various levels of competition in more than 46 different sports through leagues, tournaments, and meets. A balanced program of team, meet, dual, and individual sports is offered throughout the year. Some of these activities are flag football, basketball, softball, volleyball, racquetball, handball, tennis, badminton, swimming, track, golf, and floor hockey. The drop-in recreation program provides space for individuals who desire to participate informally in a sport. The special interest activities program is designed to serve particular
recreational interests and needs. Programs vary in structure from self-motivated fitness activities to organized events. The club sports program, comprised of 14 active clubs, provides opportunities for exercise, recreational and social fellowship, competition both on and off campus, and learning new and improving existing skills. Some of the active clubs include rugby, soccer, fencing, water skiing, karate, and volleyball. The Office of Leisure Sports also maintains records, establishes schedules, develops and interprets rules and policies, and supplies officials as needed.

THE LSU UNION

The LSU Union, through its student committees and staff, presents a wide range of events designed to appeal to all segments of the University community. Full-time students are automatically members of the Union. Faculty and staff may become members by paying an annual membership fee. Alumni and friends of the University may receive a privilege card by payment of an annual fee. All Union programs are sponsored by one of its committees. Any full-time student is eligible to join a committee; there are additional requirements to hold an office.

The Union's facilities are designed to meet the needs of the community they serve. In the Art Gallery may be found shows of international, national, or regional interest, as well as student and faculty works. The Arts and Crafts Shop provides professional instruction and complete facilities for woodworking, ceramics, matting, poster and sign making, and photography. The three music listening rooms provide a collection of records for all tastes. The browsing room contains current magazines, books, and periodicals. The central lobby and main lounge provide space for relaxing and visiting. Auditorium facilities include the 333-seat Colonnade Theatre and the 1,315-seat LSU Union Theatre, which serve as a center of the performing arts at LSU. Many of the activities in these auditoriums are sponsored by student committees. These committees and other student organizations have office or desk space in the Student Organizations Area (SOA) on the mezzanine floor. The Union Box Office serves as the sales and distribution center for tickets to all theater events on campus. The Games Area offers bowling, billiards, table tennis, card-playing, and a snack bar. The University operates a computer terminal (I/O) room on the mezzanine level.

A three-chair barbershop and student-operated candy store are located on the ground floor; a travel agency and copy service are on the main floor. The self-service Bookstore stocks required textbooks, school supplies, and convenience items. Photocopy services, located in the administrative offices on the mezzanine floor, are available at nominal rates to the University community. Lost and found and Western Union services are provided at the main floor Information Desk. Newspapers, magazines, cigars, candy, and other sundry items are also available at the Information Desk. In addition, the Union has special services, such as coin-operated lockers, telephones, and metered parking lots for visitors. Check-cashing service is provided by the bookstore and box office.

Meeting and banquet facilities are available for use by campus organizations. The Union reservationist has complete information on reservation policies.

The Union administers all campus vending. The Tiger Lair and Cafeteria, located on the main floor, provide everything from quick snacks to full meals. The Plantation Room restaurant offers table service dining. The Union's catering service furnishes on-premise banquet catering services for groups of 12 to 1000 persons and also specializes in receptions, teas, and other catered gatherings.

STUDENT ORGANIZATIONS

Student organizations are under the direct supervision of the Dean of Students, together with appropriate faculty committees.

Religious Groups

Assembly of God
Baha’i Club
Baptist Student Union
Campus Crusade for Christ
Catholic Student Center
(St.) The Chapel on the Campus
Chi Alpha Christian Fellowship
Christian Church
Christian Science Organization
Church of Christ
Church of God
Church of Jesus Christ of Latter-day Saints
Day Saints
Deseret Club
Eastern Orthodox Church
Episcopal University Center
(St. Alban's Chapel)
Hillel Foundation (Jewish)
Intervarsity Christian Fellowship
Jehovah's Witnesses
Lutheran Student Center
Maranatha
Muslim Student Association
The Navigators
Unitarian Church
Professional, Honorary, and Miscellaneous Organizations

A Cappella Choir
Accounting Society
African Student Organization
Agricultural Economics Association of Louisiana
Agricultural Mechanization Club
Agricultural Students Association
Agronomy Club
Alpha Chi Sigma (chemistry)
Alpha Epsilon Delta (premedical, honorary)
Alpha Lambda Delta (freshman, honorary)
Alpha Phi Omega (service)
Alpha Phi Sigma (criminal justice, honorary)
Alpha Pi Mu (industrial engineering, honorary)
Alpha Sigma Lambda (honorary)
Alpha Tau Alpha (agricultural education, honorary)
Alpha Zeta (agriculture, honorary)
American Advertising Federation Collegiate Chapter
American Association of Petroleum Geologists
American Association of Textile Chemists and Colorists
American Association of Zoo Veterinarians
American Civil Liberties Union
American Institute of Aeronautics and Astronautics
American Institute of Architects
American Institute of Chemical Engineers
American Institute of Industrial Engineers
American Marketing Association
American Society of Agricultural Engineers
American Society of Agronomy
American Society of Civil Engineers
American Society for Horticultural Science
American Society of Interior Designers
American Society of Landscape Architects
American Society of Mechanical Engineers
American Society of Personnel Administrators
American Society of Photogrammetry
American Veterinary Medicine Association
Amnesty International of LSU
Angel Flight
Army Bengal Raiders
Arnold Air Society
Art Students Association
Associated General Contractors of America
Association for Computing Machinery
Association of the United States Army
Band
Baton Rouge Area Council on Space
Bayou Polo Club
(WSU) Bengal Dive Club
Bengal Raiders
Beta Alpha Psi (accounting)
Bicycle Racing Club
Black United Students
(WSU) Block and Bridle Club
Business Administration Leadership Council
Ceramic Art Students Association
Chamber Music
Chi Epsilon (civil engineering, honorary)
Chinese Students Organization
Circle K Club
College Republicans
Collegiate 4-H Club
Collegium
CONCERN (Council on Conservation of the Environment)
Conflict Simulation Society
Council of Exceptional Children
(WSU) Dairy Science Club
(WSU) Dance Theatre
Delta Sigma Pi (business administration)
Delta Sigma Rho (debate)
Engineering Acoustic Research Society
Epsilon Pi Tau (industrial education, honorary)
Eta Kappa Nu (electrical engineering, honorary)
(WSU) Fencing Club
Food Science Club
Future Farmers of America
Gamma Beta Phi (honorary)
Gamma Sigma Delta (agriculture, honorary)
Geography and Anthropology Society
Geology Club
German Club (Der blau de Engel)
Graduate Association of Sociology Students
Graduate Library and Information Science
Student Association
Graduate Organization of Criminal Justice
Graduate Student Council of the Department of
Classical, Germanic, and Slavic Languages
Graduate Student Organization of the Department
of Spanish and Portuguese
Graphic Design Student Association
(WSU) Gumbo Action Civilan Club
Home Economics Association
Honduran Student Association
(WSU) Horticulture Club
Indian Student Association
Industrial and Technical Education Club
Institute of Electrical and Electronic Engineers
Institute of Industrial Engineers
Interfraternity Athletic Council
Interfraternity Council
International Association of Students in
Economics and Business Management
(WSU) International Law Society
International Student Association
Intersorority Athletic Council
Iranian-Moslem Student Association
Journalism Association of Graduate Students
Kappa Delta Epsilon (education)
Kappa Delta Pi (education, honorary)
Kappa Kappa Psi (band)
Kappa Phi Kappa (education)
(WSU) Karate Club
La Dive Bouteille (French)
(WSU) Lacrosse Club
Lambda Alpha Epsilon (criminal justice, honorary)
Lambda Sigma Upsilon (criminal justice)
Lambda Tau (medical laboratory technology)
Lebanese Club
Lebanese Student Association
Leisure-Recreation Sports Club
Linguistics Circle of LSU
Louisiana Student Association of Educators
Malaysian Students Association
Management Science Society
Marine Environment Researchers
Master of Business Administration Association
Men's Volleyball Club
Mortar Board (leadership)
Mu Kappa Tau (marketing, honorary)
Mu Sigma Rho (arts and sciences, education, music and economics majors in the College of Business Administration)
Music Educators National Conference
(LSU) National Society for Black Engineers
National Student Speech and Hearing Association
Omicron Delta Epsilon (economics, honorary)
Omicron Delta Kappa (leadership)
Omicron Nu (home economics, honorary)
Opera Chorus
Orchestra
Organization for Tropical Geography
Organization of Arab Students
Panhellenic Council
PEMM Club (physical education majors & minors)
Pershing Rifles
Petroleum Land Management Association
Phi Alpha Delta
Phi Beta Kappa (liberal arts, honorary)
Phi Chi Theta (business administration)
Phi Delta Kappa (education, honorary)
Phi Eta Sigma (freshmen, honorary)
Phi Kappa Phi (all fields, honorary)
Phi Lambda Upsilon (chemistry, chemical engineering)
Phi Mu Alpha Sinfonia (music)
Phi Sigma Iota (foreign languages, honorary)
Phi Upsilon Omicron (home economics, honorary)
Phi Zeta (veterinary medicine, honorary)
Philosophical Forum
Philosophy Club
Pi Epsilon Tau (petroleum engineering, honorary)
Pi Kappa Lambda (music)
Pi Mu Epsilon (mathematics, honorary)
Pi Sigma Epsilon (marketing)
Pi Tau Sigma (mechanical engineering, honorary)
Political Science Graduate Student Association
Poultry Science Club
Pre-Law Association
(LSU) Pre-veterinary Club
Progressive Student Network
Psi Chi (psychology, honorary)
(LSU) Psychology Club
Rho Lambda (panhellenic, honorary)
(LSU) Rugby Football Club
Sailing Club
Scabbard and Blade (military science)
Scotch Guard (auxiliary ROTC)
(LSU) Service Council
Sigma Alpha Iota (music)
Sigma Delta Chi (journalism)
Sigma Delta Pi (Spanish)
Sigma Gamma Epsilon (geology, honorary)
Sigma Lambda Alpha (landscape architecture, honorary)
Sigma Lambda Chi (construction, honorary)
Sigma Pi Sigma (physics, honorary)
Sigma Xi (professional)
(LSU) Slavic Club
Soccer Club
Society of American Foresters
Society of Engineering Technology
Society of Petroleum Engineers
Society of Physics Students
Society of Women Engineers
Sociology Club
Special Libraries Association
Student Affiliate of the American Chemical Society
Student Athletic Board
Student Dietetic Association
Student Finance Association
Students for a Libertarian Society
(LSU) Students for Gay Awareness
Students for Life
Supporters of Moslem Student Society
(LSU) Taekwondo Club
Tau Beta Pi (engineering, honorary)
Tau Beta Sigma (band)
Tau Kappa Alpha (forensics)
Tau Sigma Delta (architecture, landscape architecture, allied arts of design)
Tiger Tail Club
Transcendental Meditation Club
Truth for Palestine
Turkish American Student Association
Undergraduate Alumni Association
Union Governing Board
United States Student Association
University Chorus
University Science Fiction and Fantasy Association
Venezuelan Student Association
Water Polo Club
(LSU) Water Ski Club
(LSU) Wildlife Club
Women in Communication
Women in Law
(LSU) Women's Rugby Club
(LSU) Women's Swim Team
Xi Sigma Pi (forestry, honorary)
Young Americans for Freedom
Young Democrats

STUDENT GOVERNMENT:
Residence Hall Association
Student Government Association

GREEK ACTIVITIES

The Greek Activities Office works with the Interfraternity and Panhellenic Councils to coordinate programs and activities of the two organizations. The office staff members also advise fraternities and sororities in the areas of program development, chapter management, and educational and social activities.
### Members of the Interfraternity Council

<table>
<thead>
<tr>
<th>Acacia</th>
<th>Delta Tau Delta</th>
<th>Phi Delta Theta</th>
<th>Sigma Chi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Gamma Rho</td>
<td>Kappa Alpha</td>
<td>Phi Gamma Delta</td>
<td>Sigma Nu</td>
</tr>
<tr>
<td>Alpha Phi Alpha</td>
<td>Kappa Sigma</td>
<td>Phi Kappa Psi</td>
<td>Tau Kappa Epsilon</td>
</tr>
<tr>
<td>Alpha Tau Omega</td>
<td>Lambda Chi Alpha</td>
<td>Phi Kappa Theta</td>
<td>Theta Xi</td>
</tr>
<tr>
<td>Delta Chi</td>
<td>Omega Psi Phi</td>
<td>Pi Kappa Alpha</td>
<td>Zeta Xi</td>
</tr>
<tr>
<td>Delta Kappa Epsilon</td>
<td>Phi Beta Sigma</td>
<td>Sigma Alpha Epsilon</td>
<td>Zeta Beta Tau</td>
</tr>
</tbody>
</table>

### Members of the Panhellenic Council

<table>
<thead>
<tr>
<th>Alpha Delta Pi</th>
<th>Chi Omega</th>
<th>Delta Zeta</th>
<th>Phi Mu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Epsilon Phi</td>
<td>Delta Delta Delta</td>
<td>Kappa Alpha Theta</td>
<td>Pi Beta Phi</td>
</tr>
<tr>
<td>Alpha Gamma Delta</td>
<td>Delta Gamma</td>
<td>Kappa Delta</td>
<td>Sigma Kappa</td>
</tr>
<tr>
<td>Alpha Kappa Alpha</td>
<td>Delta Sigma Theta</td>
<td>Kappa Kappa Gamma</td>
<td>Zeta Phi Beta</td>
</tr>
<tr>
<td>Alpha Xi Delta</td>
<td></td>
<td></td>
<td>Zeta Tau Alpha</td>
</tr>
</tbody>
</table>
The information in this section may pertain to regulations of the LSU System, LSU, and/or the individual schools and colleges of the University.

RESIDENCE STATUS

Eligibility for classification as a resident of Louisiana is determined by the Office of Admissions in accordance with University regulations and is based on evidence provided on the application for admission and related documents. Regulations relate primarily to location of the home and place of employment. A resident student is defined as one who has abandoned all prior domiciles and has been domiciled in the state of Louisiana continuously for at least one full year (365 days) immediately preceding the first day of classes of the term for which resident classification is sought.

The individual's physical presence within this state for one year must be associated with substantial evidence that such presence was with the intent to maintain a Louisiana domicile. Physical presence within the state solely for educational purposes without substantial evidence of the intent to remain in Louisiana will not be sufficient for residence classification regardless of the length of time within the state. Factors considered in establishing residence classification, although not necessarily conclusive, include financial independence from parents residing in another state or country, reliance on Louisiana resources for financial support, continuous presence in Louisiana during periods when not enrolled as a student, commitments indicating an intent to stay in Louisiana permanently, paying Louisiana income taxes as a resident during the past tax year, and the absence of these indicia in other states during any period for which domicile in Louisiana is asserted. An international student on a student visa is classified as a nonresident.

A copy of the residence regulations of the LSU System may be obtained from the Office of Admissions.
REGISTRATION

Students will be permitted to attend class only when the instructor has received from the Office of Student Records and Registration evidence of proper registration.

To initiate registration after the official dates shown in the “Academic Calendar” requires special permission of the student’s dean. Students may add courses for credit, make section changes, or drop courses with approval of the appropriate dean within the periods specified in the “Academic Calendar.”

LSU students may take some of their courses at Southern University under an expanded and simplified cross-registration program between the two universities. See “LSU-Southern University Cooperative Programs” section of this catalog for details.

Graduate Registration of LSU Seniors

Regulations pertaining to LSU seniors who wish to register for graduate credit are given in the section of this catalog entitled, “Graduate Credit for LSU Seniors.”

Registration of Nonacademic LSU Employees

With approval of the appropriate department head and dean, a full-time nonacademic employee may enroll in classes not involving more than three hours of absence from work during the week. Such educational leave will not involve a reduction in pay, charge to annual or compensatory leave, or loss of full-time status. An employee registering for courses which will require an absence from work of more than three hours during the week must charge the excess over three hours to compensatory time or annual leave, where available, or to leave without pay. Under certain conditions, an employee may receive a rebate of one-half of the University fee for successful completion of one course per semester. See Policy Statement 12 for additional information. Educational leave is not granted to part-time nonacademic employees.

ACADEMIC COMMON MARKET

Thirteen Southern states, including Louisiana, participate in the Academic Common Market, an interstate agreement for sharing uncommon programs. Residents of these states who are accepted for admission into selected out-of-state programs can enroll on an in-state tuition basis. To enroll as Academic Common Market students, applicants must (1) be accepted for admission into a program to which their state has made arrangements to send its students, and (2) obtain certification of residency from the Common Market Coordinator in their home state. Applications for admission should be made directly to the institution offering the program. Programs available at in-state tuition rates for residents of Louisiana and additional information may be obtained from the Office of Student Records and Registration.

IDENTIFICATION CARDS

As part of the registration procedure, students are issued identification cards which they must present in order to procure services and privileges available to students and to identify themselves to University officers as necessary. Students who do not have their identification cards produced at registration will be charged a fee. Persons who cannot or will not produce a student identification card are not recognized as students and are not entitled to student services. Identification cards issued in the fall are validated for students who register for the following spring semester and summer term.

ADVANCED-STANDING PROGRAM

The advanced-standing program is open to students with superior ability who have acquired excellent preparation in high school or through their own initiative. It recognizes superior attainment and permits students to demonstrate academic competence through examinations. Students who earn acceptable scores on these examinations are allowed placement at a higher level and credit in courses by-passed. Students may qualify for advanced-standing credit in the ways listed below.
1. **LSU Departmentally Administered Advanced-Standing Examinations** (considered equivalent to final examinations). Ordinarily, to initiate examinations students must obtain permission from their academic dean and from the head of the department offering the course. Students may apply for these tests at any time after they have been admitted to the University. *Tests will be given subject to the following conditions:*
   a. The student must have been admitted to the University* and must be in good standing. If the examinations are taken while the student is not enrolled in the University,* credit will be granted after registration for resident study.
   b. To initiate the examination, permission must be obtained from the appropriate dean and the head of the department offering the course. After such permission is granted, the Office of Student Records and Registration will issue an official permit. No instructor may give an advanced-standing examination until the official permit has been received.
   c. If a grade of “C” or higher is earned on the examination, a mark of “P” and regular credit in the course are entered on the student’s record. If a grade lower than “C” is earned, only the fact that the examination has been attempted will be recorded; credit will not be allowed. A student may take an advanced-standing examination in a particular course only once.
   d. Students are not permitted to schedule advanced-standing examinations in courses which have been audited, in courses in which unsatisfactory grades have been earned, or in courses which have been dropped with grades of “W.”
   e. Credit earned through advanced-standing examinations will not be used in computing the student’s grade-point average.
   f. At LSU, advanced-standing examinations are given free of charge to students (1) planning to enroll as freshmen, or (2) enrolled either part-time or full-time as first-year students until the beginning of the midsemester examination period of their first regular semester. All other students must pay a fee of $20 per course.

2. **The American College Test.** Scores earned on this test are used as a basis for allowing credit in freshman English.

3. **The Advanced Placement Examination of the College Board.** Advanced placement and credit will be granted in appropriate subjects to freshmen who earn a grade of 4 or 5 on the advanced-placement examination; when the grade is 3, the decision regarding credit will be referred to the individual department.

4. **Subject Examinations of the College Level Examination Program of the College Board.** Policies governing the acceptance of credit and required scores are established by appropriate departments of the University.

Credit by examination is limited to 30 semester hours. This credit cannot be used to reduce the minimum residence requirement for graduation.

**AUDITORS**

Students may be admitted to classes as auditors by obtaining written consent of the instructor of the course and the dean of the college offering the course. Auditors will not receive credit for courses audited, nor will they be permitted to take advanced-standing examinations on such work. However, courses previously audited may be later taken for credit. See the “Fees, Expenses, Scholarships, and Financial Aid” section for a listing of fees for auditing courses.

Change in registration from audit to credit or credit to audit requires permission from the instructor of the course and the student’s dean. Approval for change from audit to credit may take place no later than the final date for adding courses for credit as shown in the “Academic Calendar.” Change from credit to audit may take place no later than the final date for dropping courses or resigning from the University without receiving a grade of “W.”

**TRANSFER CREDIT**

Prior to registration at LSU, students must submit to the Office of Admissions official transcripts from each college or university attended, regardless of whether credit was earned or is desired. Failure to submit transcripts will subject students to dismissal from the University.* The extent to which credit earned in other colleges and universities is accepted toward fulfilling degree requirements at LSU* is determined by the dean of the college concerned.

*Includes all campuses of the LSU System.
Students who are placed on probation or made ineligible by transfer work received after registration will be immediately subjected to the appropriate academic action.

After students have earned one-half of the credits required for a degree, they may not use additional credits earned in a two-year college outside the LSU System to fulfill degree requirements, unless authorized to do so by the dean of their college or school.

Students may not receive credit for work taken concurrently at another college or university without prior written approval by the dean of their college.

**ADDITION OR DROPPING COURSES**

A course may be added or dropped only in accordance with the dates indicated in the "Academic Calendar." The student will initiate the action by means of a form obtained from the office of the dean. This form must be signed by the student and the student's dean. The completed form must be returned to the Office of Student Records and Registration by the student.

**RESIGNATION FROM THE UNIVERSITY**

A student may resign from the University at his or her option until the "final date for resigning" as shown in the "Academic Calendar." Resignation is accomplished by obtaining a resignation form from the student's dean's office and by filing the form with the Office of Student Records and Registration within 10 days after it has been endorsed by the administrative offices indicated on the form. Resignation is not accomplished until the form is deposited with the Office of Student Records and Registration.

Students who absent themselves from the University without leave and without resignation will not be assigned "W" grades and, at the end of the semester, will normally receive grades of "F" in courses for which they are registered.

Students who withdraw from the University, with or without approval, or who are dropped from the University for any reason, may be ineligible for readmission for a semester or longer, depending upon their academic standing at the conclusion of the semester during which they resign or are dropped.

**YEAR CLASSIFICATION OF STUDENTS**

Year classification of undergraduate students is based on the number of credits earned as follows:

- **Freshman**—Student having fewer than 30 semester hours of credit.
- **Sophomore**—Student having at least 30 semester hours of credit.
- **Junior**—Student having at least 60 semester hours of credit.
- **Senior**—Student having at least 92 semester hours of credit. A student in a five-year curriculum achieves senior classification when 136 semester hours have been earned.

See "Course Numbering System" for regulations concerning the level of courses students may take, based on the above classifications.

Students enrolled in Junior Division are further classified as JD-1, JD-2, or JD-3, depending upon the number of semester hours of credit earned. (See "Classification of JD Students," in the "Junior Division" section of this catalog.)

Students are also classified as full-time or part-time in accordance with the following provisions.

**Full-Time Student**

1. **Undergraduate**—must carry 12 or more hours of resident credit in a regular semester or six or more hours in a summer term.

2. **Graduate**—must enroll in Graduate School for nine or more semester hours of resident credit or engage in thesis or dissertation research or other work certified by the department head and the dean of the Graduate School to be a full load.

3. **Social Work**—must enroll in the School of Social Work for nine or more hours of resident credit.

Full-time students have available to them several benefits and privileges. Among these are use of the Student Health Center; admission to athletic events on presentation of an identification

---

*Includes all campuses of the LSU System.*
card; one subscription to The Daily Reveille, the student newspaper; one class picture in the yearbook, the Gumbo, if classified full-time in the fall semester; and a copy of the Gumbo, if classified full-time in the spring semester. Only full-time students may represent LSU in any athletic, dramatic, literary, musical, or other University organization.

To receive benefits available only to full-time students, seniors may choose to be classified as full-time in the semester or summer term in which they are scheduled to graduate, even though they carry less than the number of hours required for full-time status. In no case can this option be exercised to exempt students from minimal residence requirements established by individual schools and colleges.

Part-Time Student

Undergraduate students are classified as part-time if they schedule or drop to fewer than 12 hours of course work in a semester or six hours in a summer term. Criteria for part-time status in the Graduate School and School of Social Work are available from the offices of the respective deans.

ATTENDANCE

1. Students are expected to attend all classes regularly and punctually.
2. Students registered in a senior college may, at the discretion of their dean, be placed on attendance probation.
3. Students on academic or attendance probation must attend all classes. Instructors should report absences from class when, in the opinion of the instructor, further absence will jeopardize students' chances of satisfactorily completing the course.
4. Students who violate attendance probation may be dropped from the University at the discretion of the dean concerned.
5. Absences due to authorized trips away from the campus or to special duties at the University will be excused. Sponsors in charge of these trips will present a list of students involved to the students’ dean for approval. Insurance for these trips must be obtained by the responsible faculty member in accordance with Policy Statement 22. Forms for obtaining insurance and excusing students from classes are available from the Office of the Treasurer.
6. Absences due to illness or other causes beyond students’ control will be excused if the instructor is convinced that the reason for absence is valid.
7. Students who desire to be absent for reasons not covered herein should apply for a leave of absence, which must be approved by their dean. No leave of absence may be granted immediately before or after any regular holiday.
8. Students are expected to comply with special attendance regulations of their college, school, or division.

FINAL EXAMINATIONS

Final examinations are required and shall be held at the end of each semester or summer term in accordance with the schedule issued by the Office of Academic Affairs. Where final examinations are inappropriate because of the nature of the course, exceptions to this requirement may be made upon approval of the appropriate department head, dean, or director, and the Office of Academic Affairs.

A student who, because of illness or other valid reason, is absent from any final examination may take a special examination upon recommendation of the instructor involved and with approval of the dean of the student’s college.

GRADING SYSTEMS

At the beginning of each semester, faculty members are expected to announce to their classes the basis on which the final grade will be determined. On request, faculty members should provide to students a review of all graded material, including final examinations, which contributed to the course grade and a review of the method by which the grade was determined. Unreturned examinations and other graded material should be kept on file for at least six months following termination of a course. Faculty members who leave the campus during this period should file such material in the office of their department.
It is the right and responsibility of the instructor to determine and assign the grade for each student enrolled in his or her course beyond the final date for withdrawing with a "W." The instructor's assignment of a grade is final, and the grade may not be changed or altered except through the academic appeals procedure, following appropriate investigation.

In extraordinary circumstances which make it impossible for the instructor to fulfill the responsibility of determining a course grade, the department head shall assign the grade. In such cases, the department head may elect to award the grade of "P." This "P" grade would not be part of the student's regular allotment of pass-fail grades.

Undergraduate Grades

1. Grades of "A," "B," and "C" are given for satisfactory work. A grade of "A" indicates distinguished mastery of the course material; a grade of "B," good mastery; a grade of "C," acceptable mastery. A grade of "D" indicates minimally acceptable achievement for credit; in some colleges a grade of "D" in certain courses does not carry degree credit. A grade of "F" is failing. A grade of "P" (passed) denotes satisfactory completion (grade of "C" or better) of advanced-standing examinations, pass-fail option courses, and certain other courses. A grade of "NC" (no credit) indicates that no credit is given.

A student's grade-point average is determined by the ratio of quality points earned to semester hours attempted. Quality points are assigned to letter grades as follows: "A" = 4 quality points; "B" = 3 quality points; "C" = 2 quality points; "D" = 1 quality point; "F" grades carry no quality points. Grades of "P," "W," "I," and "NC" are not used in computing the official grade-point average and, therefore, do not carry quality points.

2. A "W" will be entered on a student's record for any course dropped within the dates specified in the "Academic Calendar." In extraordinary cases, the dean of a student's college may authorize a resignation and/or a drop from a course after the last dates specified.

3. Work which is of passing quality but which, because of circumstances beyond the student's control, is incomplete, may be marked "I" (incomplete). For undergraduates, an "I" grade is given only if the instructor receives appropriate authorization from the dean of the college in which the student is enrolled. If authorization is not received, the instructor is to consider the delinquent work to be of failing quality, and an "I" grade is not to be given. It is the responsibility of the student to initiate the request for the authorization. In extraordinary cases, the dean of the student's college may authorize that the "I" grade become permanent, or that an extension of time for removing the grade be given. An "I" grade will be converted to "F" unless it is removed during the next regular semester in which the student is in residence in the LSU System prior to the deadline for adding courses for credit as noted in the "Academic Calendar."

4. Grades earned in courses offered by the Hebert Law Center, the School of Medicine, the School of Dentistry, the School of Social Work, and the School of Veterinary Medicine shall not be considered in computation of the grade-point average of an undergraduate student unless approval is given by the dean or director of the student's undergraduate college to permit the student to use the professional courses as electives or to pursue a combined curriculum.

Pass-Fail Option for Undergraduates

Some courses have been approved to be graded pass-fail for all students enrolled. In courses with regular grading, students may petition for the pass-fail grading option based on the guidelines given below. In all undergraduate courses with pass-fail grading, the grade of "P" will be given for work of "C" quality or better. The grade of "F" will be given for work below "C" quality. Students may be registered in several courses regularly graded pass-fail during a given semester and still elect to take an additional course under the pass-fail option program.

At the time of registration under the pass-fail option, students must obtain the necessary approval signatures on three petition cards (available from the office of the dean of their college). Courses passed with a grade of "P" may be offered for degree credit, but the grade will not be considered in computing the grade-point average. An "F" in a pass-fail course will be treated as any other "F," both with regard to credit and to grade-point average.

Pass-Fail Option Program for HPRD Activity Courses

The following policies exist for HPRD courses numbered below 1400.
1. Students are allowed to register for a pass-fail grade regardless of grade-point average, other courses being taken on a pass-fail basis, and total number of courses taken on a pass-fail basis.
2. Only the approval signature of the instructor of the course is required on the petition.
3. The petition must be completed up to and including the last day for adding courses.

**Pass-Fail Option Program for All Other Courses**

Limited use of a pass-fail option is permitted at the discretion of the individual colleges and schools, subject to the following policies.

1. The pass-fail option is available only to those students whose grade-point average in the LSU System is 2.50 or better.
2. The pass-fail option is allowed only for unrestricted electives or other courses approved by the student’s major department.
3. No more than 12 semester hours of degree credit in the pass-fail option program are permitted, with enrollment not to exceed one course per semester, excluding those courses normally graded pass-fail.
4. Enrollment under the pass-fail option program must have the prior approval of the instructor, the head of the student’s major department, and all deans or directors concerned.
5. Until and including the last day for adding courses for credit, students may, with appropriate approval, change from pass-fail to graded status and vice versa. No such change may be made after the last day for adding courses for credit.

**Graduate Grading System**

Grades in the Graduate School have the following meanings.

1. **Marks Carrying Advanced Degree Credit.** These are “A,” “B,” “C,” “S” (satisfactory), and “P” (pass).
2. **Marks Carrying No Credit for Advanced Degrees.** These are “D” (poor), “F” (fail), “I” (incomplete), “W” (withdrawn), “U” (unsatisfactory), and “NC” (no credit).
3. **Cumulative Grade-Point Average.** This average is based on graduate work graded “A,” “B,” “C,” “D,” and “F.” (“A” = 4, “B” = 3, “C” = 2, “D” = 1, “F” = 0).
4. **Semester Grade-Point Average.** This average is based on graduate and undergraduate work graded “A,” “B,” “C,” “D,” and “F.”

The “I” grade indicates that course performance was satisfactory but, because of circumstances beyond the student’s control, all requirements have not been met. An “I” grade should never be given to enable a student to do additional work to bring up a deficient grade. An “I” grade may not be given for a course undertaken in the semester in which the student graduates if that course is listed on the application for degree or if changing the “I” grade to an “F” would result in the student’s cumulative average being less than 3.00. Authorization from the dean of the Graduate School is not required to assign an “I” grade to a graduate student. An “I” grade is valid only until the final date for submission of grades at the end of the next regular semester (fall or spring). “I” grades received in the spring semester or in the summer term are valid until the end of the fall semester; “I” grades received in the fall semester are valid until the end of spring semester. There will be no extension of time. Responsibility for changing an “I” grade lies both with the student and the faculty member concerned. Failure to change an “I” grade by the final date for submission of grades for the next regular semester will result in the “I” grade becoming a permanent “F” grade. Unusual circumstances that preclude a student from completion of the course requirements may, at the discretion of the dean of the Graduate School, permit assignment of a permanent “I” grade. Unusual circumstances might include, but would not be limited to, withdrawal of the student from the University because of prolonged medical problems or death or resignation of the faculty member concerned and the absence of another faculty member to supervise the unfinished work. Petition for a permanent “I” grade must be initiated by the student. The petition must be accompanied by a letter of justification from the faculty member concerned if possible. It must also be endorsed by the head of the student’s department before it is submitted to the dean of the Graduate School.

A “W” grade indicates a course has been dropped between the dates specified in the “Graduate Calendar.” In extraordinary cases, the dean of the Graduate School may authorize a resignation and/or dropping of a course after the last date specified.

“S” (satisfactory) and “U” (unsatisfactory) grades are given for thesis (8000) and dissertation (9000) research courses, up to and including the semester the student graduates.
Pass-Fail Option for Graduate Students

With approval of the student’s major professor, department head, instructor of the course involved, and the dean of the Graduate School, a graduate student may register on a pass-fail basis for courses not included in the major or minor requirements. The deadline for changing from pass-fail grading to letter grading, or vice-versa, is the last day for adding courses for credit. If the student’s major department agrees, graduate courses passed with a grade of “P” may be offered for degree credit, but the grade will not be considered in computing the grade-point average. For graduate-credit courses, a grade of “P” will be assigned only if the work is of at least “B” quality. A grade of “F” in a pass-fail course will be treated as any other “F.” Some departments have designated certain research and seminar courses to be taught on a pass-fail basis. All students enrolled in these courses will be graded in this manner.

DEGREE OF PRECISION IN GRADE-POINT AVERAGES

For all academic purposes, grade-point averages shall be specified to three significant figures (two decimal places), with the last figure to reflect rounding from a four-significant-figure (three decimal places) average where such is available. If the third figure after the decimal point is a five or higher, upward rounding shall occur. If the third figure after the decimal point is less than five, it shall be dropped, regardless of what the fourth or subsequent figures may be. Thus, 3.9550 becomes 3.96, and 3.9549 becomes 3.95. In the consideration of relative rank in class, a student’s average may be carried to three decimal places. Regardless of the results of rounding, no student shall be deemed to have graduated with a “4.0” average if any grade other than “A” or “Pass” for courses completed appears on the transcript. Any grade-point average cited to only one decimal place (as 2.0) shall be construed to mean, mathematically, a figure accurate to two decimal places (as 2.00), regardless of the text.

GRADE REPORTS

To apprise students of their academic status, reports of grades earned are sent at the end of each semester and summer term to their home addresses. Midsemester grades are available through offices of academic deans and directors.

DEAN’S LIST

Each semester an honor list is compiled of those full-time undergraduate students who earn a semester average of at least 3.50 and who have no “I” grades for the semester.

SOPHOMORE HONORS DISTINCTION

Students who have (1) completed 20-23 hours of honors courses including either Honors 1001, 1003 and/or Honors 2002, 2004 and/or Honors 3001, 3003 and one honors science sequence or math course and (2) attained a 3.30 cumulative gpa will be designated as having achieved “Sophomore Honors Distinction.” This designation will be made by the deans of their colleges upon recommendation of the director of the Division of Honors and Interdisciplinary Studies and will include a notation on the transcript and a certificate awarded at the end of four semesters.

STUDENT ACADEMIC APPEALS

Appeals of final grades must be initiated by the student within 30 days after the beginning of the next regular semester. The procedure is as follows:

1. The student should meet with the faculty member concerned to discuss the situation and attempt to arrive at a solution. Although each may have an adviser present, it is believed that under most circumstances, the meeting will be more productive if only the student and the faculty member are present. If an administrative officer (department chairman, dean, Vice-Chancellor for Academic Affairs) is the faculty member who assigned the grade which is appealed, that officer should recuse himself or herself from the appellate process; his or her place in the procedure will be taken by a faculty member appointed ad hoc by the Vice-
Chancellor for Academic Affairs or the Chancellor, as appropriate. If the decision reached requires change in an official University record, the faculty member must comply with all University regulations and procedures necessary to accomplish the change.*

2. If the matter is not resolved between the student and the faculty member, and the student wishes to pursue the appeal, he or she shall make a written request to the head of the department in which the course was taught asking for a meeting of the department head, the faculty member, and himself or herself. The faculty member will provide the name of the appropriate department head. The written request should clearly state the purpose of the meeting and should indicate the faculty member’s name; however, it should not go into detail as to justification for the appeal. The department head shall arrange a meeting within two weeks from the date of receipt of the request. At this meeting, both the student and the faculty member may be accompanied by an adviser. At the close of the meeting, or within seven days thereafter, the department head shall make a decision. If a decision is made at the close of the meeting, it is to be given orally to all present. If the matter is taken under advisement, the department head shall inform all parties, including the student’s dean, of his or her decision in writing. If the decision reached requires change in an official University record, the faculty member must comply with all University regulations and procedures necessary to accomplish the change.*

3. If the student is not satisfied with the decision reached, he or she may appeal to the dean of the college in which the department offering the course is located. The dean’s name will be furnished by the department head. Appeals concerning courses numbered 8000 or above should be directed to the dean of the Graduate School. The student’s appeal must be in writing on a Student Appeal Form available in department and college offices. The form must contain the following information: (1) a statement of the actions complained of; (2) the relief requested; and (3) a specific statement of the reasons supporting the relief sought. The student may also request that a hearing panel be established to assist in reaching a decision. Upon receipt of the completed Student Appeal Form, the dean must promptly forward copies to the department head and faculty member concerned, who must promptly reply with individual written statements supporting their previous actions. Copies of the written replies must be forwarded to the student. Either may request that a hearing panel be convened.

When the department head’s and faculty member’s replies have been received, the dean may take one of the following actions: (a) he or she may decide the question on the basis of the written appeal and the faculty member’s and department head’s written replies; (b) he or she may meet with all parties concerned, who may be accompanied by advisers if desired, and, after discussion, reach a decision; or (c) he or she may refer the appeal to a hearing panel for their recommendation. If a hearing panel has been requested by the student, the faculty member, or the department head, the dean must convene such a panel.

Hearing panels to consider grade appeals will be appointed by the dean and shall be composed of three faculty members selected by the dean, with no more than two from the same department, and two students appointed by the student president of the college. The dean should designate a chairman for the panel. The panel shall hold a hearing with the department head, the faculty member, and the student, each of whom may be accompanied by an adviser. After deliberation, the panel will make its recommendation in writing to the dean. Copies of the recommendation, and the dean’s final decision, must be given to all parties, including the student’s dean.

Regardless of the method used, the dean must make his or her decision within 30 days from the date of receipt of the student’s appeal. The decision must be written, listing the reasons supporting the decision; copies must be given to all parties, including the student’s dean. If the decision requires change in an official University record, the faculty member must comply with all University regulations and procedures necessary to accomplish the change.*

4. If any party to the appeal believes that a serious procedural error occurred or that there was an abuse of discretionary authority in reaching the decision, he or she may file with the Vice-Chancellor for Academic Affairs a written petition for review. This petition, which must be filed within seven days after receipt of the decision in step 3, must contain a complete statement of the alleged serious procedural error, or examples of abuses of discretionary authority complained of, and also must contain reasons for the relief sought. The petition must be

* A change of grade is accomplished by filing a form provided for that purpose. A satisfactory reason for the change is “academic appeal.” The department head and/or the student’s dean (dean of the college in which the student is enrolled) may request documentation of the facts of the matter to facilitate any decision with respect to approval of the grade change.
accompanied by all documents produced in the appeal. Copies should be sent to all parties to the appeal and to the student's dean. The Vice-Chancellor for Academic Affairs shall decide within two weeks after receipt of the petition whether further action should be taken. In reaching this decision, he or she may ask other parties to the appeal to make written reply. If the decision is reached that a review is not justified, the student and all other parties, including the student's dean, will be so notified.

If the Vice-Chancellor for Academic Affairs decides to respond favorably to the petition for review, he or she will hold a formal meeting with all parties and their advisers, if desired, and reach a decision based on discussions at this meeting, as well as on all written materials furnished. Once a decision is reached, the Vice-Chancellor for Academic Affairs will notify all parties, including the student's dean, of his or her decision. The decision of the Vice-Chancellor for Academic Affairs shall conclude the matter, subject to the right of the Chancellor to review the case. The Chancellor will consider the case only on the basis of a petition for review following the procedure outlined above.

SENIOR COLLEGE SCHOLASTIC REQUIREMENTS

The following provisions are applicable to all students in senior colleges. Scholastic regulations for Junior Division students are given in the appropriate section of this catalog.

1. At the end of any semester or summer term, students who are as much as 10 quality points below a 2.00 average on all work attempted in the LSU System will be placed on scholastic and attendance probation.

2. Once on scholastic probation, students will remain on probation until they have a cumulative average of 2.00 or higher on all college work attempted and on all work attempted in the LSU System.

3. Students who have been on scholastic probation in a senior college will be dropped from the University* at the end of any semester or summer term during which they fail to earn at least a 2.00 average, unless at that time they have at least a 2.00 average on all college work attempted and on all work attempted in the LSU System. However, when students in this situation have completed the first semester of the senior year, they may be placed on probation for one additional semester at the discretion of their dean in lieu of being dropped from the University.*

4. Regardless of their overall average, students who fail to earn a 2.00 average in each of two consecutive semesters (or one semester and a summer term) may be declared ineligible to continue in a college or a particular curriculum, at the discretion of the dean of the college.

5. Students dropped for the first time for academic reasons may not be considered for readmission until they have been out of the University* for one regular semester. They are then eligible for consideration for readmission. Readmission may be delayed or denied at the discretion of the dean of the college in which enrollment is desired. During the period of their ineligibility to enroll, students may register on a noncredit basis for correspondence courses.

6. Students dropped the second time for academic reasons, including drops from Junior Division, must remain out of the University* for at least one calendar year. They are then eligible for consideration for readmission. Readmission may be delayed or denied at the discretion of the dean of the college in which enrollment is desired.

7. Students who have been dropped for scholastic reasons may not apply toward degree requirements in this University* credits earned at another institution during the period of their ineligibility to enroll at LSU.

CREDIT FOR REPEATED COURSES

When students are permitted to repeat for credit a course previously taken in the LSU System, the last grade and credit earned determine acceptability of the course for degree credit. A student may not repeat a course in which a grade of "C" or better has been earned unless the catalog description indicates that the course may be repeated for credit or the student's dean approves the repetition for some special reason. If a student registers for a course in violation of the above policy, the student's dean may deny degree credit for the course.

Students who receive an "F" in a course must repeat the course in the LSU System in order to receive credit and quality points for it. With prior concurrence of the head of the department in

*Includes all campuses of the LSU System.
which the course is offered and the dean of the college in which the student is enrolled, credit and quality points may be approved in individual cases for courses repeated outside the LSU System.

No student may register concurrently for more than one section of a course, except with approval of the department head in instances where the different sections cover substantially different material.

**CORRESPONDENCE AND EXTENSION STUDY**

Up to one-fourth of the number of hours required for the bachelor's degree may be taken through the Division of Continuing Education by correspondence study, extension courses, or both. Specific information regarding acceptance of correspondence study and/or extension courses toward fulfillment of degree requirements may be found in each college or school's section of this catalog. Before scheduling correspondence or extension courses, students must obtain approval of the dean of their college.

**MAXIMUM WORK FOR UNDERGRADUATES**

Each college establishes the number of semester hours of work required in each year of its curriculum. Students may register for a maximum of three semester hours beyond the number prescribed for the current semester in their curriculum if, during the preceding semester, they maintained a 3.00 average with no grade lower than "C." In no case, however, will students be permitted to register for more than 21 hours of degree credit in a regular semester or 10 hours in a summer term.

To be classified as full-time, students must register for at least 12 semester hours of work in a regular semester or six hours in a summer term. Full-time students who are doing unsatisfactory work because of a heavy academic load may be required by the dean of their college to drop one or more courses, provided such action does not change their full-time status.

**UNIVERSITY BACCALAUREATE DEGREE REQUIREMENTS**

Students must meet the curricular requirements for a degree as outlined in one issue of the LSU General Catalog. Students are responsible for knowing degree requirements. They may elect any issue of the LSU catalog in force during their residence at this or any other accredited institution of higher learning, provided their residence is continuous. The catalog chosen is to be used for determining curricular requirements only. Students whose enrollment here or elsewhere is interrupted (either voluntarily or by compulsion) for at least two consecutive regular semesters may not elect a catalog issued earlier than the one in force at the time of re-entry. The act of transferring from one institution to another is not regarded in itself as an interruption of enrollment; the interval between enrollments is the controlling factor. Students changing from one curriculum to another may not elect to follow a catalog in force earlier than the date on which the student's change was made. Under no circumstances may a catalog more than 10 years old be used.

Where programs include curricular requirements set by external agencies, e.g., accrediting associations, changes in such requirements may be made without prior notice, and students may be required to conform to such changes when they become effective. Should the University find it necessary to discontinue an academic program, every reasonable effort will be made to enable students already admitted to the program to complete degree requirements on schedule.

**Academic Requirements for Obtaining a Degree**

1. A grade-point average of 2.00 ("A" = 4) on all work taken, except for those courses in which grades of "P," "W," or "I" are recorded, is required for graduation. In order to meet graduation requirements, students must have a 2.00 average on work taken at this University* as well as a 2.00 average on their entire college record.

2. Candidates for a bachelor's degree must fulfill a minimum residence requirement of two semesters (or four summer terms), earn at least 30 semester hours of credit at this University*, and meet the residence requirements of their college.

3. After students have earned one-half of the credits required for a bachelor's degree, they may not use additional credits earned in a two-year college outside the LSU System to fulfill degree requirements, unless authorized to do so by the dean of their college or school.

*Includes all campuses of the LSU System.
4. Students must have credit in English 1002 or an acceptable equivalent as provided in this catalog.
5. In addition to these minimum requirements, students must meet all special regulations established by the faculties of their respective colleges and listed in each college's section of this catalog.
6. Degrees, both honorary and earned, are conferred only by vote of the Board of Supervisors upon recommendation of the faculty of the University* or the faculty of the proper college, school, or division of the University.*

Procedural Requirements for Obtaining a Diploma

1. Prior to the semester in which graduation is anticipated, candidates must have the dean of their college evaluate their academic records for compliance with degree requirements. (Each college establishes its own degree requirements, which are listed in that college's section of this catalog.) After the degree check-out form has been signed by the appropriate dean, it should be presented to the Office of Student Records and Registration for checking by that office. At this time, candidates must apply for a degree and state their exact name as it is to appear on the diploma and in the commencement program.
2. At the last registration, candidates must pay the graduation fee. This fee is not refundable after the fifth week of classes in a regular semester or the second week of classes in a summer term. Students who have previously paid a graduation fee, but who did not graduate at the expected time, must pay a $20 duplicate diploma fee.
3. All financial indebtedness to the University* must be cleared prior to graduation.
4. Candidates for degrees are expected to participate in the commencement exercises, unless excused by their deans.

REQUIREMENTS FOR A SECOND BACCALAUREATE DEGREE

Persons who wish to obtain a second baccalaureate degree from this University must meet all academic and residence requirements set by the college(s) concerned and must earn a minimum of 30 semester hours beyond the work offered for the degree requiring the lesser number of hours. See “Requirements for a Second Bachelor's Degree” in each college's section of this catalog.

DEGREES WITH HONORS

The baccalaureate degree is awarded summa cum laude to any student whose grade-point average is at least 3.90, magna cum laude if the grade-point average is at least 3.80, and cum laude if the grade-point average is at least 3.70. Students awarded the baccalaureate degree with honors must also have satisfied all additional requirements imposed by their college, school, or department. To be eligible for degrees awarded with honors, candidates must have earned more than 50 percent of their total college credits at LSU. Two grade-point averages will be computed for each student on (1) all work completed and (2) all work completed at LSU. The lower of the averages will be used in determining eligibility for honors.

At each commencement, the University medal for “Highest Academic Achievement” is awarded to the undergraduate student (or students) graduating with the highest grade-point average, provided that more than 50 percent of the student’s total college credits have been earned at LSU. Grade-point averages will be computed for (1) all work completed and (2) all work completed at LSU, with the lower of the two averages determining eligibility for the medal.

Students in combined undergraduate-professional curricula who have earned more than 50 percent of their preprofessional credits in an undergraduate college of this University* with a grade-point average as indicated for honors are eligible to receive their degrees with honors. To determine honors, the student's average for each year's work during the period of matriculation at LSU is added to the average furnished by the professional school and divided by the number of years the student has been enrolled at both institutions.

*Includes all campuses of the LSU System.
TRANSCRIPT OF RECORD

Students may obtain a transcript of the work they have completed, provided they are current in their financial obligations to the University.* Normally, two days of processing are required after the transcript request is received. At the beginning or end of a semester, considerably more time is required.

UNIVERSITY DISCIPLINE

The disciplinary powers of LSU are derived from the provisions of the Louisiana Revised Statutes which established the Board of Supervisors with the power to adopt rules and regulations necessary for the government of the University consistent with the purposes for which it was founded and to adopt rules and regulations governing student conduct.

LSU, therefore, has a responsibility to protect its educational purposes, and, as a corollary, its community. It follows that the function of its disciplinary powers is to protect its educational purposes, the health and safety of its community, and the safety of property therein, through regulating the use of University facilities and setting standards of scholarship and conduct for its students.

Code of Student Conduct

The administrative procedures for student discipline resulting from severe breaches of conduct which could result in the student’s being separated from the University or having the disciplinary action taken by the University made a permanent part of the student’s official record are outlined in the Code of Student Conduct. Students charged with violations of conduct listed in the Code of Student Conduct are provided a due process administrative hearing with the Dean of Students or a hearing before a panel of the Committee on Student Conduct composed of faculty members, students, and administrators.

The University issues and publishes other rules and regulations governing student activities and conduct. Certain responsibilities for assisting the University in the administration of these rules and regulations are delegated to student boards, councils, and courts.

It is the responsibility of all students to familiarize themselves with the Code of Student Conduct and other University rules and regulations governing student conduct and activities.

The Office of the Vice-Chancellor for Student Affairs has administrative responsibility for coordinating all University disciplinary procedures and practices.

The Handbook

The students, faculty, and staff of LSU have jointly produced The Louisiana State University Handbook of Rights and Responsibilities in the Student-University Relationship. This Handbook was promulgated by the Office of the Chancellor with the goal of assisting students, faculty, and staff in better understanding the rights and responsibilities of both the student and the University in the student-University relationship. All members of the University community are encouraged to become familiar with this Handbook so that its provisions can provide guidance to all in the day-to-day functioning of the University. Copies may be obtained from the Office of the Dean of Students or the Office of the Vice-Chancellor for Student Affairs.

PRIVACY OF STUDENT RECORDS

LSU insures students access to their official academic and disciplinary records and prohibits the release of personally identifiable information, other than directory information, from these records without their permission except as specified by law. Complaints regarding alleged violations of students’ rights with regard to privacy of records or access thereto should be sent to the Family Educational Rights and Privacy Act Office, Department of Education, 330 Independence Avenue SW, Washington, D.C. 20201. Copies of the University’s “Policy Statement” concerning the privacy rights of students may be obtained from the Office of Student Records and Registration.

Directory information is defined as student’s name, local address, and telephone number; student’s home address; date and place of birth; major field of study and classification; class schedule; social security number (released only to the faculty for purposes of posting grades); cumulative

*Includes all campuses of the LSU System.
grade-point average (released only to honorary organizations for use in determining eligibility for membership); participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; degrees, awards, and honors received; and the most recent previous educational institution attended by the student.

Students who wish to withhold any information in these categories should complete the appropriate form available from the Office of Student Records and Registration within 10 days after the last day of registration in any term, indicating which items should not be considered directory information. Such requests must be renewed after every registration. Students who desire that their grades not be posted should inform their instructors of their wishes not later than the day of the final examination in each course. Each student who is registered for the fall semester will have his or her name and local address listed in the campus telephone directory unless the appropriate form (available from the Office of Student Records and Registration) is completed within 10 days after the last day of registration.
LSU and Southern University have conducted cooperative programs for a number of years. A student exchange program began in 1970, and exchange of faculty and cooperation in research have also occurred. In recent years, the number and extent of cooperative efforts between the two institutions have greatly increased.

STUDENT EXCHANGE

LSU and SU students may take courses at the other institution under an expanded and simplified cross-registration program between the two universities. Frequently this program enables students to take courses not available at the institution where they matriculate. Both full-time and part-time students are eligible. Full-time students pay no additional fees; part-time students pay fees based on the total number of hours for which they are registered. Interested students can obtain information from the Office of Student Records and Registration at LSU, the Registrar's Office at SU, and the offices of academic deans at both institutions.

FACULTY EXCHANGE

Each year at least 20 members of the LSU faculty teach one or more courses at SU, and at least 10 members of the SU faculty teach one or more courses at LSU. This faculty exchange serves to enrich the offerings of both institutions. Participants are designated as adjunct faculty at the other institution.

LIBRARY PRIVILEGES

Participants in the faculty and student exchange are allowed the same library privileges granted to members of the faculty and student body at the home institution. Students and faculty not participating in these exchanges also have access to the library at the other institution.
ACADEMIC PROGRAMS

Chemistry and Chemical Engineering

This program enables a student to earn a Bachelor of Science degree with a major in chemistry from SU and a Bachelor of Science in Chemical Engineering degree from LSU within a period of approximately five years. At least three-fourths of the hours required for the bachelor’s degree must be earned at SU. The student may then be admitted to LSU to complete requirements for the Bachelor of Science in Chemical Engineering degree. Such students qualify for all benefits of the student exchange program.

Computer Science

Since the inception of LSU’s undergraduate curriculum in computer science, the Departments of Computer Science at LSU and SU have engaged in a faculty exchange in which an LSU faculty member teaches a course at SU. In 1975, the interdisciplinary program leading to the Master of Science in Systems Science was established, with LSU, SU, and the University of Southwestern Louisiana participating. Faculty members from all three universities cooperate in curricular matters and advising of students. When LSU began offering the Ph.D. in computer science in 1983, an agreement of cooperation between LSU and SU was signed setting forth articulation guidelines for the Ph.D. program, the systems science program, and SU’s M.S. program in computer science. An additional faculty exchange involves research faculty members from each university who hold part-time appointments at the other.

Environmental Sciences

The Master of Science degree in environmental sciences, a cooperative, multidisciplinary program between LSU and SU, consists of a minimum of 24 semester hours of course work and six hours of thesis research. Four options are available: environmental toxicology and environmental management systems offered at LSU and environmental biology and environmental chemistry offered at SU. A graduate student at either institution may register for any of the four options. Four core courses are common to all options and must be taken by all students. Different areas of concentration permit the design of individual and specialized job-oriented programs.

Mechanical and Petroleum Engineering

SU students enrolled in the mechanical engineering curriculum may elect a petroleum engineering option. Such students take six credit hours of specified chemistry courses at SU and 12 hours of specified petroleum engineering courses at LSU.

Naval Science

Through a cross-enrollment agreement between LSU and SU, LSU students are eligible to enroll in the Naval Reserve Officers Training Corps leading to a commission in the U.S. Navy or Marine Corps. Naval ROTC is open to male and female students, and many naval science courses are taught on the LSU campus. For additional information, see the “Reserve Officers Training Corps” section of this catalog.

Public Administration

The School of Public Policy and Urban Affairs at SU offers a Master of Public Administration degree in cooperation with the Department of Political Science at LSU. Four political science faculty members have been designated by LSU as core faculty who teach courses in the SU program. Students in the program are required to take a minimum of nine semester hours of political science courses at LSU. Fellowships are available for other-race applicants, with special attention given to LSU graduates. Graduate-level work in political science at LSU will transfer as credit in the SU M.P.A. program. Students in the SU program also have access to LSU library and computer facilities.
School Librarianship

A teaching minor in library science leading to certification as a school librarian is offered jointly by LSU and SU, with each university providing a portion of the required course work. See the “College of Education” section of this catalog or contact the Department of Administrative and Foundational Services for program requirements.

Special Education

LSU and SU have entered into a joint cooperative teacher training program at the undergraduate and graduate levels in the area of special education. Students may matriculate at either LSU or SU and take an unlimited number of courses from either of the institutions for resident credit.

Students who enroll in the graduate program in special education at LSU must take a minimum of six semester hours at SU; those enrolled at SU must take a minimum of six semester hours at LSU. These hours count as resident credit and do not preclude a student from transferring the maximum number of graduate hours from another institution.

In addition, each semester LSU faculty in special education will teach at SU, and SU faculty will teach at LSU. For additional information, contact personnel in the special education program at either LSU or SU.
The College of Agriculture at LSU is an integral part of the land grant college system. The college includes 16 departments and three schools with a faculty exceeding 160 members. Of these faculty members, 136 are jointly employed by the LSU Agricultural Center. The college is closely connected in all phases of its work with the U.S. Department of Agriculture and many other federal and state agencies concerned with agriculture, forestry, conservation, natural resources, home economics, vocational education, industrial arts education and technology, rural and community development, and related fields.

The programs of the college are organized and conducted primarily to serve the people of Louisiana, but are also intended to prepare students for service throughout the nation and the world. In addition to traditional course work related directly to the production, processing, and marketing of plants and animals and their products, the college provides training (coordinated with research and extension) in many other areas particularly relevant to current problems and opportunities. These include such areas as fisheries and sea foods, wildlife, development of human resources, rural and community development, natural resource use, family life, land and water economics, and problems of underdeveloped countries.

The teaching divisions of the college, the various curricula, and the degrees which may be earned are shown in the chart on the following page.

OBJECTIVES

One objective of the college is to give students a well-balanced education in the basic and applied sciences of agriculture and related fields. An additional objective is to provide cultural experiences necessary for the full development of the individual and to graduate educationally rounded, mature, and capable men and women, prepared to assume the responsibilities of citizenship and to contribute meaningfully to the well-being of society through their chosen fields of endeavor.
For the curriculum in agricultural engineering, see the College of Engineering.
COORDINATION WITH THE LSU AGRICULTURAL CENTER

The College of Agriculture offers a unique educational opportunity through a coordinated program of mutual cooperation with the LSU Agricultural Center, which includes the Louisiana Agricultural Experiment Station and the Louisiana Cooperative Extension Service. The experiment station has research programs in Baton Rouge and at branch stations throughout Louisiana. The extension service disseminates results of that research throughout Louisiana through specialists in Baton Rouge and county agents and home economists in every parish.

The cooperation between the college and the center gives the college a strong instructional program, providing students with up-to-date knowledge to help solve complex problems in their chosen fields. Since most of the faculty members of the college also hold research or extension appointments on the staff of the center, students are exposed to new areas of knowledge as faculty members bring the results of their work directly into classroom discussion. Similarly, students in the college benefit from the close relationship with the extension service. As extension specialists and researchers apply new knowledge to real-life problems, there is feedback through the teacher-researcher directly to the classroom. Students, thus, gain an appreciation of the relationship between academic solutions and real-world problems and also learn how to test new knowledge by practical application.

Students in the college also profit from the experience and activities of faculty on the center’s staff who participate in research, extension, and teaching assignments in many other countries throughout the world, and who bring these experiences back to the classroom. The center is particularly active in West Africa and Southeast Asia.

FACILITIES

Facilities available for instructional purposes include over 4,500 acres of farm and timber land and buildings for the care and study of crops, livestock and poultry, and wildlife and forests.

Livestock include herds of Hereford, Pollled Hereford, Angus, and Brahman cattle and other crosses. Breeds of sheep include Louisiana-native and Suffolk. Herds of swine include Hampshire, Duroc, and Yorkshire breeds and their crosses. A number of quarter horses are maintained for research and instruction. The dairy herd is composed of Holstein-Freisians and Jerseys. The Dairy Improvement Center is the hub of the artificial breeding program in Louisiana. Poultry used in instruction include Rhode Island Red, New Hampshire, White Plymouth Rock, and White Leghorn flocks.

Computer facilities, laboratories, and related research facilities are used for teaching purposes. Land and facilities at branch experiment stations throughout Louisiana also play a part in the teaching program, particularly at the graduate level. The state’s land and water resources; plant, animal, and aquatic life; and its communities and people serve as instructional aids through a constantly changing complex of hundreds of research projects throughout the state that are coordinated with the teaching program. Similarly, research, teaching, and extension activities in foreign countries make those experiences and areas part of the facilities and knowledge available for classroom instruction on campus.

ADMISSION REQUIREMENTS

Within the framework of University regulations, students may be admitted to the college according to the following policies:

a. Students admitted from Junior Division must have completed a minimum of 24 semester hours with a 2.00 average on all work taken.

b. Students admitted from other divisions of the University are expected to meet the same requirements as those admitted from Junior Division.

c. Transfer students from accredited colleges and universities who have met the general entrance requirements of the University and who have pursued college courses equivalent to those offered in Junior Division may be admitted to the college on the same conditions as those governing the entrance of students from Junior Division. Transfer credits acceptable for admission purposes shall be valid for degree credit in the college only to the extent to which they represent courses acceptable in the curricula of the college. Transfer students applying for credit in any department or school within the college may be required to take a comprehensive examination before credit is allowed.
d. On recommendation of the dean of the college, **probationary admission** may be granted in special cases.

**DEGREE REQUIREMENTS OF THE COLLEGE**

The baccalaureate degree is conferred on students who fulfill the following degree requirements.

1. Complete their respective curricula with at least a 2.00 grade-point average on all work taken not terminating in grades of “P,” “W,” or “I.”
2. Meet the college’s English proficiency requirement. To be declared proficient in English students must earn a grade of “C” or better in English 1002, 1003, or 1005 (for international students only). Those who fail to do so must earn a grade of “C” or better in English 2002 or take the English Proficiency Examination. Students who fail to score at least 298 on this test must attend the English Writing Laboratory for remedial instruction until declared proficient by the laboratory staff and the College of Agriculture English Proficiency Committee.
3. The last 30 semester hours presented for the degree must be taken in residence in the College of Agriculture.

**CORRESPONDENCE AND EXTENSION CREDITS**

Up to one-fourth of the number of hours required for the baccalaureate degree may be taken through the Division of Continuing Education, either by correspondence study or extension classes or both. Before scheduling such work, however, students should obtain approval from the dean.

**REQUIREMENTS FOR A SECOND BACHELOR’S DEGREE**

In order to receive a second bachelor’s degree in this college, a student must complete a minimum of 30 semester hours beyond the hours earned for the first degree.

**GRADUATE PROGRAMS**

Through the Graduate School, the college offers master’s and doctoral degrees in the fields of agricultural economics, agronomy, animal science, dairy science, entomology, extension education, food science, forestry, horticulture, plant pathology, poultry science, and vocational agricultural education. A doctoral degree in wildlife and fisheries science is also offered. In addition, master’s degrees are offered in applied statistics, fisheries, forest products technology, home economics, industrial education, vocational home economics education, and wildlife. For further details, consult the **Graduate School Catalog**.

**PLACEMENT SERVICE**

The College of Agriculture Placement Office arranges for students in all phases of agriculture, forestry, home economics, and vocational education to be interviewed on campus by recruiters from various companies, as well as federal, state, and local agencies. Students should contact this office as early after registration as possible in order to receive proper orientation concerning job opportunities. Counseling for job opportunities and careers is available daily. These services are also available to alumni.

**STUDENT AGRICULTURAL COUNCIL**

The Student Agricultural Council brings the various agricultural organizations together for cooperative enterprises. Membership includes student officers of the college and elected representatives from all agricultural organizations. The council serves as a student advisory group to the dean of the college.
Departments and Curricula

The dean, directors of schools, heads of departments, and members of the faculty of the college will consult with students on their choice of curriculum. Requests for substitutions for required courses in all curricula in the college must have approval of the dean upon recommendation of the head of the department or school. A maximum of six semester hours of basic ROTC and eight semester hours of advanced ROTC may be allowed for elective credit in any curriculum.

DEPARTMENT OF AGRICULTURAL ECONOMICS AND AGRIBUSINESS

HEAD: Guedry, Professor
OFFICE: 101 Agricultural Administration Building
TELEPHONE: (504) 388-3282

PROFESSORS: Fielder, Huffman, Paxton, Schupp, Traylor
ASSOCIATE PROFESSORS: Fricke, Gauthier, Heagler, Vanvee
ASSISTANT PROFESSORS: Christy, Henning, Hinson, Lange, Wharton, Williams, Zacharias

The curricula in this department are designed to provide thorough training in the application of economic and business principles to agricultural problems. Departmental offerings include courses in farm management, production economics, marketing, credit and finance, land and water economics, agricultural policy, principles, and statistics.

With basic training in the agricultural sciences and an understanding of economic principles, students majoring in agricultural economics are well prepared for positions in the Louisiana Cooperative Extension Service, USDA, and businesses serving agriculture, as well as the management of commercial farming enterprises. Additional training at the graduate level leading to the master's and doctoral degrees is offered for students preparing for professional careers in domestic and foreign government service, research, or teaching.

The department also offers a curriculum in agricultural business which provides training in basic agricultural sciences plus instruction in economics and business, including accounting, management, marketing, law, and finance. The student majoring in agricultural business is given considerable freedom to choose courses which will contribute to specialized knowledge in a particular area of interest such as agricultural finance or banking; processing plant management; operation of a livestock market or slaughter plant; or management of feed, farm supply, machinery, or insurance firm. The agricultural business curriculum is particularly suited to training for the successful operation of a commercial farming enterprise.

Students interested in supplementing work in their major departments with training in agricultural business can do so by taking a minor in this area offered by the department. The details for such a minor will be worked out between the student's department and the Department of Agricultural Economics and Agribusiness.

CURRICULUM IN AGRICULTURAL BUSINESS
TOTAL SEM. HRS.: 134

Approved Electives: Agriculture—nine sem. hrs. must be elected from courses within the college other than agricultural economics courses; Basic Social Sciences—select from American government, American history, comparative economic systems, political systems, and social systems and institutions; Humanities—select from applied arts, English literature, fine arts, foreign languages, philosophy, and psychology.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
<td>Agricultural Economics 1098, 2075, 2077</td>
<td>9</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
<td>Agricultural Mechanization 2066</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048</td>
<td>3</td>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>or Poultry Science 1049</td>
<td></td>
<td>Computer Science 1240</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 1001, 1002</td>
<td>6</td>
<td>Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
<td>Horticulture 2050</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1015, 1025; or 1021, 1025; or 1021, 1431</td>
<td>6</td>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1001, 1002 or Botany 1001, 1002, or Biology 1001, 1002, 1003, 1004</td>
<td>8</td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

34
CURRICULUM IN AGRICULTURAL ECONOMICS
TOTAL SEM. HRS.: 135

Approved Electives: Agriculture—six sem. hrs. must be selected from courses within the college other than agricultural economics courses; Economics—six sem. hrs. of economics electives must be 3000 level or above; Basic Social Sciences—select from American government, American history, comparative economic systems, political systems, and social systems and institutions; Humanities—select from applied arts, English literature, fine arts, foreign languages, philosophy, and psychology.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048</td>
<td>3</td>
</tr>
<tr>
<td>or Poultry Science 1049</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1001, 1002, 1003, 1004</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1431</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>5</td>
</tr>
</tbody>
</table>

32

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2001, 2101</td>
<td>6</td>
</tr>
<tr>
<td>Agricultural Economics 4015, 4018</td>
<td>7</td>
</tr>
<tr>
<td>Agricultural Economics 4051 or 4052</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001 or Plant Pathology 4000</td>
<td>3</td>
</tr>
<tr>
<td>Approved agricultural economics electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved agriculture electives</td>
<td>*6</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

33

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2075, 2077</td>
<td>6</td>
</tr>
<tr>
<td>Agricultural Mechanization 2066</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Economics 2010, 2020</td>
<td>6</td>
</tr>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2050 or Agronomy 1021</td>
<td>3-4</td>
</tr>
<tr>
<td>Sociology 2001 or 2351</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3-4</td>
</tr>
</tbody>
</table>

35

DEPARTMENT OF AGRICULTURAL ENGINEERING

HEAD: Nye, Professor
OFFICE: 149 Doran Agricultural Engineering Building
TELEPHONE: (504) 388-3153

PROFESSORS: Braud, Brown, Faulkner, Muller, Stipe, Wright
ASSOCIATE PROFESSORS: Baldwin, Bengston, Edling, Parish, Sistler, Verma
ASSISTANT PROFESSOR: Lawson
INSTRUCTOR: McDaniel

Agricultural Engineering

For the curriculum in agricultural engineering, see the "College of Engineering" section of this catalog.

Agricultural Mechanization

The expanding requirements for food and fiber throughout the world create a need for college-trained personnel who can increase the productivity of farm workers. The complex problems associated with design, selection, application, and maintenance of the large, complicated, and expensive machinery needed for modern agriculture have defined a new field of specialization with excellent career opportunities. Graduates of this curriculum find employment in the farm machinery industry as territory managers, retail and wholesale salespersons, and service consultants; as farm managers on large mechanized farms; and in foreign agriculture, cooperative extension work, the processing industry, and public service.
The agricultural mechanization curriculum is comprised of the study of economics, machine fundamentals, and agricultural sciences, as well as humanities and social sciences. There are sufficient electives in the curriculum to allow the student to specialize in a related area of interest.

### CURRICULUM IN AGRICULTURAL MECHANIZATION

**TOTAL SEM. HRS.: 134**

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048</td>
<td>3</td>
</tr>
<tr>
<td>or Poultry Science 1049</td>
<td></td>
</tr>
<tr>
<td>Biology 1001, 1003; or Botany 1001</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 1001, 1002, 1004; or 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>Engineering Graphics 1001</td>
<td>2</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022; or 1021, 1025; or 1015, 1025</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Mechanization 2061, 2094</td>
<td>5</td>
</tr>
<tr>
<td>Animal Science 2098</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science 1240</td>
<td>3</td>
</tr>
<tr>
<td>English 2002 or Business Communication 2071</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Education 2051</td>
<td>3</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2060 or 2064</td>
<td>3</td>
</tr>
<tr>
<td>Approved social science electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2001</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Mechanization 2050, 2059, 2065, 2066</td>
<td>11</td>
</tr>
<tr>
<td>Agriculture 2051</td>
<td>4</td>
</tr>
<tr>
<td>Biology 1002, 1004; or Botany 1002</td>
<td>4</td>
</tr>
<tr>
<td>Economics 2030 or Agricultural Economics 2075</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4015</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Engineering 3104</td>
<td>1</td>
</tr>
<tr>
<td>Agricultural Mechanization 3082, 3083, 4030, 4350</td>
<td>11</td>
</tr>
<tr>
<td>Agronomy 4052</td>
<td>4</td>
</tr>
<tr>
<td>Finance 3200</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### DEPARTMENT OF AGRONOMY

**HEAD:** J.P. Jones, **Professor**

**OFFICE:** 155 Agronomy-Horticulture Building

**TELEPHONE:** (504) 388-2110

**PROFESSORS:** Caldwell, Dunigan, J.E. Jones, Martin, B. Miller, R. Miller, Mondart, Ricaud, Robinson, Sedberry, Selim

**ASSOCIATE PROFESSORS:** Feagley, Harville, Hoff, Hudnall

**ASSISTANT PROFESSORS:** Amacher, Board, Dabney, Harrison, Kennedy, Lewis, Thro

The Department of Agronomy curricula train graduates for the operation and management of specialized and general farms; for technical work in crop breeding, crop production, and soil science; and for advanced work in crop breeding and physiology, and soil fertility, chemistry, classification and morphology, management, microbiology, and physics. Students who expect to complete advanced technical work in crop breeding and crop physiology to prepare for positions with seed farms, experiment stations, and federal agencies are advised to choose their electives in genetics and botany. Those preparing for technical careers in soil science and for employment with fertilizer companies, experiment stations, and federal agencies, are advised to choose electives in chemistry, physics, plant physiology, and plant nutrition.

Undergraduate students in this department may choose either the crop production and soil management, crop science, or soil science curriculum. The course requirements in the first two years of the crop science and the soil science curricula are so similar that the choice between these may be delayed until the beginning of the junior year.
### CURRICULUM IN CROP PRODUCTION AND SOIL MANAGEMENT
**TOTAL SEM. HRS.: 134**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048 or Poultry Science 1049</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Mechanization 2059, 2061, 2065, or 2066</td>
<td>2-3</td>
</tr>
<tr>
<td>Agricultural Mechanization 2094</td>
<td>2</td>
</tr>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Animal Science 2098</td>
<td>3</td>
</tr>
<tr>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Approved social science/humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4001 or 4015</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 3002, 3003, 3040, 4005, 4008, or 4061 (select four)</td>
<td>11-13</td>
</tr>
<tr>
<td>English 2002 or Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Extension Education 4010</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2061, 4021, 4083, or 4085</td>
<td>3</td>
</tr>
<tr>
<td>Plant Pathology 4000</td>
<td>3</td>
</tr>
<tr>
<td>Plant Pathology 4001, 4012, 4013, 4020, or CPWS 4070</td>
<td>3-4</td>
</tr>
<tr>
<td>Electives</td>
<td>4-5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 4052, 4056, 4058, 4063, 4064</td>
<td>20</td>
</tr>
<tr>
<td>Entomology 4006</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 4086</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

### CURRICULUM IN CROP SCIENCE
**TOTAL SEM. HRS.: 134**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048 or Poultry Science 1049</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Mechanization 2061 or 2066</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 2060</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Approved social science/humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2075 or 4015</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 3002, 3003, 3040, 4005, 4008, or 4061 (select three)</td>
<td>8-10</td>
</tr>
<tr>
<td>Botany 3060, 4024</td>
<td>8</td>
</tr>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 4006</td>
<td>3</td>
</tr>
<tr>
<td>Plant Pathology 4000</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 4052, 4058, 4063, 4064</td>
<td>16</td>
</tr>
<tr>
<td>Biochemistry 2083</td>
<td>3</td>
</tr>
<tr>
<td>Botany 4041 or Plant Pathology 4020</td>
<td>3-4</td>
</tr>
<tr>
<td>CPWS 4070</td>
<td>4</td>
</tr>
<tr>
<td>Horticulture 4086</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>4-5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>
### CURRICULUM IN SOIL SCIENCE

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
<td>Agricultural Mechanization 2061 or 2066</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048 or Poultry Science 1049</td>
<td>3</td>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
<td>Chemistry 2060</td>
<td>3</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Geology 1001, 1601</td>
<td>4</td>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
<td>Approved social science/humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>5</td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL SEM. HRS.</strong></td>
<td><strong>33</strong></td>
<td><strong>SEM. HRS.</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 3002, 3003, 3040, 4005, 4008, or 4061 (select three)</td>
<td>8-10</td>
<td>Agricultural Economics 2075 or 4015</td>
<td>3</td>
</tr>
<tr>
<td>Botany 3060</td>
<td>4</td>
<td>Agronomy 4052, 4055, 4056, 4058, 4063</td>
<td>20</td>
</tr>
<tr>
<td>Chemistry 2251, 2252</td>
<td>5</td>
<td>Biochemistry 2083</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2052, 2061, 4083, 4086, or Mathematics 1550</td>
<td>3-5</td>
<td>CPWS 4070</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>0-4</td>
<td><strong>TOTAL SEM. HRS.</strong></td>
<td><strong>32</strong></td>
</tr>
<tr>
<td><strong>TOTAL SEM. HRS.</strong></td>
<td><strong>32</strong></td>
<td><strong>SEM. HRS.</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### DEPARTMENT OF ANIMAL SCIENCE

**HEAD:** Turner, *Professor*

**OFFICE:** 105 Francioni Hall

**TELEPHONE:** (504) 388-3241

**PROFESSORS:** Bidner, Chambers, Franke, Godke, Hembry, Humes, Smart

**ASSOCIATE PROFESSORS:** McMillin, Thompson

**ASSISTANT PROFESSORS:** Craig, Southern

The Department of Animal Science offers course work in all major fields of the livestock industry. The undergraduate curriculum provides instruction in animal breeding, nutrition, physiology, management, livestock marketing, and meat processing. Appropriate fundamental work is prerequisite to these studies. A detailed degree-planning conference with each student early in the second year allows selection of a wide range of electives. Electives in accounting, agricultural finance, agricultural mechanization, business management, economics, entomology, veterinary science, and preveternary courses are appropriate for animal science majors.

Some students participate, on a paid basis, in the departmental research programs and in the day-to-day management of beef cattle, sheep, swine, and horse farms. This experience is of great benefit to students—especially those with nonfarm backgrounds—when they seek employment.

Animal science majors can prepare for the management of commercial livestock farms and related enterprises, positions in the Louisiana Cooperative Extension Service, and careers with various governmental agencies and commercial organizations such as pharmaceutical, chemical, and feed companies; meat packers; banks; and livestock-breed organizations.

### CURRICULUM IN ANIMAL SCIENCE

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
<td>Agricultural Economics 2075 or 2077</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
<td>Agricultural 2072</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1011</td>
<td>3</td>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Botany 1001</td>
<td>4</td>
<td>Animal Science 2133</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
<td>Chemistry 2060</td>
<td>3</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
<td>Microbiology 1001, 1002</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1021</td>
<td>3</td>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1001</td>
<td>4</td>
<td>Approved social science/humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
<td>Electives or ROTC</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL SEM. HRS.</strong></td>
<td><strong>32</strong></td>
<td><strong>SEM. HRS.</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>
### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Biology 1001, 1002, 1003, 1004; or Botany 1001, 1002; or Zoology 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1001, 1002; or 1201, 1202*</td>
<td>6</td>
</tr>
<tr>
<td>Dairy Science 1048</td>
<td>3</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1015, 1025; or 1021, 1025; or 1021, 1022*</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL SEM. HRS.:</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2001</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1004 or 1212*</td>
<td>2</td>
</tr>
<tr>
<td>Dairy Science 2075</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2030** or Agricultural Economics 2075</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Option requirements** or Approved basic social science/humanities electives</td>
<td>9-11</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>5-7</td>
</tr>
<tr>
<td><strong>TOTAL SEM. HRS.:</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>
### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy Science 4022</td>
<td>3</td>
</tr>
<tr>
<td>English 2002 or 2010</td>
<td>3</td>
</tr>
<tr>
<td>Food Science 4000</td>
<td>3</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>Option requirements***</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

*For science option.

*For business option.

### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4052</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 2085, 4021, 4051, 4081</td>
<td>10</td>
</tr>
<tr>
<td>Speech 2060 or 2064</td>
<td>3</td>
</tr>
<tr>
<td>Approved basic social science/humanities</td>
<td>3</td>
</tr>
<tr>
<td>electives</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Biology 1001, 1002, 1003, 1004; or Botany 1001, 1002; or Zoology 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
</tr>
<tr>
<td>Dairy Science 1048, 1049</td>
<td>5</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1025</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2077</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Economics 2075 or Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 2060</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 2075</td>
<td>3</td>
</tr>
<tr>
<td>English 2002 or Business Communication 2071</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 2153 or Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural mechanization or approved industrial education electives</td>
<td>3</td>
</tr>
<tr>
<td>Approved basic social science/humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4001</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 2051, 4005, 4052, Entomology 2001, Veterinary Science 3001 (select two)</td>
<td>6-8</td>
</tr>
<tr>
<td>Animal Science 4009</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 2085, 3040, 4043</td>
<td>6</td>
</tr>
<tr>
<td>Experimental Statistics 4001</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>10-12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4052</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Economics 4024 or 4082 or 4088</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 4018</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 4044</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 4010, 4051, 4054, 4118</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

### Curriculum in Dairy Production—Commercial

Total SEM. HRS.: 134
## CURRICULUM IN DAIRY PRODUCTION—SCIENCE
### TOTAL SEM. HRS.: 134

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Biology 1001, 1002, 1003, 1004; or Botany 1001, 1002; or Zoology 1001</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>Dairy Science 1048, 1049</td>
<td>5</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2075 or Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 1021</td>
<td>3</td>
</tr>
<tr>
<td>Biochemistry 2083 and Chemistry 2060; or Chemistry 2261, 2262, 2364</td>
<td>6-8</td>
</tr>
<tr>
<td>Dairy Science 2075</td>
<td>3</td>
</tr>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 1001, 1002; or 2051</td>
<td>4</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Approved basic social science/humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 2051, 4005, 4052, Entomology 2001, Veterinary Science 3001 (select two)</td>
<td>6-8</td>
</tr>
<tr>
<td>Animal Science 4009</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 2085, 3040, 4043</td>
<td>6</td>
</tr>
<tr>
<td>Experimental Statistics 4001</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2001, 2002</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 2153 or Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3-5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4052</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 4018</td>
<td>4</td>
</tr>
<tr>
<td>Dairy Science 4010, 4044, 4051, 4054, 4118</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

### CURRICULUM IN ENVIRONMENTAL HEALTH
### TOTAL SEM. HRS.: 134

**Approved Electives:** Select at least 23 sem. hrs. from Group I and nine sem. hrs. from Group II or nine sem. hrs. from Group I and 23 sem. hrs. from Group II.

**Group I (Environmental):** Botany 4046; Chemistry 2251, 4150; Civil Engineering 4120; Environmental Studies 2144, 4149, 4261; Geography 2051, 4014, 4029; Nuclear Science 3411, 4331; Wildlife 4021; Zoology 4153.

**Group II (Health and Food):** Dairy Science 4021, 4022, 4081; Entomology 4001; Entomology 4002 or 4003; Food Science 4070, 4075, 4086; Industral Education 2051, 3064, 4065; Microbiology 4122, 4163; Poultry Science 4004; Zoology 4105.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Botany 1001, 1002; or Zoology 1001, 1002; or Botany 1001, Zoology 1001</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Environmental Studies 1000</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 2261, 2262, 2364; or Chemistry 2060 and Biochemistry 2083, 2084</td>
<td>7-8</td>
</tr>
<tr>
<td>Dairy Science 2075</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2030 or Agricultural</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2075</td>
<td>3</td>
</tr>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2001, 2008</td>
<td>4</td>
</tr>
<tr>
<td>Speech 2060 or 2064</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34-35</strong></td>
</tr>
</tbody>
</table>

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 4130</td>
<td>3</td>
</tr>
<tr>
<td>Dairy Science 3001</td>
<td>2</td>
</tr>
<tr>
<td>Environmental Studies 4000</td>
<td>3</td>
</tr>
<tr>
<td>Food Science 4000</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 3115, 4161</td>
<td>8</td>
</tr>
<tr>
<td>Sociology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 4451 or 4711</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Statistics 2095 or 2201</td>
<td>3-4</td>
</tr>
<tr>
<td>Approved electives</td>
<td>23</td>
</tr>
<tr>
<td>Electives</td>
<td>4-6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31-32</strong></td>
</tr>
</tbody>
</table>
DEPARTMENT OF ENTOMOLOGY

HEAD: Graves, Professor
BOYD PROFESSOR EMERITUS: Newsom
PROFESSORS: Boethel, Chapin, Goyer, Hammond, Meek, Oliver, Rolston, Woodring
ASSOCIATE PROFESSORS: Foil, Fuxa, Johnson, LaFage, Reagan, Riley, Smith,
Sparks, Walker
ASSISTANT PROFESSORS: Byford, Pasley, Quisenberry, Story

Students majoring in entomology have a choice of either the science or the plant and animal protection curriculum, both of which are offered by this department. The science curriculum is designed specifically for students who plan to attend graduate school. The plant and animal protection curriculum is designed for those who may wish to terminate their studies at the baccalaureate level; however, students following this curriculum can pursue advanced academic work with little, if any, loss of time.

Graduates are qualified for careers in research in governmental agencies, agricultural industries, and chemical industries; regulatory work in state and federal organizations; teaching, extension, or research in educational institutions; and in private business as pest-control operators or agricultural pest management consultants.

### CURRICULUM IN ENTOMOLOGY (SCIENCE)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Agronomy 1021 or Horticulture 2050</td>
<td>3-4</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048</td>
<td>3</td>
</tr>
<tr>
<td>or Poultry Science 1049</td>
<td></td>
</tr>
<tr>
<td>Books and Libraries 1001</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35-36</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Agricultural Economics 2075</td>
<td>3</td>
</tr>
<tr>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 2261, 2262, 2364</td>
<td>8</td>
</tr>
<tr>
<td>English 2025</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Botany 4041</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 4005, 4014</td>
<td>7</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Plant Pathology 4000</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 4153 or Botany 4046</td>
<td>3-4</td>
</tr>
<tr>
<td>Approved social science/humanities electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34-35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 4002, 4006, 4016, 4017</td>
<td>12</td>
</tr>
<tr>
<td>Speech 2060 or 2064</td>
<td>3</td>
</tr>
<tr>
<td>Entomology electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved social science/humanities electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

### CURRICULUM IN ENTOMOLOGY (PLANT AND ANIMAL PROTECTION)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Agronomy 1021 or Horticulture 2050</td>
<td>3-4</td>
</tr>
<tr>
<td>Animal Science 1011 or Dairy Science 1048</td>
<td>3</td>
</tr>
<tr>
<td>or Poultry Science 1049</td>
<td></td>
</tr>
<tr>
<td>Books and Libraries 1001</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35-36</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2075</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 2261, 2262, 2364</td>
<td>8</td>
</tr>
<tr>
<td>English 2025</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
JUNIOR YEAR

Agriculture 2072................................. 3
Botany 4041........................................ 3
Entomology 4005, 4014........................ 7
Microbiology 2051............................... 4
Plant Pathology 4000............................ 3
Zoology 4153 or Botany 4046.................... 3-4
Approved social science/humanities electives .... 3

34-35

SENIOR YEAR

CPWS 4070............................................. 4
English 2002......................................... 3
Entomology 4001, 4002, 4006, 4010, 4012 (select three)................................. 9
Plant Pathology 4001, 4020......................... 6
Approved social science/humanities electives ... 7

35

DEPARTMENT OF EXPERIMENTAL STATISTICS

HEAD: Koonce, Professor
OFFICE: 161 Agricultural Administration Building
TELEPHONE: (504) 388-8305

PROFESSORS: Schilling, Warren
ASSOCIATE PROFESSORS: Blouin, Monlezun, Wright
ASSISTANT PROFESSORS: Buco, Escobar, Geaghan, Icaza (part-time), MacKenzie, Moser, Saxton, Shao, Tracy
INSTRUCTORS: Church, Kirby, Wozniak

The Department of Experimental Statistics is primarily a service department, providing instruction at both the undergraduate and graduate levels, consultation with research personnel, and computational services on research projects. The Master of Applied Statistics, offered by this department, is designed to acquaint graduate students with the techniques of statistical methods and the application of those methods to various fields of specialization. For additional information on this program, consult the Graduate School Catalog.

DEPARTMENT OF FOOD SCIENCE

HEAD: Mullins, Professor
OFFICE: 111 Food Science Building
TELEPHONE: (504) 388-5206

PROFESSORS: Grodner, Liuzzo, Meyers, Rao
ASSOCIATE PROFESSORS: Biede, Hackney
ASSISTANT PROFESSORS: Gerdes, Godber

The Department of Food Science offers courses in nutrition and food science which fulfill the scholastic requirements suggested for certification by the Institute of Food Technologists. Graduates are qualified for employment in food manufacturing; management; research and development; quality control; state and federal food, health, and enforcement agencies; educational institutions; and technical sales activities.

The department offers an undergraduate curriculum which emphasizes basic training in the physical and biological sciences. Advanced students are qualified for comprehensive courses related to the processing of basic agricultural products; manufacturing procedures; plant-equipment management; food preservation, packaging, storage, transportation, consumer preparation and utilization; and federal and state food laws.

CURRICULUM IN FOOD SCIENCE

TOTAL SEM. HRS.: 134

FRESHMAN YEAR

Agriculture 1001.................................... 1
Biological science courses........................ 8
Chemistry 1201, 1202, 1212.................... 8
English 1002........................................ 3
Food Science 1049................................ 2
Mathematics 1023, 1431........................... 8
Approved social science electives............... 3
Electives or ROTC.................................. 2

35

SOPHOMORE YEAR

Agricultural Economics 2075..................... 3
Chemistry 2261, 2262, 2364.................... 8
English 2002........................................ 3
Microbiology 2051................................ 4
Physics 2001, 2002................................. 6
Approved social science electives............. 3
Electives........................................... 4

31

Approved Electives: Electives should be selected according to the major area of interest and with consent of the student's adviser. Supplemental courses in the basic sciences or courses in the College of Business Administration may be chosen. A total of 12 sem. hrs. of approved supporting electives must be selected.
GENERAL AGRICULTURE

The curriculum in general agriculture is designed for those students who desire nonspecialized training to prepare for farming and related business, commercial, industrial, and public-service positions. The curriculum provides a strong foundation in the basic sciences and contact with the technical branches of agriculture. Provision is made to meet specific needs and particular interests of students through selective groups of electives.

CURRICULUM IN GENERAL AGRICULTURE

TOTAL SEM. HRS.: 134

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Animal Science 1011</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1001, 1002, 1003, 1004; or Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022; or 1021, 1025</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 4015</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 4009</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Plant Pathology 4000 or Microbiology 2051</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Forestry and wildlife management electives</td>
<td>2-4</td>
</tr>
<tr>
<td>Approved basic social science/humanities</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6-9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2075</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 1021, 2051</td>
<td>7</td>
</tr>
<tr>
<td>Chemistry 2261, 2262, 2364; or Chemistry 2060 and Biochemistry 2083, 2084</td>
<td>7-8</td>
</tr>
<tr>
<td>Dairy Science 1048, 1049</td>
<td>5</td>
</tr>
<tr>
<td>Horticulture 2050</td>
<td>4</td>
</tr>
<tr>
<td>Poultry Science 1049</td>
<td>3</td>
</tr>
<tr>
<td>Approved basic social science/humanities</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Mechanization 2065, 2066</td>
<td>6</td>
</tr>
<tr>
<td>Agronomy 4064 or Animal Science 4018</td>
<td>4</td>
</tr>
<tr>
<td>Dairy Science 4010</td>
<td>4</td>
</tr>
<tr>
<td>Agricultural economics electives</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural mechanization electives</td>
<td>6</td>
</tr>
<tr>
<td>Agronomy, horticulture, forestry, or wildlife electives</td>
<td>3-4</td>
</tr>
<tr>
<td>Electives</td>
<td>6-7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32-33</strong></td>
</tr>
</tbody>
</table>

DEPARTMENT OF HORTICULTURE

HEAD: Newsom, Professor

OFFICE: 137 Agronomy-Horticulture Building
TELEPHONE: (504) 388-2052

PROFESSORS: Barrios, Fontenot, Meadows, O'Rourke, Standifer

ASSOCIATE PROFESSOR: Sundstrom

ASSISTANT PROFESSORS: Boudreaux, Lundergan, Picha, Randle, Torres, Walker, Wilson, Woodson

The Department of Horticulture offers specialized training in the production and handling of fruit, vegetable, and ornamental crops. The undergraduate curriculum, which is oriented toward the basic sciences, leads to the Bachelor of Science degree. Students graduating in horticulture are prepared for graduate study in plant breeding; nutrition; physiology of fruits, vegetables, and ornamentals; and for ownership or management of commercial establishments as well as for other job opportunities within the realm of horticulture.
### CURRICULUM IN HORTICULTURAL SCIENCE

#### TOTAL SEM. HRS.: 134

Approved electives must include three sem. hrs. in humanities and six sem. hrs. in social sciences. A minimum of 12 sem. hrs. of electives must be in courses numbered above 3000. English 1001 may be taken as an elective.

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 1001</td>
<td>1</td>
</tr>
<tr>
<td>Books and Libraries 1001</td>
<td>1</td>
</tr>
<tr>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2050</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 2261, 2262, 2364</td>
<td>8</td>
</tr>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Botany 4024</td>
<td>4</td>
</tr>
<tr>
<td>CPWS 3060</td>
<td>4</td>
</tr>
<tr>
<td>Entomology 4012</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2075, 2076</td>
<td>6</td>
</tr>
<tr>
<td>Plant Pathology 4000</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>Biochemistry 2083</td>
<td>3</td>
</tr>
<tr>
<td>CPWS 3060</td>
<td>4</td>
</tr>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2076</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2050</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy 4052</td>
<td>4</td>
</tr>
<tr>
<td>Biochemistry 2083</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2051</td>
<td>4</td>
</tr>
<tr>
<td>Landscape Architecture 2111</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economics 2077</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture 2072</td>
<td>3</td>
</tr>
<tr>
<td>CPWS 3060</td>
<td>4</td>
</tr>
<tr>
<td>English 2002</td>
<td>3</td>
</tr>
<tr>
<td>Entomology 2001</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 2076</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 4021, 4051, 4071 (select two)</td>
<td>6</td>
</tr>
<tr>
<td>Plant Pathology 4000</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Mechanization 2094</td>
<td>2</td>
</tr>
<tr>
<td>Agricultural Economics 2077</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 4052</td>
<td>4</td>
</tr>
<tr>
<td>CPWS 4070</td>
<td>4</td>
</tr>
<tr>
<td>Entomology 4012</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 4083, 4085, 4086</td>
<td>9</td>
</tr>
<tr>
<td>Plant Pathology 4012</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

### INTERNATIONAL AGRICULTURE

The curriculum in international agriculture is designed to provide students with the theory and practical knowledge of technical agriculture essential for social, economic, and cultural progress in emerging countries around the world. Agricultural background is not essential, since the curriculum includes requirements for practical experiences so that students can apply their knowledge to conditions in the countries in which they
### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Foreign language courses</td>
<td>10</td>
</tr>
<tr>
<td>Mathematics 1015 or above or Philosophy 2010</td>
<td>3</td>
</tr>
<tr>
<td>Music 1700 (two semesters)</td>
<td>0</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
</tr>
<tr>
<td>Piano proficiency (two yrs. beyond Music 1133)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1753, 1754</td>
<td>4</td>
</tr>
<tr>
<td>Ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Biological or physical science (one science with 2 sem. hrs. of lab)</td>
<td>6-8</td>
</tr>
<tr>
<td>Approved history electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives (7 sem. hrs. in courses other than humanities)</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34-36</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language (through course 2055)</td>
<td>6</td>
</tr>
<tr>
<td>Music 1700 (two semesters)</td>
<td>0</td>
</tr>
<tr>
<td>Music 2711, 2712</td>
<td>8</td>
</tr>
<tr>
<td>Piano proficiency (two yrs. beyond Music 1133)</td>
<td>6</td>
</tr>
<tr>
<td>Biological or physical science (one science with 2 sem. hrs. of lab)</td>
<td>6-8</td>
</tr>
<tr>
<td>Approved literature courses</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34-36</strong></td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 3711, 4719, 4723, 4730, 4751, 4752</td>
<td>15</td>
</tr>
<tr>
<td>Approved social science electives (two fields other than history)</td>
<td>9</td>
</tr>
<tr>
<td>Approved electives (7 sem. hrs. in courses other than humanities)</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>
College of Basic Sciences

RONALD J. W. HENRY, Dean
R. GREGORY HUSSEY, Associate Dean
RONALD C. MONTELARO, Associate Dean
LINDA F. LANGE, Academic Counselor
JOAN M. OSBORNE, Academic Counselor
338 Choppin Hall
(504) 388-4001

The College of Basic Sciences offers preparation for careers in biochemistry, botany, chemistry, computer science, cytotechnology, geology, medical technology, microbiology, physics and astronomy, and zoology and physiology. It also provides students with strong academic backgrounds for professional study in medicine and dentistry and for many other careers that require in-depth study of science.

The departments within the college, the various curricula, and the degrees which may be earned are shown in the following chart. These curricula provide broad general education as well as knowledge of the structure of science. Students in the college may also choose curricula which provide premedical preparation, including curricula in biochemistry, basic chemistry with a life sciences option, computer science with a life sciences option, microbiology, physics with a life sciences option, and zoology. Students who want to obtain knowledge and develop skills in two areas concomitantly in preparation for interdisciplinary careers should consider the "second area" options of the Departments of Chemistry, Computer Science, and Physics and Astronomy.

The programs of the college are accredited by all the recognized national organizations concerned with such functions. Classroom and laboratory study may be supplemented by contact with active research programs.

The Department of Computer Science offers work leading to the bachelor's and doctoral degrees in computer science and is a participating department in the University's graduate program leading to the Master of Science in Systems Science degree. The other departments of the college offer work leading to the bachelor's, master's, and doctoral degrees. For specific information concerning undergraduate degree programs, refer to the curricula offered by the departments on the following pages. Detailed information about graduate degree programs may be obtained from the Graduate School Catalog.
ADMISSION REQUIREMENTS

**Junior Division students** who contemplate entering this college should give special attention to the mathematics and science courses they select and should consult a representative of the department they plan to enter prior to completing their initial registration.

Junior Division students will be admitted to the college when they have met the following requirements:

1. earned 24 or more semester hours;
2. maintained a grade-point average of at least 2.00;
3. passed all courses in mathematics and science with grades of "C" or better or received special approval of the dean of the college; and
4. passed English 1002 with a grade of "C" or better.

Students planning to major in computer science must be eligible to take Mathematics 1550 in order to enter the college.

**Transfer students** from other divisions of the University or from other accredited colleges or universities will be permitted to enter the college when they: (1) present, by means of an official transcript, evidence that they have met the same requirements as students entering from Junior Division; and (2) receive approval of the dean of the college. Students who, after initial enrollment in this college, wish to obtain credits from colleges or universities other than LSU and who plan to offer such credits toward their degree requirements must obtain prior approval from the dean on a specific-course basis.
CORRESPONDENCE AND EXTENSION CREDITS

Correspondence and extension credits may be accepted toward meeting degree requirements only with approval of the dean of the college and may not exceed a total of 12 hours.

Students in residence may take courses by correspondence only in exceptional cases (e.g., conflicts between single sections of required courses) and with specific approval of the dean of the college.

DEGREE REQUIREMENTS OF THE COLLEGE

The college offers the bachelor's degree in several curricula designed to give students professional training in an area of concentration. In addition, a core of material representing a broad exposure to the human cultural heritage is an integral part of the curricula in the college. That core consists of the following course work:

**English:** Nine semester hours including freshman composition (English 1002, 1003, or 1005) and one of the literature sequences (English 2020, 2022 or 2025, 2027). Degree credit will not be allowed for English 1001 or 1004.

**Mathematics:** Five semester hours of calculus (Mathematics 1550). Degree credit will not be allowed for mathematics courses numbered below 1550.

**Foreign language:** Ten semester hours in the same language. Unless specified in the individual curriculum, any classical or modern foreign language may be chosen. Students whose native language is not English and who did not attend an American or English high school may meet this requirement with nine hours of credit in foreign language courses in the native tongue numbered above 2070, or with nine hours of credit in other humanities, history, or political science courses.

**Sciences:** Seventeen hours including two semesters of study in the biological sciences, a course in computer science (programming), and a year course in a physical science. Either the biological or physical science must include a laboratory. Courses selected to meet this requirement must be chosen from courses offered by departments in the College of Basic Sciences.

**Social sciences and humanities:** Fifteen semester hours of elective courses including six hours in courses numbered 3000 or above. Only three hours of participation (activity) courses in music may be offered toward fulfillment of this requirement.

The cytotechnology and medical technology programs, leading to degrees awarded jointly with the LSU Medical School, do allow credit for Mathematics 1021, 1022 and do not require Mathematics 1550 or a foreign language.

Following is a list of the more important academic policies of the college offered to guide students toward degrees. Further information may be obtained from the pamphlet entitled, *College Rules Regarding Courses Taken for Credit in the College of Basic Sciences.*

1. All students must complete a program of study established by the department concerned and approved by the faculty and the dean of the college.

2. No curricula in the college requires less than 128 semester hours; some curricula require more. Students in all degree programs of the college, except medical technology and cytotechnology, must earn at least 24 of the last 30 semester hours offered toward their degrees as registrants in the College of Basic Sciences at LSU. Students in the medical technology and cytotechnology curricula must earn at least 24 of the last 30 semester hours of credit as registrants in this college prior to entering their senior year.

3. Students in all degree programs of the college must earn in residence on the LSU campus at least 18 of the hours offered toward their degrees in courses offered by departments in the College of Basic Sciences. In all degree programs, except medical technology and cytotechnology, at least nine of these 18 hours must be in courses numbered above 3000 and offered by the department administering the major program. Students in medical technology must earn at least six of these 18 hours in courses designated as biochemistry. Students in cytotechnology may include up to six hours of advanced mathematics courses among the 18 hours in courses offered by departments in the college.

4. All students in the college must have a grade-point average of at least 2.00 on all work undertaken.

5. All courses specified by number in science (including computer science) and mathematics, all approved electives in these areas, English 1002 or 1003, and all approved option electives must have been passed with a grade of "C" or better. A student who makes a "D" or an "F"
in a course in which a minimum grade of "C" is required must register for that course again (and may not drop the course) in the next term in which the student is in residence and the course is offered. Exceptions may be made only with approval of the dean.

6. Nonparticipation courses in HPRD may be taken for elective credit. A maximum of three semester hours will be allowed in HPRD participation (activity) courses. Twelve semester hours of ROTC may be allowed for degree credit, with no more than six of the twelve semester hours in courses numbered below 3000. However, the sum of ROTC course credits and HPRD activity course credits allowed toward the degree may not exceed twelve semester hours.

7. Students are expected to make reasonable and satisfactory progress in a degree program. Consequently, sequential scheduling of courses in the major field is necessary, and required courses in English and mathematics must be scheduled each semester until they are satisfactorily passed. If necessary, a required course may be dropped once with the approval of the dean, but, normally, not a second time.

8. Application for the bachelor's degree must be made in writing and approved by the dean of the college prior to the final date for adding courses for credit in the semester in which the degree is anticipated.

9. Juniors and seniors in the college with grade-point averages above 3.50 are considered for election to membership in Phi Beta Kappa. The Phi Beta Kappa selection criteria emphasize breadth of the academic program as well as grade-point average. Superior students interested in becoming members of Phi Beta Kappa are advised to use some elective credits for English literature courses, for an additional foreign language course, and for other courses above the 1000 level in several areas of humanities and social sciences. Required courses in mathematics and science generally meet the expectations of Phi Beta Kappa in those areas.

PREMEDICAL AND PREDENTAL COUNSELING

A premedical/predental counselor is available to help students plan their undergraduate curricula and to assist with application to medical and dental schools.

REQUIREMENTS FOR A SECOND BACHELOR'S DEGREE

In order to qualify for a second bachelor's degree, students must meet all academic requirements of the college, earn a minimum of 24 semester hours as a resident in the College of Basic Sciences, and earn 30 semester hours beyond the work offered for the degree requiring the lesser number of hours.

PASS-FAIL OPTION

**Students in the College of Basic Sciences** may register for courses in the college on a pass-fail basis under the following conditions:

1. Only students with a 2.50 average or better may participate.
2. Required courses, electives chosen from several listed, and courses germane to the major and the career for which the student is preparing may not be taken on a pass-fail basis. Registration for a course on a pass-fail basis will not be permitted until the required work in the same area has been satisfactorily completed. A student may not take courses offered by the Division of Honors and Interdisciplinary Studies on a pass-fail basis.
3. Eligible students may take one course per semester up to a total of 12 hours toward the degree on a pass-fail basis.
4. A student must have permission (by signatures on a petition form) from the dean of this college, the instructor of the course, and the dean of the college in which the course is offered.
5. Pass-fail registration must be completed before the final day for adding courses.

**Students from other colleges** who wish to register for courses in this college on a pass-fail basis will present a petition form to the dean of the college. If the petition is approved, the student will then present the form to the instructor concerned for the appropriate action. **Courses offered by the College of Basic Sciences that are required in a student's curriculum or that are normally considered important in preparation for the student's career will not be approved on a pass-fail basis.**
The Department of Biochemistry administers curricula in biochemistry, cytotechnology, and medical technology and participates in the organized research program in fundamental areas of biochemistry. The biochemistry curriculum deals with events which occur in living systems at the molecular level and in the chemistry of molecules involved in these processes. A student may obtain a Bachelor of Science degree with a major in biochemistry by either of two routes.

1. The basic curriculum in biochemistry provides thorough training in chemistry and a solid foundation in biological sciences. Although it is designed for students who wish to become professional biochemists, it also serves as excellent preparation for entry into medical or dental school.

2. The preprofessional science option in biochemistry is preferred by many students who plan to enter medical or dental school after completion of an undergraduate degree. The program places strong emphasis on the physiological applications of chemistry, physics, and biochemistry.

The degrees of Bachelor of Science in Medical Technology and Bachelor of Science in Cytotechnology are offered through the College of Basic Sciences and the School of Allied Health Professions of the LSU Medical Center. These curricula include three years of study at LSU and a fourth full calendar year of study in a hospital affiliated with the LSU Medical Center. Admission to the senior year is on a competitive basis. These degrees require a minimum of 132 semester hours, of which at least 96 must be earned prior to entering the senior year. Graduates are eligible for national certification examinations.

### CURRICULUM IN BIOCHEMISTRY

| TOTAL SEM. HRS.: 134 |

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212 ...</td>
<td>8</td>
</tr>
<tr>
<td>English 1002 ...</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552 ...</td>
<td>10</td>
</tr>
<tr>
<td>Zoology 1001, 1002 ...</td>
<td>8</td>
</tr>
<tr>
<td>Social science/humanities courses ...</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives ...</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong> ...</td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 2251, 2252, 2464, 4491, 4492 ...</td>
<td>13</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051 ...</td>
<td>10</td>
</tr>
<tr>
<td>Social science/humanities courses ...</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives ...</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong> ...</td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 2261, 2262, 2463 ...</td>
<td>8</td>
</tr>
<tr>
<td>Computer Science 1240 or 1241 ...</td>
<td>3</td>
</tr>
<tr>
<td>English 2020, 2022; or 2025, 2027 ...</td>
<td>6</td>
</tr>
<tr>
<td>Microbiology 2051 ...</td>
<td>4</td>
</tr>
<tr>
<td>Physics 1201, 1202, 1208, 1209; or 2101, 2102, 2108, 2109 ...</td>
<td>8</td>
</tr>
<tr>
<td>Approved electives ...</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong> ...</td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry 4385, 4390, 4393, 4394 ...</td>
<td>10</td>
</tr>
<tr>
<td>Chemistry 4493 ...</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry 4561, 4562, 4594, Biochemistry 4397, 4595 [select one] ...</td>
<td>3</td>
</tr>
<tr>
<td>Social science/humanities courses (3000 level or above) ...</td>
<td>6</td>
</tr>
<tr>
<td>Approved biological science elective ...</td>
<td>4</td>
</tr>
<tr>
<td>Approved electives ...</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong> ...</td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### CURRICULUM IN BIOCHEMISTRY (PREPROFESSIONAL SCIENCE OPTION—PREMEDICINE, PREDENTISTRY, OR PREPHARMACY)

| TOTAL SEM. HRS.: 134 |

This option is not intended for students planning to enter graduate study in biochemistry. Approved electives in the freshman and sophomore years may include a total of six semester hours of basic ROTC. The advanced science or mathematics electives will be selected with approval of the departmental adviser and the dean of the college and may be used to satisfy any particular or unusual requirements of the professional school of the student's choice.
## CURRICULUM IN CYTOTECHNOLOGY

**TOTAL SEM. HRS.: 132**

**Additional information about this curriculum may be obtained from the medical technology office, 32 Agricultural Administration Building, (504) 388-8785.**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
<td>Chemistry 1212, 2261, 2262, 2364</td>
<td>10</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022; or 1023; or 1550</td>
<td>6-5</td>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
<td>Approved electives</td>
<td>5</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>33</strong></td>
<td></td>
<td><strong>34</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 2251, 2252</td>
<td>5</td>
<td>Biochemistry 4083, 4084, 4385, 4390</td>
<td>10</td>
</tr>
<tr>
<td>Zoology 2153, 2154</td>
<td>6</td>
<td>Approved advanced science or mathematics electives</td>
<td>9</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
<td>Social science/humanities courses (3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>4</td>
<td>Approved electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>32</strong></td>
<td></td>
<td><strong>34</strong></td>
<td></td>
</tr>
</tbody>
</table>

| CURRICULUM IN MEDICAL TECHNOLOGY
<table>
<thead>
<tr>
<th>TOTAL SEM. HRS.: 132</th>
</tr>
</thead>
</table>

**Additional information about this curriculum may be obtained from the medical technology office, 32 Agricultural Administration Building, (504) 388-8785.**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
<td>Chemistry 1212, 2261, 2262, 2364</td>
<td>10</td>
</tr>
<tr>
<td>Computer science programming course</td>
<td>3</td>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1021, 1022; or 1023; or 1550</td>
<td>6-5</td>
<td>Physics 2001, 2008</td>
<td>4</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
<td>Social science/humanities courses (3 sem. hrs. at 3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
<td>Approved electives</td>
<td>2</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>32</strong></td>
<td></td>
<td><strong>32</strong></td>
<td></td>
</tr>
</tbody>
</table>
### DEPARTMENT OF BOTANY

**CHAIRMAN:** Moore, Professor  
**BOYD PROFESSOR:** Tucker  
**PROFESSOR:** Chapman  
**ASSOCIATE PROFESSOR:** Urbatsch  
**ASSISTANT PROFESSORS:** Adams, Blackwell, Clay, Longstreth, Saunders, Williamson

**OFFICE:** 305 Life Sciences Building  
**TELEPHONE:** (504) 388-8485

### CURRICULUM IN BOTANY

**TOTAL SEM. HRS.: 128**

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany 1001, 1002; or Biology 1001, 1002, 1003, 1004</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Mathematics 1550</td>
<td>5</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>Computer science programming course</td>
<td>3</td>
</tr>
<tr>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>9</td>
</tr>
<tr>
<td>Approved electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany 3060</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 2261, 2262, 2364</td>
<td>8</td>
</tr>
<tr>
<td>Approved botany electives</td>
<td>4</td>
</tr>
<tr>
<td>Social science/humanities courses (3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved botany electives (3000 level or above)</td>
<td>8</td>
</tr>
<tr>
<td>Approved electives</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

### DEPARTMENT OF CHEMISTRY

**CHAIRMAN:** Daly, Professor  
**BOYD PROFESSORS:** Mattice, McGlynn, Pryor  
**PROFESSORS:** Baddley, Bhacca, Carpenter, Cartledge, Fischer, Kestner, Nauman, Newkome, Robinson, Runnels, Selbin, Sen, Traynham, Wharton  
**ASSOCIATE PROFESSORS:** Barkley, Gandour, Hales, Vidaurreta, Watkins  
**ASSISTANT PROFESSORS:** Babcock, Butler, Cherry, Church, Gale, Johnson, Russo  
**INSTRUCTORS:** Berg, Delord, Rinker

**OFFICE:** 232 Choppin Hall  
**TELEPHONE:** (504) 388-3361

Through two curricula offered by the Department of Chemistry, students obtain a thorough working knowledge of the fundamentals of the various branches of chemistry, supplemented by study in physics, mathematics, and other sciences. Both programs are further enriched by the requirement of a broad basic background in the social sciences and humanities. The department offers special lecture and laboratory courses (or special sections of courses) for its majors.

The curriculum in basic chemistry (with options) includes 62 semester hours of elective credit, 25-30 of which must constitute an approved option. Among the traditional options is a program that specifically prepares students for graduate study in chemistry. Students may also combine basic chemical education with an
emphasize in a second area, with approval of the dean. This program will permit emphasis in many areas where need for a chemical background has been shown. For example, options in physics, computer science, life sciences, geology, engineering, business administration, ecology, history, foreign languages, marine sciences, political science, and sociology are possible.

Students who complete certain options in the basic chemistry curriculum are certified as chemists by the American Chemical Society at the time of their graduation.

CURRICULUM IN BASIC CHEMISTRY (WITH OPTIONS)

Electives: An approved option consists of 25-30 sem. hrs. of electives in one area. Any area may be chosen, with approval of the dean, provided that education in depth is planned through the option. Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC.

With the dean's approval, Chemistry 1202, 1212 may be substituted for Chemistry 1422, 1431.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201 or 1421; 1422; 1431</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 4491, 4492, 4551, 4570</td>
<td>12</td>
</tr>
<tr>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Biological science sequence</td>
<td>6-8</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>5-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1432, 2261, 2262, 2463</td>
<td>11</td>
</tr>
<tr>
<td>Computer science programming course</td>
<td>3</td>
</tr>
<tr>
<td>Physics 2101, 2102, 2108, 2109</td>
<td>8</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 4493 or 4553</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry 4552</td>
<td>2</td>
</tr>
<tr>
<td>Social science/humanities courses (3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

Option for Students Preparing for Graduate Study in Chemistry: Students completing this option will receive American Chemical Society certification.

SOPHOMORE YEAR: Mathematics 2065 or 2085 or 2090 (3-4 sem. hrs.).

JUNIOR YEAR: Chemistry 2464; and Chemistry 4581 or Physics 2111 (5 sem. hrs.); Mathematics 2057 or Computer Science 2263, or an advanced physics course numbered above 2111 (3 sem. hrs.).

SENIOR YEAR: Chemistry 4493 or 4553 (2 sem. hrs.)—choose the course not elected in the senior year, as listed above; approved chemistry electives (6 sem. hrs.)—must include a minimum of six sem. hrs. representing two areas of chemistry selected from Chemistry 3900, 4554, 4561, 4582, 4594, 4595, 4596, and Biochemistry 4393; approved physics electives (3 sem. hrs.)—select from Physics 2221, 2231, 4132, 4135, 4141, and 4142.

DEPARTMENT OF COMPUTER SCIENCE

CHAIRMAN: Rudd, Professor

LSU FOUNDATION MURPHY J. FOSTER PROFESSOR: Chen

PROFESSORS: Kraft, Lee

ASSOCIATE PROFESSORS: Buell, Iyengar, Jones, Kundu, Tyler

ASSISTANT PROFESSOR: Cross

INSTRUCTORS: Cater, Chiarulli, Edgeworth, Hanchey, Hart, Hatch, Mims, Shepherd, Taylor

The impact of the digital computer on our everyday lives has been greater than that of any other technological development in modern times, even atomic energy. The study of computer science encompasses all aspects of computing machines and their applications in virtually every area of society today.

The curriculum leading to the Bachelor of Science degree with a major in computer science is structured around basic courses in computer science and mathematics. Students are expected to schedule, via a 24-hour approved elective group, enough courses in another area to provide them with a basic understanding of the principles of that area. The curriculum requires a broad background in the humanities and social sciences and also provides the student with electives to pursue other interests.

Students wishing to continue their studies at the graduate level may major in computer science or, in some cases, in the discipline of the 24-hour approved elective group.
### CURRICULUM IN COMPUTER SCIENCE

**TOTAL SEM. HRS.: 132**

Students entering this curriculum must be eligible for Mathematics 1550.

Restricted electives must constitute an approved option of 24 semester hours. Any second area may be chosen, with consent of the dean, provided that in-depth education is planned. Up to six of these 24 hrs. may be taken in computer science courses if remaining hours permit in-depth study in the option.

Electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC. The computer science elective (three sem. hrs.) must be an approved senior-level computer science course.

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1250, 1251</td>
<td>6</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Biological or physical science sequence</td>
<td>6</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 3102, 4101, 4103</td>
<td>9</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Industrial Engineering 3302*, 4510**</td>
<td>6</td>
</tr>
<tr>
<td>Computer Science 2263**</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer science elective</td>
<td>3</td>
</tr>
<tr>
<td>Social science/humanities courses (3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

*Students who have completed the prerequisites may substitute MATH 4055 or QBA 4000.
**Students who have completed the prerequisites may substitute MATH 4056, QBA 4020, or EE 4640.
***Students who have completed the prerequisites may substitute ME 4533 or MATH 4065.

### DEPARTMENT OF GEOLOGY

**CHAIRMAN:** McGinnis, **Professor**

**OFFICE:** 331 Geology Building

**TELEPHONE:** (504) 388-3353

**PROFESSORS:** Ferrell, Hanor, Hart, Lowe, Moore, Nummedal, Roche, Sen Gupta, van den Bold

**ASSOCIATE PROFESSORS:** Baksi, Byerly, Chan, Ferguson, Pilger, Schiebout (Adjunct)

**ASSISTANT PROFESSORS:** Aharon, Dokka, Ghiold, Nunn

The geology curricula are structured to develop a broad mathematics and natural science background. Students are then introduced to laboratory and field techniques required to solve the complex problems associated with the varied processes which shape the earth. The professional geology curriculum prepares students for graduate studies or for careers in geology.

Both graduate and undergraduate majors in geology must pay a $35 field service fee each semester. Students not majoring in geology who schedule courses requiring field trip fees will be assessed a pro rata part of the above amount as determined by the department chairman. Part-time students enrolled in seminar courses only and students registered for thesis or dissertation only are exempt from paying this fee. Information concerning special fees for summer camps may be obtained from the Department of Geology.

Honors courses offered are Geology 1002 and 1004.

### CURRICULUM IN GEOLOGY (PROFESSIONAL)

**TOTAL SEM. HRS.: 136**

Geography 2050, 4013, 4015, 4020, 4021, 4022, 4023, 4028, and 4045 may be taken for elective credit for the professional degree in geology rather than social science electives. Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC.

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Geology 1001, 1003, 1601, 1602</td>
<td>8</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Approved electives</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1241</td>
<td>3</td>
</tr>
<tr>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Geology 2071, 2081, 2082, 2661</td>
<td>13</td>
</tr>
<tr>
<td>Modern foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>
JUNIOR YEAR SEM. HRS.
English 3002 ........................................... 3
Geology 2666, 3011, 3012, 4031 ..................... 14
Physics 2101, 2102, 2108, 2109 ................................ 8
Approved electives.................................. 6 31

SUMMER (FOLLOWING JUNIOR YEAR) SEM. HRS.
Geology 3666 ........................................... 6 6

CURRICULUM IN GEOLOGY (NONPROFESSIONAL)
TOTAL SEM. HRS.: 128

Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC.

FRESHMAN YEAR SEM. HRS.
English 1002 ........................................... 3
Geology 1001, 1003, 1601, 1602 ..................... 8
Mathematics 1550 .................................... 5
Social science/humanities courses .................. 3 11
Approved electives.................................. 30

JUNIOR YEAR SEM. HRS.
Computer Science 1240 or 1241 ..................... 3
Geology 2071, 3011, 4041 ......................... 11
Approved biological science sequence ............. 5-6
Social science/humanities courses .................. 6
Approved electives.................................. 30

SUMMER (FOLLOWING JUNIOR YEAR) SEM. HRS.
Geology 3666 ........................................... 6 6

DEPARTMENT OF MICROBIOLOGY

CHAIRMAN: Socolofsky, Professor
PROFESSORS: Braymer, Larkin, Siebeling, Srinivasan
ASSOCIATE PROFESSOR: Orlowski
ASSISTANT PROFESSORS: Achberger, Gayda
INSTRUCTOR: Potter

OFFICE: 508 Life Sciences Building
TELEPHONE: (504) 388-2601

CURRICULUM IN MICROBIOLOGY
TOTAL SEM HRS.: 128

Microbiology 2051 and 16 additional hours of microbiology courses, including 12 hours in courses numbered 3000 and above, are required for graduation. Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC.

FRESHMAN YEAR SEM. HRS.
Chemistry 1201, 1202, 1212 .......................... 8
English 1002 ........................................... 3
Mathematics 1550 .................................... 5
Zooology 1001, 1002; or Biology 1001, 1002, 1003, 1004 ........................................... 8
Social science/humanities courses .................. 3
Approved electives.................................. 32

SOPHOMORE YEAR SEM. HRS.
Chemistry 2261, 2262 .................................. 6
Computer science programming course ............. 3
English 2020, 2022; or 2025, 2027 .................. 6
Foreign language courses 1001, 2051 ................. 10
Microbiology 2051 .................................... 4
Approved electives.................................. 3 32
JUNIOR YEAR  SEM. HRS.  SENIOR YEAR  SEM. HRS.
Chemistry 2251, 2364........................................... 5  Chemistry 2252........................................... 2
Approved microbiology electives.......................... 6  Social science/humanities courses (3000
Social science/humanities courses.......................... 6  level or above)............................................. 6
Approved electives............................................ 6  Approved electives........................................... 15
                                                      31                                                      33

CURRICULUM IN MICROBIOLOGY
(SUGGESTED PREMEDICAL AND PREDENTAL OPTION)

Microbiology 2051 and 16 additional hours of microbiology courses, including 12 hours in courses num-
bered 3000 and above, are required for graduation. Approved electives in the freshman and sophomore years
may include a total of six sem. hrs. of basic ROTC.

FRESHMAN YEAR  SEM. HRS.  SOPHOMORE YEAR  SEM. HRS.
Chemistry 1201, 1202, 1212............................... 8  Chemistry 2261, 2262............................... 6
English 1002................................................ 3  Computer science programming course....................... 3
Mathematics 1550........................................... 5  English 2020, 2022; or 2025, 2027.......................... 6
Zoology 1001, 1002........................................... 8  Foreign language courses 1001, 2051.......................... 10
Social science/humanities courses.......................... 3  Microbiology 2051........................................... 4
Approved electives.......................................... 5  Approved electives........................................... 3
                                                      32                                                      32

JUNIOR YEAR  SEM. HRS.  SENIOR YEAR  SEM. HRS.
Chemistry 2251, 2364........................................... 5  Chemistry 2252........................................... 2
Microbiology 4110, 4121....................................... 7  Microbiology 4122, 4146....................................... 6
Social science/humanities courses.......................... 6  Social science/humanities courses (3000
Approved electives............................................ 6  level or above)............................................. 6
                                                      32                                                      32

*Microbiology electives might include Microbiology 3115 and 4190.
**Predental students must take Zoology 4104 to satisfy professional school requirements. Suggested
approved electives include Philosophy 2018, Business Administration 1001, Biochemistry 4083, and Zoology
2152.

DEPARTMENT OF PHYSICS AND ASTRONOMY

CHAIRMAN: Zganjar, Professor
OFFICE: 202 Nicholson Hall
BOYD PROFESSORS: Callaway, Reynolds
TELEPHONE: (504) 388-2261
PROFESSORS: Bond, Chanmugam, Draayer, Drilling, Goodrich, Grenier, Hamilton, Haymaker,
Henry, Huggett, Hussey, Imlay, Jones, Landolt, O'Connell, Perry, Rajagopal, Rau
ASSOCIATE PROFESSORS: Chan, Greene, Grenchik, Kirk, Lee, Metcalf, Piller, Zebouni,
Zimmerman
ASSISTANT PROFESSORS: DiMauro, Ho, Rosenfeld, Tohline, Wefel

This department offers undergraduate students a program in physics with options. There is a central core
of course work common to all programs. In combination with the basic core, students may elect options in phys-
ics, astronomy, or a cognate field to prepare for graduate study in either physics or astronomy or to develop
interest in a second discipline. With approval of the dean of the college and a faculty adviser of the department,
any second area of study may be chosen, provided that in-depth study is planned in the chosen field. Such a
program of study permits added emphasis in any area where a basic background in physics is desirable. All
options give a thorough knowledge of physics, an adequate foundation in mathematics, and a broad back-
ground in the social sciences and humanities.

CURRICULUM IN PHYSICS (PHYSICS OPTION)

TOTAL SEM. HRS.: 130

Students planning to enter graduate school should select either French, German, or Russian as their for-
eign language. Approved electives in the freshman and sophomore years may include a total of six sem. hrs.
of basic ROTC.
### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 1201, 1202, 1208, 1209</td>
<td>10</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 32**

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer science programming course</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Physics 4125, 4132, 4141, 4142, 4198</td>
<td>15</td>
</tr>
<tr>
<td>Mathematics elective (2085 or 3000 level or above)</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 31**

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 4201, 4202, 4399</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics electives (3000 level or above)</td>
<td>3</td>
</tr>
<tr>
<td>Social science/humanities courses (6 sem. hrs. at 3000 level or above)</td>
<td>12</td>
</tr>
<tr>
<td>Approved electives</td>
<td>9-8</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 33-32**

### CURRICULUM IN PHYSICS (ASTRONOMY OPTION)

**TOTAL SEM. HRS.: 130**

Students planning to enter graduate school should select either French, German, or Russian as their foreign language. Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy 1111, 1112</td>
<td>6</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 1201, 1202, 1208, 1209</td>
<td>10</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 32**

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy 4261</td>
<td>3</td>
</tr>
<tr>
<td>Computer science programming course</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Physics 4125, 4132, 4141, 4142</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics elective (2085 or 3000 level or above)</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 31**

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 2057</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 2065 or 2090</td>
<td>3-4</td>
</tr>
<tr>
<td>Physics 2111, 2209, 2221, 2231</td>
<td>13</td>
</tr>
<tr>
<td>Biological science sequence</td>
<td>6-8</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3-1</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 34-35**

### CURRICULUM IN PHYSICS (OPTION IN PHYSICS AND A SECOND DISCIPLINE)

**TOTAL SEM. HRS.: 130**

At least 25 sem. hrs. of electives must be from an approved discipline outside the department. Any second area may be chosen with consent of the dean and a departmental faculty adviser. Students planning to enter graduate school should select either French, German, or Russian as their foreign language. Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 1201, 1202, 1208, 1209</td>
<td>10</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 32**

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 2020, 2022; or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 2057</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 2065 or 2090</td>
<td>3-4</td>
</tr>
<tr>
<td>Physics 2111, 2209, 2221, 2231</td>
<td>13</td>
</tr>
<tr>
<td>Biological science sequence</td>
<td>6-8</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 31-34**
DEPARTMENT OF ZOOLOGY AND PHYSIOLOGY

CHAIRMAN: Dietz, Professor
OFFICE: 202 Life Sciences Building
TELEPHONE: (504) 388-1132

PROFESSORS: Corkum, Fitzsimons (Adjunct), Harman, Lee, Meier, Rossman (Adjunct), Stickle, Woodring

ASSOCIATE PROFESSORS: Caprio, Fleeger, Hafner, Homberger, Leonard, Remsen (Adjunct), Weidner

ASSISTANT PROFESSORS: Collins, Foltz, Freel, Hatch, Lynn, Silverman, Zink (Adjunct)

INSTRUCTOR: Thompson

Marine Zoology: The department offers course work in the field of marine zoology at the Gulf Coast Research Laboratory, Ocean Springs, Mississippi, through a cooperative arrangement with that institution. The laboratory is in service throughout the year and is available for field trips by classes interested in marine zoology and by individual research workers. Students wishing to take courses at the laboratory should contact the chairman, Department of Zoology and Physiology. Only six semester hours in marine zoology at a field station may be counted toward the 30-hour requirement for undergraduate concentration.

Students choosing a career in marine zoology are urged to prepare themselves by taking the following courses in addition to departmental requirements: Zoology 4155; 6 sem. hrs. from Zoology 4145, 4153, 4154, 4162, 4647, 4673; Chemistry 2251, 2252; Mathematics 1550; 3 sem. hrs. from Computer Science 1241, 1250, or Experimental Statistics 4001; 7 sem. hrs. from Botany 1002, 4052, or Geology 1001, 1005, 1601.

CURRICULUM IN ZOOLOGY

TOTAL SEM. HRS.: 128

Approved electives in the freshman and sophomore years may include a total of six sem. hrs. of basic ROTC. Approved zoology electives must include one physiology course in either the junior or senior year.

Approved electives may be used to satisfy premedical requirements of the LSU Medical School in New Orleans. These include completion of Chemistry 2251 or a biochemistry lecture course in the junior year; and Chemistry 2252 or a biochemistry laboratory course in the senior year.

The zoology curriculum satisfies all Louisiana predental requirements.

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer science programming course</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Physics 4132, 4198</td>
<td>6</td>
</tr>
<tr>
<td>Physics or astronomy elective (3000 level or above)</td>
<td>3</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34-31</strong></td>
</tr>
</tbody>
</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics or astronomy elective (3000 level or above)</td>
<td>3</td>
</tr>
<tr>
<td>Social science/humanities courses (3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
</tr>
<tr>
<td>English 1002</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550</td>
<td>5</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1212, 2261, 2262</td>
<td>8</td>
</tr>
<tr>
<td>English 2020, 2022, or 2025, 2027</td>
<td>6</td>
</tr>
<tr>
<td>Foreign language courses 1001, 2051</td>
<td>10</td>
</tr>
<tr>
<td>Zoology 2152 or 3156</td>
<td>4</td>
</tr>
<tr>
<td>Zoology 2153</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 2364</td>
<td>2</td>
</tr>
<tr>
<td>Approved zoology electives</td>
<td>7</td>
</tr>
<tr>
<td>Social science/humanities courses</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1241 or 1248</td>
<td>3</td>
</tr>
<tr>
<td>Approved zoology electives (4000-level courses with labs)</td>
<td>8</td>
</tr>
<tr>
<td>Social science/humanities courses (3000 level or above)</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>
Research Units

BASIN RESEARCH INSTITUTE

DIRECTOR: Moore, Professor

OFFICE: 102 Geology Building
TELEPHONE: (504)388-8328

The Basin Research Institute was established to foster multidisciplinary research on the origin and development of sedimentary basins, the "habitat of oil." Project oriented with integrated, regional basin studies of economic importance as its main research goal, the institute is structured into six areas: the stratigraphy-sedimentation task forces and the research groups in petroleum engineering, geophysics, clastic diagenesis, geochemistry, and carbonate diagenesis. To promote cooperative, multidisciplinary research on basin-related topics, the institute draws staff from the Departments of Petroleum Engineering and Geology, the Coastal Studies Institute, and the Louisiana Geological Survey. It also maintains joint laboratory facilities with these units. The institute's public service program has been designed to assist the petroleum industry of Louisiana in its search for and recovery of the hydrocarbon resources of the state.

COASTAL STUDIES INSTITUTE

DIRECTOR: Coleman, Boyd Professor

OFFICE: 215 Coastal Studies Building
TELEPHONE: (504)388-2395, 388-5301

The Coastal Studies Institute, a research organization established in 1954 with major emphasis on physical systems, receives support from the Coastal Sciences Program of the Office of Naval Research, the Corps of Engineers, the Sea Grant Program, the National Science Foundation, and major petroleum companies. Its research is interdisciplinary, extending into marine geology and geophysics, hydrodynamics, dynamical meteorology, physical oceanography, and remote sensing. Field investigations have been undertaken on all continents, except Antarctica, but including the coast of the Arctic Ocean. The program is field oriented, and concentrates on form-process relationships in coastal and continental-shelf environments. The emphasis of the marine geology program is on deltaic and shelf sedimentary environments and sediment-transport mechanisms, including mass-movement processes. The physical oceanography program focuses on the dynamics of water and sediment particulates in near-coastal, continental-shelf and -slope, and marginal-sea and -strait environments. The dynamical meteorology program addresses research problems in the coastal zone and marine boundary layer. An Industrial Associates Research Program supplements contractual research funds.
The College of Business Administration offers professional training in several areas of business specialization in addition to a program of general business administration. The curricula of the various departments are shown in the chart below.

- **Accounting**
- **Economics**
- **Finance**
- **Management**
- **Marketing**
- **Quantitative Business Analysis**

**CURRICULA**

- Business and Public Administration
- Economics
- International Trade and Finance
- Transportation
- Commercial Banking
- Finance
- Real Estate
- Risk and Insurance
- Management and Administration
- Office Systems
- Petroleum Land Management
- Quantitative Business Analysis (with options)
- General Business Administration (with option)

**DEGREE**

Bachelor of Science
Each curriculum is constructed to insure that students receive a broad general education and a sound foundation in the basic areas of business knowledge. At the same time, students may obtain limited specialization in a particular area of business endeavor. The objective of the college is to provide training in the functional fields of business administration so students will be qualified to hold positions of leadership, trust, and responsibility in business and industry.

The College of Business Administration is a member school of the American Association of Collegiate Schools of Business. Its undergraduate programs have been accredited continuously by the association since 1931.

ADMISSION REQUIREMENTS

Students may enter the College of Business Administration from Junior Division, by transfer from another division of the University, or by transfer from another accredited college or university.

From Junior Division: Students may be admitted to the college from Junior Division if (1) they have completed a minimum of 24 semester hours with a grade-point average of 2.00 or better on all work undertaken, and (2) they have received a grade of "C" or above in English 1002 or English 1005. In addition, students must have a 2.00 average in all business administration courses numbered 2000 and above. Students should pursue the freshman program shown in the appropriate curriculum.

Transfer Students: Students transferring from other divisions of the University, and students from other accredited colleges or universities who have met the general entrance requirements of the University and who have pursued a college course equivalent to that offered in Junior Division, may be admitted to the college on the same basis as students from Junior Division. Transfer credit acceptable for admission purposes shall be valid for degree credit in the college only to the extent to which they represent courses acceptable in the curricula of the college.

The college may decline to accept transfer credit for any course in which a grade lower than "C" has been received. Credit will not be allowed for business courses completed at the lower-division level that are offered at the junior or senior level in this college.

DEGREE REQUIREMENTS OF THE COLLEGE

The degree of Bachelor of Science will be conferred on students who complete one of the approved curricula with (1) a 2.00 or better grade-point average on all work taken; (2) a 2.00 or better grade-point average on all work in the student’s curriculum; and (3) a 2.00 or better grade-point average on all business administration courses taken. The above requirements apply both to the total course work taken and to LSU course work separately.

The last 30 semester hours presented for the degree must be taken in residence in the College of Business Administration on the LSU campus.

The student must complete 131 semester hours in accordance with the following regulations.

Academic Work, 131 Semester Hours

General Education Requirements

1. English Composition and Speech (9 hrs.): English 1002 or 1003 or Honors 1001, 1003; 3 sem. hrs. of English courses numbered 2000 or above; Speech 1061 or 1062. Students with a 3.00 average in any curriculum, whose native language is English and who definitely expect to do graduate work following completion of the B.S. degree, may substitute a foreign language for English with the approval of their faculty adviser and the dean of the college. If a substitution is made, a minimum of two courses in the same language is required. English 1001 may be used as a general elective in category 5 below.

2. Mathematics and Computer Science (9 hrs.): Computer Science 1240, 1241, or 1248; Mathematics 1431, 1435. Mathematics 1550 may be substituted for 1431 and Mathematics 2085 may be substituted for 1435. Students majoring in quantitative business analysis should refer to their specific curriculum. No student may receive more than nine semester hours of credit in mathematics courses numbered below 1550.

3. Natural Science (6 hrs.): Astronomy 1101, 1102; Biology 1001, 1002; Botany 1001, 1002; Chemistry 1001, 1002 or 1202; Geology 1001, 1003; Honors 1007, 1008; Physics 2001, 2002 or 2101, 2102; or Zoology 1001, 1002.

5. Approved General Electives (20 hrs.): Students should choose 20 semester hours of course work from the following lists, except where otherwise specified in the curriculum. A minimum of six semester hours must be taken from List A.

   List A: anthropology, art, economics (Economics 1010 or 1050), English, geography, history, honors, modern languages, music, philosophy, political science, psychology, religious studies, sociology, speech.

   List B: astronomy, biochemistry, biology, botany, chemistry, computer science, engineering, geology, mathematics, microbiology, physics, zoology.

6. Not more than 39 semester hours of required and elective courses numbered below 2000 may be applied toward a degree from this college.

Required Work in the College of Business Administration

1. Tool Areas (24 hrs.): Accounting 2001 and 2101 or 3101 or 2021; Business Communication 2071; Economics 2035; Finance 3201; QBA 2000, 2001, 2100.

2. Functional Areas (9 hrs.): Finance 3715; Marketing 3401; QBA 3115.


4. Major Field (24 hrs.): See curricular requirements.

5. Approved Business Electives (6 hrs.): Courses numbered 3000 or above.

Elective Options

Students should choose 12 hours, of which six must be outside the college. Up to six of the hours may be ROTC, HPRD, band, chorus, or music skills courses.

Proficiency in English

To meet the English proficiency requirements, students must receive a grade of “B” or above in English 1002, 1003, or 1005. Students whose grade in English 1002, 1003, or 1005 is lower than a “B” must choose one of the following alternatives to achieve proficiency: (1) register for the English Proficiency Laboratory on the first day of scheduled classes in the next regular semester of enrollment or (2) complete English 2001 or 2002 with a grade of “C” or better. Students registering for the laboratory must be certified competent by its director, with the concurrence of the Dean of the College of Business Administration, to satisfy the English proficiency requirements. Students who fail to demonstrate proficiency in the use of English by the end of their first semester in the college will be dropped from the college.

ROTC OR HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

Up to six semester hours in ROTC may be elected. HPRD courses are not required; however, up to six semester hours of HPRD activity courses, band, chorus, or music skills courses will be accepted for degree credit in any curriculum. Students who do not elect ROTC must make up the number of hours necessary to meet the curriculum requirements by taking additional courses outside this college. Students may elect additional courses in ROTC, HPRD, or other subjects by adding the number of hours of elective subjects to the curricular requirements. These additional courses may not be counted toward making up deficiencies in the grade-point average.

PASS-FAIL OPTION

The pass-fail grading option is limited by the college to courses which are either Approved General Electives or Elective Options, as described under “Degree Requirements of the College.”

CORRESPONDENCE AND EXTENSION CREDIT

Special restrictions apply to correspondence and extension credits being used for degree credit. Students must have the permission of the dean of the college prior to scheduling correspondence courses or extension work. Enrollment in correspondence courses must be completed before the final date for adding courses for any term, including summer. Students in residence must complete
any correspondence work before the first day of classes of the following term. Extensions are not normally granted. No more than 12 semester hours of correspondence and extension credits may be applied toward degree requirements without the permission of the dean. Students may not enroll in more than 18 hours of combined resident and correspondence course work in a regular semester (9 hours in a summer term).

Graduating seniors may not enroll in correspondence study during their final semester in residence without permission of the dean. All correspondence work must be completed before registering to receive the degree.

**STUDENT RESPONSIBILITY**

Students in this college bear final responsibility for selection of their academic programs and adherence to all published regulations and requirements of the college and the University. Each student must see a counselor for a final degree checkout during the semester prior to the semester in which the degree is to be awarded.

**GRADUATION REQUIREMENTS**

Upon receiving senior status, the student will complete a personal data form and return it to the dean's office. A photograph and the personal data form should be submitted early in the student's final semester prior to graduation.

**REQUIREMENTS FOR A SECOND BACHELOR'S DEGREE**

To receive a second bachelor's degree in this college, students must complete—with a grade-point average of 2.50 or better—all stated requirements for a B.S. degree in the College of Business Administration not previously met. In all cases, however, the program of studies must comprise a minimum of 30 semester hours of work beyond that presented for the first degree and at least two semesters in residence in the college.

**GRADUATE PROGRAMS**

Master's and doctoral degrees are offered through the Graduate School by the various departments within the college. In addition, the following specialized master's degrees are offered. For information about these degrees consult the Graduate School Catalog.

**Master of Business Administration**

The combination of a general or a technical undergraduate education with a graduate-level Master of Business Administration degree is today a widely recognized avenue to opportunity and success in the business world. To this end, the college offers an M.B.A. program for students who aspire to management careers in business and industry. The program is open to those who hold degrees in arts and sciences or special fields such as engineering, geology, chemistry, physics, or agriculture, as well as to students with undergraduate degrees in business administration.

**Master of Public Administration**

The Departments of Accounting, Economics, Management, Political Science, and Quantitative Business Analysis and the Hebert Law Center cooperate in this interdepartmental program.

**PLACEMENT SERVICE**

The College of Business Administration maintains a professionally staffed placement service designated as the Center for Engineering and Business Administration Placement Office. Interviews are conducted throughout the year. The major concern of the placement office is to assist both students and alumni in finding positions in line with their career objectives.
Divisions, Departments, and Curricula

GOVERNMENTAL SERVICES INSTITUTE

HEAD: Breen

Through its comprehensive program of training, services, and research, the institute provides state and local governments with the expertise necessary to solve governmental problems. Services range from seminars and in-service training programs to consultation and research on specific problems. The institute also develops and publishes manuals on various governmental procedures, such as personnel administration, management, organizational development, and job evaluation and pay. These services are provided statewide by institute staff and University professors.

The institute has been designated as the sponsoring agency for two training and educational programs authorized by the 1979 Louisiana Legislature. The Comprehensive Public Training Program is designed to increase the skills and knowledge of all state employees and nonelective officials. The Certified Public Manager Program is open to persons holding a management position in state government or nominated by their supervisors for promotion to such a position. The CPM curriculum includes 216 instructional hours in management and 60 hours in elective courses. On completion of the program, participants are awarded the designation of Certified Public Manager.

PUBLIC ADMINISTRATION INSTITUTE

DIRECTOR: Richardson, Professor

The Public Administration Institute, begun in 1981, provides an interdepartmental administrative framework for the orderly expansion and development of quality public administration education at LSU. The institute also promotes service programs with various local and state governmental agencies.

DIVISION OF RESEARCH AND DEVELOPMENT

DIRECTOR: Johnson, Professor

The Division of Research and Development, an integral part of the college, furnishes information on current business and economic conditions and other matters of business interest in Louisiana; prepares bulletins on business and economic problems affecting Louisiana’s economy; studies Louisiana’s industrial and commercial resources with reference to location of industry and development of trade, both foreign and domestic; provides facilities for studies at a minimum cost to business concerns desiring an analysis of their policies, practices, and problems; develops materials for use in teaching specialized courses in accounting, business communication, economics, finance, management, and marketing; and provides training for students in business research and encouragement and facilities for faculty research.

All organized research of the college is carried on through the Division of Research and Development. Results of studies of the Louisiana economy made by various business administration faculty members are published periodically in Louisiana business bulletins.
### CURRICULUM IN GENERAL BUSINESS ADMINISTRATION

**TOTAL SEM. HRS.: 131**

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1240, 1241, or 1248</td>
<td>3</td>
</tr>
<tr>
<td>English 1002 or 1003</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1431, 1435</td>
<td>6</td>
</tr>
<tr>
<td>Natural science (Astronomy 1101, 1102; Biology 1001, 1002; Botany 1001, 1002; Chemistry 1001, 1002 or 1201, 1202; Geology 1001, 1003; Physics 2001, 2002 or 2101, 2102; or Zoology 1001, 1002)</td>
<td>6</td>
</tr>
<tr>
<td>Speech 1061 or 1062</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>3</td>
</tr>
</tbody>
</table>

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>Approved business administration electives***</td>
<td>12</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2001, 2101**</td>
<td>6</td>
</tr>
<tr>
<td>Business Communication 2071</td>
<td>6</td>
</tr>
<tr>
<td>Economics 2010, 2020</td>
<td>3</td>
</tr>
<tr>
<td>English courses numbered 2000 or above</td>
<td>3</td>
</tr>
<tr>
<td>QBA 2000, 2001, 2100</td>
<td>9</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Approved business administration electives</td>
<td>12</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Electives*</td>
<td>9</td>
</tr>
</tbody>
</table>

*If ROTC is elected, see "Degree Requirements of the College."


**To be selected from offerings of at least four of the following: Departments of Accounting, Economics, Finance, Management, Marketing, and Quantitative Business Analysis.

### CURRICULUM IN GENERAL BUSINESS ADMINISTRATION

**(OPTION IN PRE-LAW)**

**TOTAL SEM. HRS.: 131**

*For the first two years, see the General Business Administration curriculum.*

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
</tr>
<tr>
<td>History 2071</td>
<td>3</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2051</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>5</td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance 3826</td>
<td>3</td>
</tr>
<tr>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Management 4164 or 4167</td>
<td>3</td>
</tr>
<tr>
<td>Business electives (select from Accounting 3201; Finance 3202, 3351, 3440; and other courses with approval of adviser)</td>
<td>15</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives (3000-level or above)</td>
<td>6</td>
</tr>
</tbody>
</table>

#### DEPARTMENT OF ACCOUNTING

**CHAIRMAN:** Brenner, Professor  
**OFFICE:** 3101 CEBA Building  
**TELEPHONE:** (504) 388-6202

**PROFESSORS:** Hartman, McCameron, Orbach  
**ASSOCIATE PROFESSORS:** Curatola, Kyle, Trappnell  
**ASSISTANT PROFESSORS:** Friedberg, Harper, Hoffman, Okopny, Park, Shalchi, Sumners, Vicknair, White  
**INSTRUCTORS:** Anderson, Armentor, Calandro, Curtis, Grant, Irwin, Miller
CURRICULUM IN ACCOUNTING
TOTAL SEM. HRS.: 131

Accounting majors may transfer accounting course credits only from schools accredited by the American Association of Collegiate Schools of Business. No more than 12 credit hours in accounting may be transferred.

For the first two years, see the General Business Administration curriculum.

JUNIOR YEAR SEM. HRS. SENIOR YEAR SEM. HRS.
Accounting 3021, 3022.......................... 6 Accounting 3121 or 3221.......................... 3
Accounting 3121 or 3221...................... 3 Accounting 3222................................. 3
Economics 2035................................. 3 Management 3190............................... 3
Finance 3201, 3203, 3715....................... 9 Accounting electives (select from Accounting
Management 3159.............................. 3 4021, 4121, 4221, 4222, 4321, 4421)........... 6
Marketing 3401................................. 3 Approved general electives..................... 5
QBA 3115......................................... 3 Electives........................................... 9
Approved general electives.................. 3

33

DEPARTMENT OF ECONOMICS

CHAIRMAN: Scott, Professor
ALUMNI PROFESSOR: Daly
PROFESSORS: Beard, Campbell, Culbertson, Farber, Flammang, Johnson, Jones, Moore,
Rice, Richardson
ASSOCIATE PROFESSORS: Dahl, Martin, Newman, Yu
ASSISTANT PROFESSORS: Birch, Deyak, Koray, Lunn, McMillin, Yucel

CURRICULUM IN BUSINESS AND PUBLIC ADMINISTRATION
TOTAL SEM. HRS.: 131

For the first two years, see the General Business Administration curriculum.

JUNIOR YEAR SEM. HRS. SENIOR YEAR SEM. HRS.
Accounting 4421................................. 3 Economics 4120 or 4440.......................... 3
Economics 2035, 4720............................ 6 Management 3190............................... 3
Economics 4120 or 4440....................... 3 Political Science 4010, 4015.................... 6
Finance 3201, 3715............................... 6 Political science electives (select from Political
Management 3159.............................. 3 Science 4020, 4022, 4041, 4043)................ 3
Marketing 3401................................. 3 Approved general electives..................... 5
Political Science 2051.......................... 3 Electives........................................... 9
QBA 3115......................................... 3
Approved general electives.................. 3

33

CURRICULUM IN ECONOMICS
TOTAL SEM. HRS.: 131

For the first two years, see the General Business Administration curriculum.

JUNIOR YEAR SEM. HRS. SENIOR YEAR SEM. HRS.
Economics 2035, 4720............................ 6 Economics 4710................................. 3
Finance 3201, 3715............................... 6 Management 3190............................... 3
Management 3159.............................. 3 Economics electives......................... 9
Marketing 3401................................. 3 Approved general electives..................... 5
QBA 3115......................................... 3 Electives........................................... 9
Economics electives............................ 9
Approved general electives.................. 3

33
### CURRICULUM IN INTERNATIONAL TRADE AND FINANCE

**TOTAL SEM. HRS.: 131**

For the first two years, see the General Business Administration curriculum.

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035, 4030, 4410, 4720</td>
<td>12</td>
<td>Economics 4520, 4550</td>
<td>6</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>Management 3190, 4140</td>
<td>6</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
<td>Marketing 4443</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Political Science 2053</td>
<td>3</td>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved general electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

**CURRICULUM IN TRANSPORTATION**

**TOTAL SEM. HRS.: 131**

For the first two years, see the General Business Administration curriculum.

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035, 4410, 4520, 4720</td>
<td>12</td>
<td>Economics 4210, 4460, 4550</td>
<td>9</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
<td>Marketing 4425</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Political Science 2051</td>
<td>3</td>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved general electives</td>
<td></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

### DEPARTMENT OF FINANCE

**CHAIRMAN:** Crary, Professor

**OFFICE:** 2163 CEBA Building

**TELEPHONE:** (504) 388-6291

**LOUISIANA BANKERS ASSOCIATION CHAIR OF BANKING:** Staats, Professor

**LOUISIANA REAL ESTATE COMMISSION CHAIR OF REAL ESTATE:** Sirmans, Professor

**ALUMNI PROFESSOR:** Davidson

**PROFESSORS:** Aguilar, Felton, Henry, Schroeder, Woodland

**ASSOCIATE PROFESSOR:** Lane

**ASSISTANT PROFESSORS:** Allen, Blomeyer, Caks, Cordell, Dobray, Jameson, Kemp, Shilling, Wansley

**INSTRUCTORS:** Breaux, Callaway, Simon

### CURRICULUM IN COMMERCIAL BANKING

**TOTAL SEM. HRS.: 131**

For the first two years, see the General Business Administration curriculum.

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 3021</td>
<td>3</td>
<td>Finance 3632, 3636</td>
<td>6</td>
</tr>
<tr>
<td>Economics 2035</td>
<td>3</td>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3715, 3826</td>
<td>9</td>
<td>Major field electives to be selected from courses in finance, accounting, and/or economics, except Economics 3310 and 4010</td>
<td>12</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
<td>Approved general electives</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Approved general electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>
## CURRICULUM IN FINANCE
**TOTAL SEM. HRS.: 131**

*For the first two years, see the General Business Administration curriculum.*

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 3021</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2035</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3715, 3826</td>
<td>9</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance 3636, 3717</td>
<td>6</td>
</tr>
<tr>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Major field electives to be selected from courses in finance, accounting and/or economics, except Economics 3310 and 4010</td>
<td>12</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

## CURRICULUM IN REAL ESTATE
**TOTAL SEM. HRS.: 131**

*For the first two years, see the General Business Administration curriculum.*

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3351, 3715</td>
<td>9</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance 3352, 3353</td>
<td>6</td>
</tr>
<tr>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Major field electives to be selected from courses in finance, accounting, economics, and/or marketing, except Economics 3310 and 4010</td>
<td>15</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

## CURRICULUM IN RISK AND INSURANCE
**TOTAL SEM. HRS.: 131**

*For the first two years, see the General Business Administration curriculum.*

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3440, 3715, 3826</td>
<td>12</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance 3351, 3441, 3442, 4440</td>
<td>12</td>
</tr>
<tr>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Major field electives to be selected from courses in finance, accounting, and economics, except Economics 3310 and 4010</td>
<td>6</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

## DEPARTMENT OF MANAGEMENT

**CHAIRMAN:** Gray, Professor  
**OFFICE:** 3158 CEBA Building  
**TELEPHONE:** (504) 388-6101

**PROFESSORS:** Fletcher, Harris, McCann  
**ASSOCIATE PROFESSORS:** Kedia, Wallin, M. White  
**ASSISTANT PROFESSORS:** Arendall, Farh, Flynn, Smeltzer, Smith, Waltman, Werbel, S. White  
**INSTRUCTORS:** Fontenot, Titkemeyer
### CURRICULUM IN MANAGEMENT AND ADMINISTRATION

**TOTAL SEM. HRS.: 131**

For the first two years, see the General Business Administration curriculum.

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology 4081, Psychology 2040, or Sociology 4301</td>
<td>6</td>
<td>Management 3127, 3190, 3193, 4140, 4167</td>
<td>15</td>
</tr>
<tr>
<td>Economics 2035, 4210</td>
<td>6</td>
<td>Approved general electives</td>
<td>5</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>Management 3159, 4164</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>33</td>
<td><strong>TOTAL</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

### CURRICULUM IN OFFICE SYSTEMS

**TOTAL SEM. HRS.: 131**

Students majoring in office systems may elect courses in two areas: office operations, which is directed toward careers such as administrative office managers and information processing managers; and secretarial administration, which is directed toward careers such as administrative assistants and executive secretaries.

For the first two years, see the General Business Administration curriculum.

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration 3200, 3400</td>
<td>6</td>
<td>Business Administration 3600</td>
<td>3</td>
</tr>
<tr>
<td>Business Communication 3070</td>
<td>3</td>
<td>Business Communication 4200</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2035</td>
<td>3</td>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>Accounting 3121, Management 4164, 4167</td>
<td>3</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
<td>(office operations); or Business Administration 3500, Vocational Education 3000, 3100 (secretarial administration)</td>
<td>9</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td>Business administration electives</td>
<td>6</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
<td>Approved general electives from Lists A and B</td>
<td>2</td>
</tr>
<tr>
<td>Approved general electives from Lists A and B</td>
<td>6</td>
<td>Approved electives (3000-level or above)</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>33</td>
<td><strong>TOTAL</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

### CURRICULUM IN PETROLEUM LAND MANAGEMENT

**TOTAL SEM. HRS.: 132**

If ROTC is elected, see "Degree Requirements of the College."

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1240, 1241, or 1248</td>
<td>3</td>
<td>Accounting 2001, 2101</td>
<td>6</td>
</tr>
<tr>
<td>English 1002 or 1003</td>
<td>3</td>
<td>Business Communication 2071</td>
<td>3</td>
</tr>
<tr>
<td>Geology 1001, 1003, 1601, 1602</td>
<td>8</td>
<td>Economics 2010, 2020</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1431, 1435</td>
<td>6</td>
<td>English course above 2000</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1061 or 1062</td>
<td>3</td>
<td>Geography 3065</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Geology 2001</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>29</td>
<td>Petroleum Engineering 2020</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychology 2000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QBA 2000, 2001, 2100</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>39</strong></td>
<td><strong>TOTAL</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 3201</td>
<td>3</td>
<td>Geology 4131 or 4165</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2035</td>
<td>3</td>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Finance 3201, 3202, 3205, 3355, 3715</td>
<td>15</td>
<td>Management 3193 or 4140</td>
<td>3</td>
</tr>
<tr>
<td>Geology 3031 or 4031</td>
<td>3</td>
<td>Management 4164 or 4167</td>
<td>3</td>
</tr>
<tr>
<td>Geology 4042</td>
<td>3</td>
<td>Petroleum Engineering 3025</td>
<td>3</td>
</tr>
<tr>
<td>Management 3000, 3159</td>
<td>4</td>
<td>Business administration electives</td>
<td>6</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td>General electives</td>
<td>6</td>
</tr>
<tr>
<td>QBA 3115</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>37</td>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>
DEPARTMENT OF MARKETING

CHAIRMAN: Hair, Professor
PROFESSORS: Burns, Bush, Reddoch
ASSISTANT PROFESSORS: Bloch, Carlson, Dawson, Lichtenstein, Richins, Ridgway, Sherrell
INSTRUCTORS: Bailey, Hansen, Myers

OFFICE: 3127 CEBA Building
TELEPHONE: (504) 388-8684

CURRICULUM IN MARKETING
TOTAL SEM. HRS.: 131

*Approved Electives

**Mathematics

English

FRESHMAN JUNIOR YEAR SEM. HRS. SEM. HRS.

Economics 2035 ................................................. 3 Management 3190 ................................................. 3
Finance 3201, 3715 .......................................... 6 Marketing 4451 ................................................. 3
Management 3159 ............................................. 3 Approved general electives ................................. 5
Marketing 3401, 3411, 3413 .......................... 9 Marketing electives ........................................... 6
QBA 3115 ......................................................... 3 Electives (approved by department) ................. 3
Approved general electives .............................. 3 Electives .......................................................... 9
Marketing electives ......................................... 3
Electives (approved by department) ................. 3

33

DEPARTMENT OF QUANTITATIVE BUSINESS ANALYSIS

CHAIRMAN: Peters, Professor

PROFESSORS: Burford, Cangelosi, Hargrave, Stanfel, Thompson
ASSOCIATE PROFESSORS: Williams, Willis
ASSISTANT PROFESSORS: Banerjee, Flynn, Gulledge, Looney, Ringuest, Rinks, Tang
INSTRUCTORS: Badeaux, Fry, Lanier, Neghabat, Zarruk

OFFICE: 3190 CEBA Building
TELEPHONE: (504) 388-2126

The curriculum in quantitative business analysis has four options. The business administration option is designed for those students whose interest is primarily in business applications of quantitative techniques. The management science option is oriented toward providing a more extensive background in the fundamentals of science and mathematics. This option provides an excellent foundation for those who anticipate graduate work in business or quantitative methods. The computer science option is for those students who wish to emphasize utilization of the computer in administrative decision making. Within the operations management option, a student may elect the information systems concentration or the production systems concentration. Students desiring an emphasis in the design and analysis of information systems for decision making should follow the information systems concentration. The production systems concentration provides a foundation for the analysis and operation of production systems.

Approved electives (List Q) are as follows: Computer Science 2252, 2262, or any course numbered 3000 or above; Engineering Graphics 4243; Geography 4043; Industrial Engineering 4382, 4453, 4511, 4540; Mathematics 2065, 4016, 4023, 4031, 4032, 4153, 4171, 4172; QBA 3070 or any course numbered 4000 or above. No more than 6 sem. hrs. of List Q electives outside the Department of Quantitative Business Analysis may be applied toward the degree.

CURRICULUM IN QUANTITATIVE BUSINESS ANALYSIS
(BUSINESS ADMINISTRATION OPTION)
TOTAL SEM. HRS.: 131

FRESHMAN YEAR SEM. HRS.

Computer Science 1240, 1241, or 1250 .......... 3 Accounting 2001 .................................................. 3
English 1002 or 1003 .................................... 3 Accounting 2021 or 2101 .................................. 3
Mathematics 1431, 1435* ............................ 6 Business Communication 2071 ....................... 3
Natural science (Astronomy 1101, 1102; Biology 1001, 1002; Botany 1001, 1002; Chemistry 1001, 1002 or 1201, 1202; Geology 1001, 1002; Physics 2001, 2002 or 2101, 2102; or Zoology 1001, 1002) .......... 6
Speech 1061 or 1062 ................................... 3 Computer Science 1251 or 2270 ..................... 3
Approved general electives* ......................... 5 Economics 2010, 2020 .................................. 6
Electives** .................................................. 3 English course numbered 2000 or above .......... 3

29

SOPHOMORE YEAR SEM. HRS.

Accounting 2001 .................................................. 3 QBA 2000, 2001, 2100 .................................. 9
Accounting 2021 or 2101 .................................. 3 Electives** .................................................. 6
Business Communication 2071 ....................... 3
Computer Science 1251 or 2270 ..................... 3
Economics 2010, 2020 .................................. 6
English course numbered 2000 or above .......... 3

36
### CURRICULUM IN QUANTITATIVE BUSINESS ANALYSIS (COMPUTER SCIENCE OPTION)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035</td>
<td>3</td>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 3159</td>
<td>3</td>
<td>Marketing 3401</td>
<td>3</td>
<td>Approved electives (List Q)</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3000, 3115, 4020</td>
<td>9</td>
<td>Approved electives (List Q)</td>
<td>3</td>
<td>Approved business administration electives</td>
<td>15</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>6</td>
<td>Approved general electives</td>
<td>9</td>
<td>Approved general electives</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 131**

- It is highly recommended that students majoring in quantitative business analysis substitute Mathematics 1550, 1552, 2085 for Mathematics 1431, 1435. The additional seven sem. hrs. required may be counted as approved general electives, provided no more than 39 sem. hrs. of courses numbered below 2000 are submitted for degree credit.

- If ROTC is elected, see “Degree Requirements of the College.”

---

### CURRICULUM IN QUANTITATIVE BUSINESS ANALYSIS (MANAGEMENT SCIENCE OPTION)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1002, 1003, 1004; or Zoology 1001, 1002</td>
<td>8</td>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>Management 3190</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science 2262</td>
<td>3</td>
<td>Management 3159</td>
<td>3</td>
<td>Approved electives (List Q)</td>
<td>3</td>
</tr>
<tr>
<td>English 1002 or 1003</td>
<td>3</td>
<td>Marketing 3401</td>
<td>3</td>
<td>Approved business administration electives</td>
<td>15</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
<td>QBA 3000, 3115, 4020</td>
<td>9</td>
<td>Approved general electives</td>
<td>9</td>
</tr>
<tr>
<td>Speech 1061 or 1062</td>
<td>3</td>
<td>Approved electives (List Q)</td>
<td>3</td>
<td>Approved general electives</td>
<td>9</td>
</tr>
<tr>
<td>Electives*</td>
<td>3</td>
<td>Approved general electives</td>
<td>9</td>
<td>Approved general electives</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 131**

- It is highly recommended that students majoring in quantitative business analysis substitute Mathematics 1550, 1552, 2085 for Mathematics 1431, 1435. The additional seven sem. hrs. required may be counted as approved general electives, provided no more than 39 sem. hrs. of courses numbered below 2000 are submitted for degree credit.

- If ROTC is elected, see “Degree Requirements of the College.”

---
### CURRICULUM IN QUANTITATIVE BUSINESS ANALYSIS (OPERATIONS MANAGEMENT OPTION)

**TOTAL SEM. HRS.: 131**

Students electing the operations management option will concentrate in either information or production systems.

- **Information Systems Concentration:** Accounting 3121 and 4321 and six additional semester hours selected from Computer Science 2252, 2270, 3102, 4321; Engineering Graphics 4243; Industrial Engineering 4425; QBA 3070.

- **Production Systems Concentration:** Industrial Engineering 4516 and nine additional semester hours selected from Industrial Engineering 4406, 4425, 4433, 4490, 4511, 4540; Marketing 4425; QBA 3070, 4010, 4021.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1250</td>
<td>3</td>
<td>Accounting 2001, 2021</td>
<td>6</td>
</tr>
<tr>
<td>English 1002 or 1003</td>
<td>3</td>
<td>Business Communication 2071</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1431, 1435</td>
<td>6</td>
<td>Computer Science 1251</td>
<td>3</td>
</tr>
<tr>
<td>Natural science (Astronomy 1101, 1102; Biology 1001, 1002; Chemistry 1001, 1002 or 1201, 1202; Geology 1001, 1003; Physics 2001, 2002 or 2101, 2102; or Zoology 1001, 1002)</td>
<td>6</td>
<td>Economics 2010, 2020</td>
<td>6</td>
</tr>
<tr>
<td>Speech 1061 or 1062</td>
<td>3</td>
<td>English course numbered 2000 or above</td>
<td>3</td>
</tr>
<tr>
<td>Approved general electives</td>
<td>5</td>
<td>QBA 2000, 2001, 2100</td>
<td>9</td>
</tr>
<tr>
<td>Electives*</td>
<td>3</td>
<td>Electives*</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 2035</td>
<td>3</td>
<td>Management 3190, 4125</td>
<td>6</td>
</tr>
<tr>
<td>Finance 3201, 3715</td>
<td>6</td>
<td>QBA 4168</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Engineering 4104</td>
<td>3</td>
<td>Approved concentration electives</td>
<td>9</td>
</tr>
<tr>
<td>Management 3159</td>
<td>3</td>
<td>Approved general electives</td>
<td>12</td>
</tr>
<tr>
<td>Marketing 3401</td>
<td>3</td>
<td>Electives*</td>
<td>3</td>
</tr>
<tr>
<td>QBA 3000, 3115, 4020</td>
<td>9</td>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
<tr>
<td>Approved concentration electives</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved general electives</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*If ROTC is elected, see "Degree Requirements of the College.”
The Division of Continuing Education, established in June 1924 as the General Extension Division, is an academic unit of LSU. In addition to its regular staff, members of the University faculty and adjunct teachers are appointed as instructors. Each regular and adjunct faculty member who engages in continuing education services is approved for the particular service by the department head and academic dean concerned and by the dean of the Division of Continuing Education. Continuing education teachers assigned to graduate courses meet graduate faculty requirements and are approved on special appointments by the Vice-Chancellor for Research and the Vice-Chancellor for Academic Affairs.

It is the purpose of the division, in cooperation with the various schools and colleges of the University, to extend the educational resources of LSU to the people of the state. Formal university-level instruction is provided by means of off-campus courses and independent study. Credit courses taught off campus are offered in accordance with guidelines of the Board of Regents where there is a demand. In addition to the formal class instruction, the Division of Continuing Education—individually or in cooperation with other academic units of the University—conducts a variety of other higher adult-education services on and off campus. The program of continuing education at LSU is an extension of the University itself, established to provide educational experiences of professional or personal value to adults and other nontraditional students.

THE CONTINUING EDUCATION CENTER

Pleasant Hall, the LSU Continuing Education Center, is one of the outstanding continuing education centers in the U.S. The center has a large auditorium with a seating capacity of 250, two medium-sized auditoriums with seating capacities of 80 each, and ten smaller conference rooms. The center is operated primarily for those who wish to spend brief periods of time in serious and intensive study of problems related to their professional, civic, and cultural interests.

Pleasant Hall contains 102 bedrooms, all of which have private baths. While food service is not provided, other routine hotel accommodations are available.
COMPUTER REHABILITATION TRAINING PROGRAM

The Computer Rehabilitation Training Program, designed to train physically handicapped students as programmers/analysts, is funded by the Department of Health and Human Resources, Vocational Rehabilitation Agency. The program offers a certificate of completion after 11 months of comprehensive study in five programming languages, two editing languages, and several other computer-related subjects. Students accepted into the program must be certified by their local vocational rehabilitation office. A Business Advisory Council supervises instruction, curriculum, and placement.

ENGLISH LANGUAGE AND ORIENTATION PROGRAM

Noncredit 14-week English and orientation courses for international students are offered three times a year beginning in September, January, and April. These courses are designed to enable international students to obtain a mastery of English and to facilitate their adjustment to the educational, social, and cultural life of the U.S. Admission to the English Language and Orientation Program neither signifies nor guarantees admission to LSU.

DEPARTMENT OF EXTRAMURAL TEACHING

The LSU extramural teaching program is designed to provide educational opportunities for persons not in residence. Many of the courses listed in this catalog are available through the program to off-campus students. Every effort is made by the Division of Continuing Education and LSU cooperating colleges and schools, including all campuses in the LSU System, to provide needed services when requested. Louisiana citizens are urged to explore with the Department of Extramural Teaching the many possibilities for off-campus instruction. Representatives of the division will meet with and advise groups seeking off-campus continuing education services.

Office of Academic Programs Abroad

The Office of Academic Programs Abroad, a unit of the Department of Extramural Teaching, coordinates the University's international exchange and group study abroad programs in cooperation with the International Student Office, the University Council on Academic Programs Abroad, and the various academic departments involved. This office administers a number of summer programs for undergraduate and graduate students in various fields and countries. Occasionally, programs are devised for special groups such as teachers and librarians and others with specific professional or academic needs. The office also has responsibility for development of the University's semester and year-long programs of study abroad. Students interested in participating in overseas study should contact the Office of Academic Programs Abroad, 43A Pleasant Hall, (504) 388-6801.

FIREMEN TRAINING PROGRAM

Provision is made for in-service training for firemen by dividing the state into five sections, with an instructor assigned to each section and six instructors assigned to the 51-acre Training Center located south of the LSU campus. Activities include courses taught in the various communities of the state on an extension-class basis. A series of specialized institutes taught at the Firemen Training Center meets the in-service needs and the national standards for both paid and volunteer firefighters. In addition, the six instructors responsible for industrial training offer specialized, OSHA-approved training courses for individuals and fire brigades, both at the Training Center and at the individual industrial organizations. A correspondence study course for firefighters, with testing procedures conducted by the Firemen Training Program, is available. The Firemen Training Program staff also participates in the training of students enrolled in the fire science associate degree program at LSU-Eunice.

GIFTED AND TALENTED PROGRAM

Numerous noncredit minicourses are offered year-round for gifted and high-achieving students in grades 4-11. These courses enable bright youngsters to pursue accelerated studies in such traditional disciplines as mathematics and writing and to explore such subjects as astronomy, genetic
engineering, finance, mythology, veterinary medicine, and sculpture which are not usually taught in local school systems. A resident program is conducted during the summer for students from outside the Baton Rouge area. Instruction is provided by University faculty and staff and highly qualified secondary school teachers.

IADC BLOWOUT CONTROL SCHOOL

This school offers certified comprehensive and refresher courses in oil and gas well blowout prevention practices. The school has been approved by the U.S. Minerals Management Service (MMS) to award certificates for the training required for drillers, toolpushers, and operator's representatives under the O.C.S. Training Standard T-1. The school also offers noncertified courses in blowout prevention for those not requiring MMS certification. Each course includes theory of well control and the care and use of well equipment. The certified course offers training on both surface and subsurface BOP stacks. In addition, practical experience is provided at two 6000-foot practice training wells and on two IMCO/BOSS simulators and three Simtran simulators. Both land and offshore drilling operations are included.

OFFICE OF INDEPENDENT STUDY

Correspondence study courses in both college and high school subjects are taught by members of the regular University faculty. Enrollment for a correspondence course may be made at any time.

College-level courses are substantially the same in scope and content as those taught on campus. They are of particular interest to high school graduates who are unable to enroll immediately for resident study, to college students temporarily out of school, to adults who seek personal benefit from supervised study, and to teachers who are working toward certification.

High school instruction by correspondence offers a person who has not finished high school a program of study that can be followed at home. Students in high schools offering limited curricula can enrich their study programs by enrolling for correspondence courses which the local school is unable to offer.

Further information concerning correspondence study courses, requirements, and opportunities may be obtained from the Independent Study by Correspondence Bulletin which is available on request from the Office of Independent Study.

LAW ENFORCEMENT TRAINING PROGRAM

Provision is made through this program for in-service training of persons employed in law enforcement. The Basic Training Academy holds four 6-week courses and the specialized Juvenile Officers School holds one 5-week school; the Law Enforcement Institute holds two 12-week courses on the LSU campus annually. The Mobile Police Traffic Training School and the Field In-Service Training School are held in various communities of the state on an extension-class basis. Specialized schools are held both on and off campus as the need arises.

This training program is designed to provide officers the best, current information available from experts in all fields of law enforcement and related areas. Agents of the Federal Bureau of Investigation, judges, district attorneys, sheriffs, state and municipal officers, and other public officials assist with the training.

LOUISIANA COUNCIL ON ECONOMIC EDUCATION

The Louisiana Council on Economic Education is a nonprofit organization dedicated to improving the understanding of economics among the citizens of Louisiana. The council conducts workshops on teaching strategies and materials, creates audio-visual materials, and sponsors an awards program for Louisiana teachers who develop and implement innovative lessons.

SENIOR COLLEGE AT ALEXANDRIA

The University offers the last two years of bachelor's programs in business administration, education, and general studies on the campus of LSU at Alexandria (LSUA). Thus, students may complete all requirements for their bachelor's degree and graduate from LSU while maintaining physical attendance on the LSUA campus. Further details of the program may be obtained by
SHORT COURSES AND CONFERENCES

Programs of short courses, conferences, institutes, seminars, and workshops are designed to meet needs for specialized short-term instruction. Particular emphasis is placed on continuing education programs for the professions. In some cases, an annual institute or seminar is offered in order for systematic and continuous study to be made of the problems of a particular group. Some of the programs are designed by members of the faculty to meet educational needs of various groups. However, most programs are offered in response to demand. The responsibility for initiating the programs may rest with the faculty or with leaders of groups. Instruction used in short courses and seminars varies with the type of program, since it is designed to meet particular needs.

Short courses and conferences have the academic sponsorship of the various colleges, schools, and departments of the University through the Division of Continuing Education. In some instances, educational projects are sponsored directly by the division.

University faculty members serve as program monitors, advisers, and speakers. The Division of Continuing Education coordinates all activities, assists in program planning, registers participants, collects fees, makes arrangements for all physical facilities, and offers many other services according to the needs of the conference activity.
The College of Design was created to bring together the disciplines of design and visual arts which focus on the development of the built environment. Faculty and students are concerned with eminent scholarship and excellence in art, design, and research. The college offers professional education in accredited programs in the following areas: architecture, art, interior design, and landscape architecture. Art programs include graphic design, sculpture, printmaking, painting and drawing, and crafts. Study in each of these disciplines leads to a professional degree at the bachelor's level. The Master of Fine Arts and Master of Landscape Architecture degrees are offered through the Graduate School. The schools within the college, the curricula which they offer, and the degrees to which these curricula lead are shown in the following chart.

Beyond obtaining competence in a design profession or one of the visual arts, the student is expected to acquire a liberal education and to maintain high levels of performance in the humanities and social, physical, and natural sciences.
Close association of the schools within the college offers special opportunities for interdisciplinary understanding. A computer-aided design and information system, which supports all programs in the college, provides additional opportunity for interdisciplinary study. To further enrich the total educational experience, individual schools sponsor exhibitions, field trips, and lectures in their areas of interest.

ADMISSION REQUIREMENTS

Students may enter the college from Junior Division, by transfer from another division of LSU, or by transfer from another approved college or university. However, it must be noted that the College of Design has a policy of selective admission presently applied to the programs in architecture, graphic design, interior design, and landscape architecture. In the future, selective admission may be extended to other areas. Therefore, students seeking admission to the college should contact the dean's office to ascertain the admission requirements of that particular program. Other requirements for entering the college are as follows:

**From Junior Division:** Students must have (1) completed a minimum of 24 semester hours, with a 2.00 gpa on all work taken, and (2) earned grades of "C" or better in all courses in the college taken for degree credit.

Students wishing to enter a program in the college for which there is a selective admission requirement must meet one of the following additional requirements:

1. **before midterm of the spring semester (for fall admission),** submit to the appropriate school or program office a letter of application accompanied by ACT profile and a transcript or grade reports of college work. Applicants will be called for counseling sessions after midterm; the successful candidates will be notified by the end of the freshman year, or

2. request conditional admission to the college pending completion of the selective admission requirements of the curriculum.

**By Transfer:** Transfer credits acceptable for admission to the University will be valid for degree credit in the college only if they represent courses acceptable in the college's curricula. Students who expect to receive transfer credit for studio courses in any of the schools may be required to submit examples of their work. Students seeking to transfer into the college should submit their application on or before June 1 in order to be considered for admission in the fall semester. In order to enter the college in good standing, a transfer student must have earned a minimum of 24 semester hours of credit with at least a 2.00 grade-point average or higher where required to meet school entrance standards, meet all the specific scholastic requirements of the school concerned, and be accepted by that school.

**By Conditional Admission:** Upon recommendation of a school or the college Committee on Admissions and Standards, the dean may grant conditional admission in special cases. Candidates for such admission should submit their requests to the office of the dean no later than two months prior to the anticipated date of registration.

DEGREE REQUIREMENTS OF THE COLLEGE

To qualify for a particular degree in the college, a student must meet the following requirements:

1. Complete a program of studies established by the school concerned and be approved for the degree by the faculty and the dean of the college.

2. In addition to having satisfied the admission requirements of the college and the school concerned, satisfactorily complete a curriculum with at least a 2.00 average in all courses required in the school and an overall 2.00 average.

3. Earn a specified number of credits while registered in the college, depending on the requirements stated for the individual by the school. In all cases, students transferring into the college must take at least the last 30 semester hours of academic credit while registered in the college. Twenty-four of these 30 semester hours must be in courses in the student's major area.

4. Attain proficiency in English (see below).

5. In the final year, complete the check-out of all course work required for the degree. Details of check-out procedures are available in the dean's office.
SPECIAL PROVISIONS OF THE COLLEGE

In addition to the scholastic regulations of the University, the college has established the provision that its students must maintain a 2.00 average in school courses required in the student’s curriculum.

While students are urged to participate in sports, in considering qualification for degrees awarded by the college, some schools limit the number of hours for activity courses in the School of Health, Physical Education, Recreation, and Dance. Further, certain schools do not allow pass/fail grades for degree credit. Students should contact the dean’s office for information concerning these regulations.

In addition to the general attendance regulations of the University, the college’s policy provides that any student with more than three unexcused absences in any course or in the English Writing Laboratory is automatically placed on attendance probation.

PROFICIENCY IN ENGLISH

Students should refer to individual school sections to determine any special requirements which must be satisfied to be considered proficient in English.

REQUIREMENTS FOR A SECOND BACHELOR’S DEGREE

In order to qualify for a second degree in this college, a student must have completed requirements for the first degree with a 2.50 or higher GPA.

Second degrees may be awarded at the bachelor’s level in architecture, art, interior design, and landscape architecture. The program of studies for the second degree must include a minimum of 30 semester hours of work beyond requirements for the first degree, including any stated degree requirements not previously met. This program must be completed while the student is registered in the College of Design.

The program of studies for the second degree must have approval of the director or associate director of the school and the dean of the college. To obtain approval, the student should submit the program of studies and a petition for permission to begin work on a second degree to the dean’s office at least one month before the projected registration date.

GRADUATE PROGRAMS

Graduate programs offered by the schools of the college through the Graduate School lead to the degrees of Master of Fine Arts and Master of Landscape Architecture. For information concerning advanced degrees in the college, consult the Graduate School Catalog.

Schools and Curricula

Electives in the freshman and sophomore years may include a total of six semester hours of basic ROTC.

SCHOOL OF ARCHITECTURE

DIRECTOR: Oppermann, Professor
ALUMNI PROFESSOR: Heck
PROFESSORS: Aguilar, Shih, Smothers
ASSOCIATE PROFESSORS: Glenny, Griffin, Killingsworth, McQueen, St. Martin, White
ASSISTANT PROFESSORS: Burke, Dominguez, Glover, Leaver, Moore, Pitts, Seif, Vajna

The architect today is involved with a wide range of architectural problems extending from individual buildings, their sites, interiors, and components, to large building complexes and city and regional planning. An architect may work as an individual professional practitioner, a collaborator, a consultant, or a member of an architectural firm. Preparation for these professional roles requires both formal education and practical experience followed by a professional examination and registration.
The School of Architecture, a member of the Association of Collegiate Schools of Architecture, is accredited by the National Architectural Accrediting Board. The accredited, five-year, undergraduate program leading to the Bachelor of Architecture degree includes the areas of management, humanities, technology, graphic communications, and the synthesis of these areas through architectural design.

First-year architecture courses are open to any interested LSU student as space is available; however, admission into the professional program (years 2-5) is selective. Students must submit a formal application with a current transcript showing grade-point average and a copy of ACT scores to the School of Architecture office. The application period is January through June 1 for fall entry. Admission will be approved only for the fall semester of each academic year. Students who have successfully completed all first-year courses (or their equivalents) required in the architecture curriculum, earned an overall GPA of 2.25 or above, earned a composite ACT score of at least 21, and scored 75 or higher on the school's Graphics Proficiency Test will be approved for admission into the professional program as resources allow. Selection is made on a competitive basis after a review of all criteria. Students lacking one or more admission requirements may be admitted provisionally on a space-available basis. Students not admitted to the professional program by the School of Architecture will not be allowed to register for architecture courses other than those listed as first-year courses.

Transfer students must first apply for admission to LSU. The application, if approved by the Office of Admissions, will be forwarded to the College of Design. When it is determined that the college entrance requirements are met, the application will be routed to the School of Architecture for evaluation and review. Transfer credit for courses in the second year and above of the professional program in architecture will be considered only if these courses have been taken as part of an architecture program accredited by the National Architectural Accrediting Board (NAAB). The prospective transfer student will be required to submit a portfolio for faculty evaluation. The Graphics Proficiency Test requirement may be waived. Transfer applications will be considered January 1 through June 1 for fall entry only.

### CURRICULUM IN ARCHITECTURE

**TOTAL SEM. HRS.: 170**

In the architecture curriculum, normal course progress is imperative. A student failing to complete any required course more than one semester later than the time designated in the curriculum is prohibited from further registration in architecture courses until the deficiency is corrected. Courses listed below are normally taken in the sequence in which they are listed.

**Approved electives:** Of the 43 elective hours available, at least six sem. hrs. must be in each of the following areas: (1) humanities, social sciences, or social problems; (2) management/business; (3) art, history of architecture or art, or design; (4) technology; and at least 21 sem. hrs. must be in the courses offered in the School of Architecture.

Since one of the selection criteria for admission into the professional program is a score of 75 or higher on the school’s Graphics Proficiency Test, it is recommended that students desiring entry into the professional program schedule Architecture 1181 and/or 1182 as electives during the first year of study. The test, given as the final exam in these courses, is freehand and covers orthographic, paraline, and linear perspective drawings.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 1051, 1153, 1161</td>
<td>9</td>
<td>Architecture 2141, 2142, 2153, 2154, 2171, 2172, 2174</td>
<td>27</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics 1441</td>
<td>3</td>
<td>Physics 2002</td>
<td>3</td>
</tr>
<tr>
<td>Physics 2001</td>
<td>3</td>
<td>RÖTC or approved electives</td>
<td>6</td>
</tr>
<tr>
<td>RÖTC or approved electives</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 3143, 3144, 3151, 3152, 3160, 3175, 3176</td>
<td>27</td>
<td>Architecture 3131, 3153, 3154, 3171, 3173, 3177</td>
<td>25</td>
</tr>
<tr>
<td>Approved electives</td>
<td>9</td>
<td>Approved electives</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIFTH YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 3214, 3216, 3218, 3314, 3316, 3318 (variable requirements depending on a GPA evaluation and a proposal for student-initiated credit hours approved by the school director)</td>
<td>0-24</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6-30</td>
</tr>
<tr>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

### BACHELOR OF ARCHITECTURE—MASTER OF BUSINESS ADMINISTRATION PROGRAM

The School of Architecture offers a Bachelor of Architecture—Master of Business Administration program for students who qualify through a combination of grade-point average and score on the Graduate Manage-
ment Admission Test (GMAT). The program permits a student to obtain the Bachelor of Architecture degree at the end of five years and the Master of Business Administration degree at the end of two additional semesters plus one summer term. A student who selects this program must take the GMAT during the fourth year of study in the School of Architecture. The Graduate Council has approved enrollment of fifth-year architecture students in 5000-level M.B.A. courses, provided they meet the following formula requirement: the product of the student’s GPA for 140 semester hours times 200, plus the GMAT score, must be greater than, or equal to, 1100.

Following successful completion of the prescribed course of study for the first four years of the Bachelor of Architecture curriculum and the fifth-year courses listed below, the degree of Bachelor of Architecture will be awarded.

FIFTH YEAR (1ST SEMESTER) SEM. HRS. FIFTH YEAR (2ND SEMESTER) SEM. HRS.
Architecture 3216 ............................................. 6 Accounting 5001 ............................................. 3
Economics 5700 ............................................. 3 Architecture 3316 ............................................. 6
Finance 5200 ............................................. 2 Economics 4720 ............................................. 3
Management 5220 ............................................. 3 QBA 5014 ............................................. 3

14 15

Following successful completion of the sixth-year courses listed below, the degree of Master of Business Administration will be awarded.

SIXTH YEAR (SUMMER) SEM. HRS. SIXTH YEAR (1ST SEMESTER) SEM. HRS.
Accounting 7101 ............................................. 3 Finance 7717 ............................................. 3
Marketing 7711 ............................................. 3 Management 7268 ............................................. 3
Business administration elective .......................... 3 QBA 7101 ............................................. 3
Business administration elective .......................... 3

9 12

SIXTH YEAR (2ND SEMESTER) SEM. HRS.
Management 7280 ............................................. 3
Business administration electives .......................... 9

12

INTERIOR DESIGN PROGRAM

ASSOCIATE DIRECTOR: Singer, Professor
PROFESSORS: Nielson, Schar
ASSOCIATE PROFESSORS: Spencer, Wachob
ASSISTANT PROFESSORS: Postero, Serry
INSTRUCTOR: Mathews

OFFICE: 402 New Design Building
TELEPHONE: (504) 388-8422

The interior designer is involved with a wide range of design problems extending from interiors in the personal environment (such as residences) to complete public environments in institutions, commercial establishments, transportation facilities, and entertainment and recreation facilities. The interior designer’s competence must include design analysis, programming, and space planning. This must be coupled with an understanding of the relationship of interior design to all aspects of the environment through the professional disciplines of architecture and landscape architecture. Following an apprenticeship period, the interior design graduate can practice in firms specializing in commercial or contract interiors and/or residential design space planning, or architectural firms offering interior design services.

The curriculum in interior design is accredited by the Foundation for Interior Design Education and Research.

Admission into the professional program (years 2-4) is selective. Students desiring to enter the professional program must make formal application for admission during the spring semester or summer term prior to the start of their sophomore year in the major. The application process includes: (a) a formal letter of intent; (b) a transcript of all courses completed and a current grade-point average; and (c) a portfolio of work from all first-year design studio courses. Transfer students from other universities or programs will be considered for admission on the same basis.

Students must meet the following criteria prior to applying for the selective admissions process: (1) completion of or enrollment in Architecture 1153 or Art 1011, Architecture 1181 or Art 1847, Architecture 1182 and Interior Design 1051; (2) an overall grade-point average of at least 2.25; and (3) an ACT composite score of at least 21. Students who do not meet these criteria may apply for conditional admission on a space-available basis. Students who have not been admitted into the professional program in interior design will not be allowed to enroll in architecture or interior design courses above the freshman level. Specific questions concerning curriculum and admission should be directed to the Interior Design Program office, 402 New Design Building.

Credit earned in two-year technical or terminal degree programs and programs which, when completed, result in an “Associate in Applied Sciences” diploma may be accepted for degree credit to the extent that the courses are equivalent to degree work in the Interior Design Program, as determined by the program director.
**Course Sequence:** Required major courses carrying the architecture and interior design prefixes are offered only the semester indicated in the catalog course description. Prerequisites are rigidly enforced.

**English Proficiency:** Students must obtain a grade of “B” or better in English 1002 or a grade of “C” or better in English 1003 or 1005. Students failing to do so will be required to complete satisfactorily the English Proficiency Examination or obtain a grade of “C” or better in English 2002. This requirement also applies to students transferring into the college from another college or university. Students will not be permitted to proceed with the final year of studies until they have achieved proficiency in English.

**Grade Policy:** Students majoring in interior design must maintain a minimum grade-point average of 2.00 in the major and an overall grade-point average of 2.00. Students seeking to transfer to this major program will be subject to the same grade requirements.

### CURRICULUM IN INTERIOR DESIGN (WITH OPTION)

**TOTAL SEM. HRS.: 132-147**

#### College Electives: select 18 sem. hrs. from courses in architecture, art, interior design, and landscape architecture. Nine sem. hrs. must be in studio courses. ART 1001 may not be used for degree credit.

#### Liberal Arts Electives: select six sem. hrs. from courses in anthropology, foreign language, geography, history, philosophy, political science, psychology, and sociology.

#### Business Electives: select six sem. hrs. at 2000 level or above from courses in accounting, economics, finance, management, or marketing.

#### OPTION—INTERIOR SYSTEMS DESIGN (22 sem. hrs.): Architecture 2171, 2172; Mathematics 1550, 1552; and Physics 2001, 2002.

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 1153 or Art 1011</td>
<td>3</td>
</tr>
<tr>
<td>Architecture 1181 or Art 1847</td>
<td>3</td>
</tr>
<tr>
<td>Architecture 1182</td>
<td>3</td>
</tr>
<tr>
<td>Art 1440, 1441, or 2470</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Interior Design 1051</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022 or physical and/or biological science courses</td>
<td>6</td>
</tr>
<tr>
<td>Electives**</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** 33

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English course above 2000</td>
<td>3</td>
</tr>
<tr>
<td>Home Economics 3040 or approved college elective</td>
<td>3</td>
</tr>
<tr>
<td>Interior Design 3770, 3771</td>
<td>6</td>
</tr>
<tr>
<td>Interior Design 3752, 3753</td>
<td>8</td>
</tr>
<tr>
<td>Approved speech elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved business elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved college elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved liberal arts elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** 32

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Design 3741, 3742, 3754, 3755, 3760</td>
<td>19</td>
</tr>
<tr>
<td>Approved business elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved college elective</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL:** 31

*Students following the interior systems design option will be required to earn 147 semester hours for the degree. Other students will be required to earn 132 semester hours.

**Students desiring to take ROTC will be allowed to substitute ROTC for three sem. hrs. of general electives and for three sem. hrs. of liberal arts electives.

### SCHOOL OF ART

**ACTING DIRECTOR:** Garrett, Professor

**OFFICE:** 123 Design Center

**TELEPHONE:** (504) 388-5411

**PROFESSORS:** Bova, Burke, Cox, Daugherty, Dufour, Lawrence, Millward, Pramuk, Rutkowski, Warrens
Through the College of Design, the School of Art offers the professional B.F.A. degree with majors in crafts (ceramics or stained glass option), graphic design, painting and drawing, printmaking, and sculpture. In addition, students majoring in these areas may minor in ceramics, jewelry/metalsmithing, painting and drawing, photography, printmaking, stained glass, and sculpture.

Certain courses offered by the school require fees to defray the cost of consumable materials used by students. This information is included in the individual course descriptions.

**Bachelor of Fine Arts Degree**

The Bachelor of Fine Arts degree provides the liberal education and specialized instruction needed for a professional career in the visual arts. Students transferring into the B.F.A. program may be required to submit portfolios or reproductions of their work. The art faculty will review the work of all advanced students prior to admission to the final project course required for the B.F.A. degree. The School of Art will retain a limited number of examples of each student's best work for exhibition purposes and the department's permanent collection.

Credit earned in two-year technical or terminal degree programs and programs which, when completed, result in an "Associate in Applied Sciences" diploma may be accepted for degree credit to the extent that the courses are equivalent to degree work in the School of Art, as determined by the school director.

**LIBERAL ARTS REQUIREMENTS**

From 24 to 36 hours are required in the liberal arts, not including three to six hours in English 1001, 1002 (1003). A minimum of six hours is required in English above 1002—to be included as part of the liberal arts total. Students are required to take a minimum of three sem. hrs. of credit from each of the groups listed below. For specific requirements, see individual programs.

**Group I:** Classical languages (Latin, Greek); English; German; Journalism; Music; Philosophy; Romance languages (French, Italian, Portuguese, Spanish); Russian; Speech.

**Group II:** Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Microbiology, Physics, Zoology.

**Group III:** Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology.

**CURRICULUM IN CRAFTS (CERAMICS OPTION)**

**TOTAL SEM. HRS.: 128**

Credit for Art 3661, 4661, 4671, and 4681 will be allocated depending on student's qualifications and interests. Courses will be selected with advice of an academic counselor.

**Ceramics Minor:** Art 1661, 2661 (repeated for nine hours of credit), and six sem. hrs. of ceramics courses at the 3000 level or above.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1001, 1661, 1762, 1847, 1848 (core courses)</td>
<td>15</td>
</tr>
<tr>
<td>Art history course below 3000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1361, 1849 (core course)</td>
<td>6</td>
</tr>
<tr>
<td>Art 2661</td>
<td>6</td>
</tr>
<tr>
<td>Art history course below 3000</td>
<td>3</td>
</tr>
<tr>
<td>English courses above 2000</td>
<td>6</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 2655</td>
<td>3</td>
</tr>
<tr>
<td>Art 3661 and/or 4661</td>
<td>9</td>
</tr>
<tr>
<td>Art history courses above 3000</td>
<td>6</td>
</tr>
<tr>
<td>Art studio electives</td>
<td>6</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 4661, 4671, and/or 4681</td>
<td>12</td>
</tr>
<tr>
<td>Art 4691</td>
<td>3</td>
</tr>
<tr>
<td>Art studio electives</td>
<td>12</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
CURRICULUM IN CRAFTS (STAINED GLASS OPTION)
TOTAL SEM. HRS.: 129

Approved Electives: A minimum of nine sem. hrs. of mathematical, physical, and/or biological sciences, excluding courses offered by the school, is required. A minimum of nine sem. hrs. of foreign language, humanities, and/or social sciences, excluding courses offered by the school and the freshman English courses, is required.

Stained Glass Minor: Art 1645, 2645, 2646, 3645, 3646, and 4645.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1001, 1847, 1848, 1849 (core courses) ..........</td>
<td>12</td>
<td>Art 1661, 1762, and either 1361 or 1371 (core courses) ..........</td>
<td>9</td>
</tr>
<tr>
<td>Art 1645 ..........</td>
<td>3</td>
<td>Art 2645, 2646 ..........</td>
<td>6</td>
</tr>
<tr>
<td>Art history course below 3000 ..........</td>
<td>6</td>
<td>English courses above 2000 ..........</td>
<td>6</td>
</tr>
<tr>
<td>English 1001, 1002 ..........</td>
<td>6</td>
<td>Art studio elective ..........</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives ..........</td>
<td>6</td>
<td>Approved electives ..........</td>
<td>6</td>
</tr>
<tr>
<td>General University electives or ROTC ..........</td>
<td>3</td>
<td>General University electives or ROTC ..........</td>
<td>3</td>
</tr>
<tr>
<td>................................................</td>
<td>36</td>
<td>................................................</td>
<td>33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 2655, 3645, 3646, 4412 ..........</td>
<td>12</td>
<td>Art 2661 ..........</td>
<td>3</td>
</tr>
<tr>
<td>Art history course above 3000 ..........</td>
<td>5</td>
<td>Art 4645 ..........</td>
<td>6</td>
</tr>
<tr>
<td>Art studio electives ..........</td>
<td>3</td>
<td>Art 4648 ..........</td>
<td>6</td>
</tr>
<tr>
<td>Approved electives ..........</td>
<td>3</td>
<td>Art studio electives ..........</td>
<td>9</td>
</tr>
<tr>
<td>General University electives ..........</td>
<td>3</td>
<td>Approved electives ..........</td>
<td>6</td>
</tr>
<tr>
<td>................................................</td>
<td>30</td>
<td>General University electives or ROTC ..........</td>
<td>3</td>
</tr>
<tr>
<td>................................................</td>
<td>30</td>
<td>................................................</td>
<td>33</td>
</tr>
</tbody>
</table>

CURRICULUM IN GRAPHIC DESIGN
TOTAL SEM. HRS.: 128

Admission into the professional program (years 2-4) is selective. Students desiring admission should apply during the spring semester prior to the start of their sophomore year. The following entrance requirements must be met before applying: (1) completion of all required freshman graphic design courses, or faculty-approved equivalents, (2) attainment of a minimum 2.25 overall gpa, and (3) preparation of a portfolio containing examples from freshman studio courses.

Once these requirements have been satisfied, an application packet must be submitted. It should contain the following: (1) application form, (2) unofficial transcript of grades, (3) letter of application and intent, and (4) portfolio of examples from freshman studio courses.

Students who are unable to meet the specified criteria for selective admission may apply for conditional acceptance, provided space is available. Transfer students from other LSU programs and from other universities will be considered according to the same standards. Individuals not admitted to the professional program will not have access to graphic design courses other than those listed in the first two semesters of the curriculum.

Approved Electives: A minimum of nine sem. hrs. of mathematical, physical, and/or biological sciences, excluding courses offered by the school, is required. A minimum of nine sem. hrs. of foreign language, humanities, and/or social sciences, excluding courses offered by the school and the freshman English courses, is required.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1011, 1440, 1441, 1551, 1847, 1848 ..........</td>
<td>18</td>
<td>Art 2544, 2552, 2555, 2564 ..........</td>
<td>12</td>
</tr>
<tr>
<td>English 1001, 1002 ..........</td>
<td>6</td>
<td>English course above 2000 ..........</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives ..........</td>
<td>3</td>
<td>Art studio electives ..........</td>
<td>6</td>
</tr>
<tr>
<td>General University electives or ROTC ..........</td>
<td>3</td>
<td>Approved electives ..........</td>
<td>6</td>
</tr>
<tr>
<td>................................................</td>
<td>32</td>
<td>General University electives or ROTC ..........</td>
<td>3</td>
</tr>
<tr>
<td>................................................</td>
<td>33</td>
<td>................................................</td>
<td>33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 2095, 3544, 3564 ..........</td>
<td>9</td>
<td>Art 4524, 4534, 4555, 4564 ..........</td>
<td>12</td>
</tr>
<tr>
<td>Art 2881 or 2883 ..........</td>
<td>3</td>
<td>Art 1361 or 1371 ..........</td>
<td>3</td>
</tr>
<tr>
<td>Art history elective above 3000 ..........</td>
<td>6</td>
<td>Art studio electives ..........</td>
<td>3</td>
</tr>
<tr>
<td>Art studio electives ..........</td>
<td>6</td>
<td>Approved electives ..........</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives ..........</td>
<td>6</td>
<td>General University electives ..........</td>
<td>3</td>
</tr>
<tr>
<td>................................................</td>
<td>30</td>
<td>................................................</td>
<td>33</td>
</tr>
</tbody>
</table>
**CURRICULUM IN PAINTING AND DRAWING**

**TOTAL SEM. HRS.: 131**

*Approved Electives:* A minimum of nine sem. hrs. of mathematical, physical, and/or biological sciences, excluding courses offered by the school, is required. A minimum of nine sem. hrs. of foreign language, humanities, and/or social sciences, excluding courses offered by the school and the freshman English courses, is required.

**Painting and Drawing Minor:** Art 2879, 2881, 4880, 4881, 4884, and 4889.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1001, 1762, 1847, 1848, 1849</td>
<td>9</td>
<td>Art 1361 or 1371, 1661, 1762, 1849 (choose two not selected in the freshman year)</td>
</tr>
<tr>
<td>(core courses)</td>
<td>15</td>
<td>Art history course below 3000</td>
</tr>
<tr>
<td>Art history course below 3000</td>
<td>3</td>
<td>Art history course below 3000</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>English courses above 2000</td>
</tr>
<tr>
<td>Art studio elective</td>
<td>3</td>
<td>Art studio electives</td>
</tr>
<tr>
<td>Approved electives</td>
<td>6</td>
<td>Liberal arts requirements</td>
</tr>
<tr>
<td>General University electives or ROTC</td>
<td>3</td>
<td>Electives or ROTC</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>36</td>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 2883, 4880, 4881, 4887</td>
<td>9</td>
<td>Art 4889</td>
</tr>
<tr>
<td>Art history courses above 3000</td>
<td>6</td>
<td>Art history course above 3000</td>
</tr>
<tr>
<td>Art studio electives</td>
<td>9</td>
<td>Art studio electives</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3</td>
<td>Liberal arts requirements</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>30</td>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 4800, 4884, 4889</td>
<td>11</td>
</tr>
<tr>
<td>Art studio electives</td>
<td>15</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3</td>
</tr>
<tr>
<td>General University electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>32</td>
</tr>
</tbody>
</table>

---

**CURRICULUM IN PRINTMAKING**

**TOTAL SEM. HRS.: 129**

*Major Requirements:* In addition to the core courses, students must complete Art 2362, 2372, and 24 more sem. hrs. of printmaking courses, at least 12 hrs. of which must be numbered above 4000.

**Printmaking Minor:** Art 1361, 1371, six semester hours of printmaking courses at the 2000 level, and six semester hours of printmaking courses at the 4000 level.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1001, 1847, 1848</td>
<td>9</td>
<td>Art 1361 or 1371, 1661, 1762, 1849</td>
</tr>
<tr>
<td>Art 1361 or 1371, 1661, 1762, 1849 (choose two)</td>
<td>6</td>
<td>Art history course below 3000</td>
</tr>
<tr>
<td>Art history course below 3000</td>
<td>3</td>
<td>English courses above 2000</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Art studio electives</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>6</td>
<td>Liberal arts requirements</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
<td>Major requirements</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>33</td>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 2879, 4887</td>
<td>9</td>
<td>Art 4889</td>
</tr>
<tr>
<td>Art history course above 3000</td>
<td>3</td>
<td>Art history course above 3000</td>
</tr>
<tr>
<td>Art studio electives</td>
<td>3</td>
<td>Art studio electives</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>3</td>
<td>Liberal arts requirements</td>
</tr>
<tr>
<td>Major requirements</td>
<td>12</td>
<td>Major requirements</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>
**CURRICULUM IN SCULPTURE**

**TOTAL SEM. HRS.: 129**

**Sculpture Minor:** Art 1762, 2761 (repeated for nine hours of credit), and 4761 (repeated for six hours of credit).

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1001, 1762, 1847, 1848, 1849 (core courses)</td>
<td>15</td>
<td>Art 2761</td>
<td>9</td>
</tr>
<tr>
<td>Art history course below 3000</td>
<td>3</td>
<td>Art 1661 and either 1361 or 1371 (core courses)</td>
<td>6</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Art 2655</td>
<td>3</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>6</td>
<td>Art history course below 3000</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
<td>English courses above 2000</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liberal arts requirements</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 4761</td>
<td>9</td>
</tr>
<tr>
<td>Art 2661</td>
<td>3</td>
</tr>
<tr>
<td>Art history course above 3000</td>
<td>3</td>
</tr>
<tr>
<td>Arts studio electives</td>
<td>9</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 4761</td>
<td>6</td>
</tr>
<tr>
<td>Art 4762</td>
<td>3</td>
</tr>
<tr>
<td>Art 4671</td>
<td>6</td>
</tr>
<tr>
<td>Art studio electives</td>
<td>6</td>
</tr>
<tr>
<td>Liberal arts requirements</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

**Other Minor Programs**

In addition to the programs specified above, minors in jewelry/metalsmithing and photography are also available. Requirements are as follows:

**Jewelry/Metalsmithing Minor:** Art 2655, 2656, 4651 (repeated for six hours of credit), and 4655 (repeated for six hours of credit).

**Photography Minor:** Art 2095, 2096, 3094, and 4041 (repeated for six hours of credit).

**Art Curricula Outside the School of Art**

Other undergraduate degree programs in art are offered by academic divisions outside the College of Design. The College of Arts and Sciences offers a Bachelor of Arts degree with a major in fine arts and concentration in either studio art or art history. General requirements for this degree may be found in the section of this catalog entitled "Degree Requirements of the College" for the College of Arts and Sciences. School of Art requirements for such students are also given in the "College of Arts and Sciences" section. Students interested in pursuing this degree should confer with an adviser in the School of Art. The art history area offers a wide range of courses in all major historical eras. Students are prepared to continue their education in graduate school or to enter a variety of related fields without additional training beyond the college level.

The College of Education offers the Bachelor of Science degree with a major in education and a teaching major in art. Students planning to major in art education should confer with the office of the dean of the College of Education concerning admission to the teacher education program and certification requirements for Louisiana. The art education curriculum, leading to grades K-12 certification, includes experiences in studio art, art history, art teaching methods, and professional and general studies recommended by the Louisiana State Department of Education and national accrediting agencies.

**SCHOOL OF LANDSCAPE ARCHITECTURE**

**DIRECTOR:** Odenwald, *Professor*

**PROFESSORS:** Conrad, Earle, Emerson, Haynes, Popadic, Womack

**ASSOCIATE PROFESSORS:** Abbey, Fryling, Tomioka, Turner

**ASSISTANT PROFESSORS:** Artunc, Brown, Butterfield, Chaffin, Cox, Maechling

**OFFICE:** 302 New Design Building
**TELEPHONE:** (504) 388-1434

LSU is the only school in Louisiana with a nationally accredited curriculum in landscape architecture. The five-year curriculum affords a well-rounded course of study based on standards set by the American Society of Landscape Architects. It provides training in the many aspects of the profession, ranging from physical master-planning of cities and regions to design of intimate outdoor spaces associated with individual structures. Work on landscape architectural projects frequently involves active collaboration with the related professions.
of architecture, art, city planning, engineering, law, sociology, psychology, geology, geography, economics, and other areas of specialization. Upon satisfactory completion of the undergraduate program, the degree of Bachelor of Landscape Architecture is awarded.

**Admission Requirements:** A student will be admitted to the curriculum in landscape architecture subject to the following conditions:

From Junior Division: In addition to University requirements, the following school requirements must be met:

a. Satisfactory completion of Landscape Architecture 1151, 1181, 1182; Mathematics 1015; and English 1002. Students who have attained a satisfactory academic standing, but have not completed all of these courses, may be admitted on a provisional basis.

b. All students are requested to have an interview to determine their suitability for studies in landscape architecture. The results of this interview will be important in determining admission.

**Transfer Students:** Students transferring into landscape architecture from other disciplines may be admitted only after having been interviewed as indicated above.

Credit earned in two-year technical or terminal degree programs and programs which, when completed, result in an “Associate in Applied Sciences” diploma may be accepted for degree credit to the extent that the courses are equivalent to degree work in the School of Landscape Architecture, as determined by the school director and admissions committee.

**English Proficiency:** Students who do not receive a grade of “B” or better in English 1002 or a grade of “C” or better in English 1003 or 1005 are required to take the English proficiency exam. Students who fail this exam must attend the English Writing Laboratory until certified proficient in English.

**CURRICULUM IN LANDSCAPE ARCHITECTURE (WITH OPTIONS)**

To assure a comprehensive focus, students must choose 51 hours of electives from a broad spectrum of subjects. Of these 51 hours, students must earn a minimum of six hours from each of the five elective areas: biological and physical science, individual realization, cultural appreciation, built/managed environment, and information/communication. Three additional hours of speech or technical writing and two hours of LA 4291 or 4292 are also required. In overall course work (required or elective), students must include nine hours of humanities, social science, and/or foreign language courses, and nine hours of mathematics, physical, and/or biological science courses outside the School of Landscape Architecture. Students may elect more courses within any elective area or any other courses within the University, but may not receive credit toward graduation for more than six hours of ROTC and six hours of HPRD activity courses. All elective courses must be approved by the school director or designated adviser.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture 2401</td>
<td>3</td>
<td>Agricultural Engineering 2307 or 2309</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Civil Engineering 2500, 2510</td>
<td>3</td>
</tr>
<tr>
<td>Landscape Architecture 1151, 1153, 1181, 1182</td>
<td>12</td>
<td>Landscape Architecture 2112, 2121, 2151, 2152, 2171, 3122</td>
<td>18</td>
</tr>
<tr>
<td>Landscape Architecture 2141, 2142, or 2143</td>
<td>3</td>
<td>Landscape Architecture 2141, 2142, or 2143</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1015</td>
<td>3</td>
<td>Approved electives</td>
<td>8</td>
</tr>
<tr>
<td>Approved electives</td>
<td>5</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>JUNIOR YEAR</td>
<td>SEM. HRS.</td>
<td>SENIOR YEAR</td>
<td>SEM. HRS.</td>
</tr>
<tr>
<td>Landscape Architecture 2183, 3153, 3154, 3183, 4173, 4174</td>
<td>20</td>
<td>Landscape Architecture 4156, 4157, 4158, 4175, 4184</td>
<td>20</td>
</tr>
<tr>
<td>Approved electives</td>
<td>12</td>
<td>Approved electives</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>FIFTH YEAR</td>
<td>SEM. HRS.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Architecture 4195, 4196, 4252, 4276</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Architecture 4250 or 4251</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved electives</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>
The College of Education has as its purpose the preparation of students for teaching in elementary and secondary schools and for other school positions. The departments, curricula, and degrees within the college are shown in the following chart. In addition to these, the Teacher Placement Service is part of the College of Education. The college administers all curricula (except those offered by the School of Vocational Education and Technology) designed specifically for preparation of teachers in various teaching fields. All freshmen who enter the University with the intent of becoming teachers (except those following the curricula offered by the School of Vocational Education and Technology) should plan their Junior Division work to conform to the requirements of the College of Education.

This college is accredited at the bachelor's and master's levels by the National Council for Accreditation of Teacher Education.

Programs in vocational agricultural education, vocational home economics education, and industrial arts education are offered through the School of Vocational Education and Technology in the College of Agriculture. Students may also prepare for nursery school-kindergarten teaching through the School of Home Economics in the College of Agriculture.

OBJECTIVES OF TEACHER EDUCATION

The objectives of teacher education are implied in the admission requirements, organization, and curricula of the College of Education. Students with a desire to teach are recruited and in the sophomore year are formally admitted to curricula leading to graduation and certification. Curricula insuring a broad general education, specialized scholarship in teaching fields, and professional background and competence are offered. The undergraduate program includes supervised student teaching in the senior year. Through course work, student organizations, directed laboratory training, and counseling, students who have chosen teaching as a career learn to bring together high purpose, academic scholarship, and teaching skill and understanding.
Some of the major objectives of teacher education are to facilitate understanding of children and adults; to develop understanding and appreciation of our culture and its historical evolution; to formulate a philosophy of education for our society; to develop sound scholarship and a continuing interest in the teaching fields; to understand the American public school and its contribution to the individual and society; to develop the art and science of teaching, combining scholarship and professional skill; and to understand the ethics, status, organizations, history, and ideals of the teaching profession in a multicultural society.

ADMISSION REQUIREMENTS

Teachers should rank high in mental alertness, power of expression, and professional enthusiasm. Students enrolling in the College of Education should have a positive desire to teach, show an aptitude for oral and written expression, and be free of mental, physical, or other personal handicaps that would be detrimental to successful work with children. Within the framework of University regulations, the college admits students to teacher-education programs according to the following selective admission policies.

1. **Students from Junior Division and other LSU senior colleges** who have completed a minimum of 24 semester hours with at least 2.20 grade-point averages on all work taken will be considered for admission to the college.
2. **Transfer students from accredited colleges and universities** with cumulative grade-point averages of at least 2.20 will be considered for admission to the college. Such students must meet curricular requirements of this college as determined by the dean.

3. Students on University scholastic and attendance probation will not be admitted to the college.

4. Prospective teachers in all fields, except the various areas of vocational education, should register in the college no later than the beginning of the sophomore year. Students who enter after that time will usually suffer loss of time in making the necessary adjustments to degree requirements.

5. All students must have completed a minimum of three clock hours of counseling related to their suitability and aptitude for teaching and to the availability of jobs both geographically and by subject major.

**RETENTION IN THE COLLEGE**

In view of its responsibility to the teaching profession, the college reserves the right to review at any time a student's suitability to continue in a teacher-education program. Faculty members are encouraged to monitor the growth of prospective teachers enrolled in the college. Questions concerning the suitability of students for particular programs should be referred to the college Admission and Retention Committee.

To remain in the College of Education, students must meet the following retention criteria.

1. All students are expected to earn a grade of "C" or better in one of the following courses, or have the equivalent in transfer credit: English 1002, 1003, 1005 (foreign students), 2001, or 2002. Students who fail to do so must repeat the course, pass the English proficiency examination, or be declared proficient in English through the English Writing Laboratory. Any student not declared proficient within three semesters after entering the college will be dropped from the college.

2. Students enrolled in the college who are on scholastic probation will be dropped from the college for failure to earn a 2.00 grade-point average during any semester.

3. Students enrolled in the college who fail to earn a 2.00 grade-point average for two consecutive semesters will be dropped from the college.

4. Students within 14 semester hours (or less) of graduation who are not qualified for student teaching will be dropped from the college. (See "Requirements for Student Teaching," below.)

**STUDENT TEACHING**

**Application for Student Teaching**

Application for student teaching must be made to the Coordinator of Clinical Experiences, with approval of the student’s adviser, no later than one week following the last day for adding courses in the semester prior to student teaching.

**Requirements for Student Teaching**

No student may schedule more than 15 semester hours of work during the semester in which student teaching is done. Any student who is within 14 hours of graduation and is not qualified for supervised student teaching will be dropped from the college (see requirements below). The student teaching experience must include a minimum of 270 clock hours, 180 of which must be actual teaching. A substantial portion of the 180 clock hours in actual teaching must be on an all-day basis. Student teachers must also plan for 3:30-4:30 p.m. meetings on Mondays and Wednesdays.

To be permitted to do student teaching, the student must fully meet the following requirements.

**In the Elementary Grades**

1. Attainment of senior standing in the college with an overall average of 2.50 on all work attempted and on all work at LSU, with at least a 2.00 average in professional education
courses and in all work other than professional education courses, and with no grade lower than "C" in professional education courses and in specialized courses required for certification in elementary education, regardless of institution(s) attended.

2. Completion of EDCI 2025, 3112, 3113, 3125, 3126, 3127; and Psychology 2060, 2076.

3. Proficiency in written expression.

In Secondary and K-12 Subjects

1. Attainment of senior standing in the college with an overall average of 2.50 on all work attempted and on all work at LSU, with at least a 2.00 average in professional education courses and in each teaching field, and with no grade lower than "C" in professional education courses and in courses required in each teaching field, regardless of the institution(s) attended.

2. Completion of all professional education courses, including psychology and specialized courses prescribed in the freshman, sophomore, and junior years in the teaching area.

3. Proficiency in written expression.

DEGREE REQUIREMENTS OF THE COLLEGE

Teacher Education Programs

Degrees in teacher education programs in this college are conferred when the following conditions have been met:

1. Completion of a minimum of 128 semester hours with an average of 2.50 on all work taken, with no grade less than "C" in professional education courses and in specialized academic courses.

2. Completion of the final 30 semester hours of work done in residence on the LSU campus as a registrant in this college.

3. Satisfactory completion of an approved program of teacher education which has been determined and approved by the faculty of this college, the LSU Teacher Education Council, and the Louisiana Board of Elementary and Secondary Education.

4. Proficiency in written expression.

Other Degree Programs

Degrees in non-teaching areas in this college are conferred when the following conditions have been met:

1. Completion of a minimum of 128 semester hours with an average of 2.50 on all work taken, with no grade less than "C" in specialized academic courses.

2. Completion of the final 30 semester hours of work done in residence on the LSU campus as a registrant in this college.

3. Satisfactory completion of the appropriate approved curriculum.

4. Proficiency in written expression.

PROFICIENCY IN ENGLISH

To be certified as proficient in English, students in this college must earn a grade of "C" or better in English 1002, 1003, 1005 (international students), 2001, or 2002 or have the equivalent in transfer credit. Students whose grades are lower than "C" must earn satisfactory scores (at least 301) on the English proficiency test. Those whose test scores are unsatisfactory must attend the English Writing Laboratory until proficiency is certified. Any student not declared proficient within three semesters after entering the college will be dropped from the college.

SPEECH AND HEARING PROFICIENCY

All students in the college are expected to take a speech and hearing proficiency test for the own guidance and for improving their professional capability. As a result of this test, some stu-
dent's may be referred to the Speech and Hearing Clinic for further evaluation or for therapy. It is the student's responsibility to meet the speech and hearing demands of the profession.

SPECIAL REQUIREMENT

No final grade lower than “C” will be accepted in any professional or specialized academic education course which is required for certification, regardless of a student's overall grade-point average.

NATIONAL TEACHER EXAMINATION

A satisfactory score on the National Teacher Examination (NTE) is required for teacher certification in Louisiana. Specific information and registration forms are available from the Teacher Placement Office, College of Education.

CORRESPONDENCE AND EXTENSION CREDITS

Up to one-fourth of the number of hours required for the baccalaureate degree may be taken through the Division of Continuing Education by correspondence study, extension courses, or both. Students may not schedule correspondence or extension work during the last 30 hours of their programs. Time limits for correspondence study will be imposed in order that these courses cause as little conflict as possible with regular classes.

DUAL ENROLLMENT PROGRAM

A student enrolled in another college of the University who seeks certification as a secondary teacher should apply for admission to an approved teacher education program in the College of Education. All admission, retention, and other academic requirements of the division in which the student is enrolled must be satisfied.

REQUIREMENTS FOR A SECOND BACHELOR'S DEGREE

In order to qualify for a second bachelor's degree in the College of Education, a student must meet all previously listed entrance requirements and must complete a program of studies which comprises at least 30 semester hours of work, including any stated degree requirements not previously met.

GRADUATE PROGRAMS

The college offers courses leading to the degrees of Master of Arts, Master of Education, Master of Science, Doctor of Education, and Doctor of Philosophy. The Certificate of Education Specialist is also offered. For information on these programs, consult the Graduate School Catalog.

LSU TEACHER EDUCATION COUNCIL

The Teacher Education Council is responsible for setting and achieving teacher education goals, establishing policies, fixing responsibilities for program decision-making, identifying and utilizing resources, and facilitating continuing development and improvement of basic and advanced teacher education programs.

TEACHER PLACEMENT SERVICE

The College of Education maintains a teacher placement service to assist its graduates in locating teaching positions and to assist employers in locating suitable school personnel. Its facilities are available without charge to qualified teachers and other school personnel who are graduates of this college. (Teachers in the various fields of vocational education administered by the School of Vocational Education are placed through the College of Agriculture.)
SEQUENCE IN SUBJECT-MATTER FIELDS FOR TEACHING MAJORS AND MINORS IN GRADES K-12

Art Education

Teaching Major, 51 sem. hrs.: Art 1011, 1361 or 1371, 1440, 1441, 1661, 1761, 1847, 1848, 1849, 2271, 2272, 2879, 4273, 4466, 4889; art history elective; 3 sem. hrs. of art electives.

Teaching Minor: Art may not be scheduled as a teaching minor.

Music Education

Music may be scheduled as a teaching major only. Students majoring in music are not required to have a teaching minor. Curricula are offered in instrumental and vocal music education.

Physical Education

Teaching Major, 53 sem. hrs.: HPRD 1404, 1600, 2500, 2501, 2502, 2540, 2601, 3510, 3511, 3513, 3514, 3515, 3516; 2 sem. hrs. of HPRD 2508; Zoology 2160.

Teaching Minor, 28-29 sem. hrs.: HPRD 1404; 2 sem. hrs. selected from HPRD 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413; HPRD 2500, 2501, 2540, 2601 or 3602 or 4503, 3510, 3511, 3513, 3514 or 3515, and 3516. Minors in physical education are certified for grades K-12.

School Health Education

Teaching Major, 46 sem. hrs.: HPRD 1600, 1601, 2500, 2501, 2502, 2504, 2601, 2602, 2604, 3602, 3603, 3604, 3608, 4600, 4601, 4602, 4605; Zoology 2160; and Home Economics 1010.

Teaching Minor, 30 sem. hrs.: HPRD 1600, 2601, 3603, 4601, 4602; 6 sem. hrs. selected from HPRD 2602, 3604, or 4619; 3 sem. hrs. selected from HPRD 2500, Zoology 2160; and 6 sem. hrs. selected from HPRD 1601, 2600, 3602, 4604, and 4605.

Speech, Language, and Hearing Specialist

Teaching Major, 57 sem. hrs.: Psychology 2004, 2076, 2078, 3083; Speech 1050, 2081, 4079, 4080, 4150, 4152, 4153, 4181, 4183, 4184, 4185, 4187, 4188, 4683.

Teaching Minor: Speech, language, and hearing specialist may not be scheduled as a teaching minor.

SEQUENCE IN SUBJECT-MATTER FIELDS FOR TEACHING MAJORS AND MINORS FOR SECONDARY TEACHERS

Students in most of the following curricula have the option of choosing a teaching major with a teaching minor (Plan A) or a teaching major with no teaching minor (Plan B). Careful consideration of factors such as employment opportunities and personal interests should precede the selection of Plan A or B. Students are invited to consult faculty advisers or personnel in the dean’s office for counseling.

Secondary Education—Biology

Teaching Major, Plan A, 39 sem. hrs.: Botany 1001, 1002, 2055; Chemistry 1201, 1202, 2060; Microbiology 2051; Zoology 1001, 1002; and 6 sem. hrs. of biological science electives (Zoology 2153 or 2160; and either Botany 4083, Entomology 2001, Zoology 4149, Zoology 4153, or Biochemistry 4087).


Teaching Minor, 29 sem. hrs.: Botany 1001, 1002; Chemistry 1201, 1202, 2060; Microbiology 2051; Zoology 1001, 1002.
Secondary Education—Chemistry

**Teaching Major, Plan A, 31 sem. hrs.** Biochemistry 4001, 4078; Chemistry 1201 or 1421, 1202 or 1422, 1212 or 1431, 1432, 2261, 2262, 2364; Physics 2001, 2002.

**Teaching Major, Plan B, 53 sem. hrs.** Biochemistry 4001, 4083, 4084; Chemistry 1421, 1422, 1431, 1432, 2261, 2262, 2364, 3 sem. hrs. of chemistry electives; Geology 1001, 1003, 1601, 1602; Physics 1201, 1202, 1208, 1209; Zoology 1001, 1002.

**Teaching Minor, 20 sem. hrs.** Biochemistry 2083, 2084; Chemistry 1201 or 1421, 1202 or 1422, 1212 or 1431, 1432, 2060, 2364.

Secondary Education—Earth Science

**Teaching Major:** Earth science may not be scheduled as a teaching major.

**Teaching Minor, 21 sem. hrs.** Geology 1001 or 1002, 1003 or 1004, 1005, 1006, 1601, 1602, 2071, 2081, 2661.

Secondary Education—English

Students may not use more than 6 sem. hrs. of English 1001 or 1002 as part of the major. If only English 1002 is taken, three additional hours of English electives are required. Students interested in continuing their studies in English at the graduate level are advised to elect at least one year of a foreign language, preferably French or German.

**Teaching Major, Plan A, 42 sem. hrs.** English 1001, 1002, 2001, 2010, 2020, 2022, 2025, 2027, 4012, and 2148 or 4148 or 4149; 3 sem. hrs. of American literature; 3 sem. hrs. of electives selected from English courses numbered 4011 or higher, and from the English honors courses 3820, 3821, 3822, 3823 (courses in language, literary criticism, and Afro-American literature are recommended); Speech 2040 and three additional hours of electives in speech (Speech 1050 is recommended).

**Teaching Major, Plan B, 54 sem. hrs.** English 1001, 1002, 2001, 2010, 2020, 2022, 2025, 2027, 4012; English 2148 or 4148 or 4149; 3 sem. hrs. of American literature; 15 sem. hrs. of electives selected from English courses numbered 4011 or higher, and from the English honors courses 3820, 3821, 3822, and 3823 (courses in language, literary criticism, and Afro-American literature are recommended); Speech 2040 and three additional hours of electives in speech (Speech 1050 is recommended).

**Teaching Minor, 30 sem. hrs.** English 1001, 1002, 2001, 2010, 2020, 2022, 2027, 4012; English 2148 or 4148 or 4149; 3 sem. hrs. of American literature.

Secondary Education—French

**Teaching Major, Plan A, 29 sem. hrs.** French 2051, 2053, 2055, 2060, 2071, 2072, 4005, 4015; 3 sem. hrs. of electives in French.

**Teaching Major, Plan B, 40 sem. hrs.** French 2051, 2053, 2055, 2060, 2071, 2072, 4005, 4015, 4016; 12 sem. hrs. of electives in French.

**Teaching Minor, 26 sem. hrs.** French 2051, 2053, 2055, 2060, 2071 or 2072, 4005, 4015; 3 sem. hrs. of electives in French.

Secondary Education—General Science

**Teaching Major:** General science may not be scheduled as a teaching major.

**Teaching Minor, 32 sem. hrs.** Biology 1001, 1002, 1003, 1004; Chemistry 1201 or 1421, 1202 or 1422, 1212 or 1431; Geology 1001 or 1002, 1003 or 1004, 1601, 1602; Physics 2001, 2002, 2008, 2009.

Secondary Education—German

**Teaching Major:** German may not be scheduled as a teaching major.

**Teaching Minor, 26 sem. hrs.** German 2051, 2053, 2055, 2061, 2062, 2075, 4002; 3 sem. hrs. of electives in German above the freshman level.
Secondary Education—Industrial Arts Education

Teaching Major: Industrial arts education may not be scheduled as a teaching major in this college.

Teaching Minor, 24-30 sem. hrs.: 6 sem. hrs. of professional industrial education courses; 18-24 sem. hrs. of study in two technical areas.

Secondary Education—Journalism

Teaching Major: Journalism may not be scheduled as a teaching major.

Teaching Minor, 15 sem. hrs.: Journalism 2090, 2151, 3151, 3152, 4082.

Secondary Education—Latin

Teaching Major, Plan A, 23 sem. hrs.: Latin 2051, 2053, 2065, 4002; 9 sem. hrs. of electives in Latin above the freshman level.

Teaching Major, Plan B, 34 sem. hrs.: Latin 1001, 2051, 2053, 2065; 12 sem. hrs. of electives in Latin to be selected from 2073, 2074, 4002, 4004, 4006; plus 6 sem. hrs. specified by Department of Classical, Germanic, and Slavic Languages.

Teaching Minor, 20 sem. hrs.: Latin 2051, 2053, 2065, 4002; 6 sem. hrs. of electives in Latin above the freshman level.

Secondary Education—Library Science

Completion of the teaching minor in library science leads to certification as a school librarian. This minor is sponsored jointly by LSU and Southern University, with each campus offering a portion of the required course work.

Teaching Major: Library science may not be scheduled as a teaching major.

Teaching Minor, 24 sem. hrs.: EDAF 3500, 3550, 3551, 3552, 3553, 3554, 3555; EDCI 3660.

Secondary Education—Mathematics

Based on test scores, students placed in Mathematics 1023 (5 sem. hrs.) will be required to take 33 sem. hrs. for a mathematics major with a minor, 25 sem. hrs. for a mathematics minor, and 45 sem. hrs. for a mathematics major with no minor. Mathematics majors must have at least 25 sem. hrs. of math courses numbered 1550 or above.

Teaching Major, Plan A, 33-34 sem. hrs.: Mathematics 1021, 1022, 1550, 1552, 2019, 2057, 2085, 4005, 4181; Computer Science 1241.

Teaching Major, Plan B, 45-46 sem. hrs.: Mathematics 1021, 1022, 1550, 1552, 2019, 2057, 2085, 4005, 4022, 4055, 4181; a 3 sem. hr. math elective at the 4000 level; Computer Science 1250, 1251.

Teaching Minor, 25-26 sem. hrs.: Mathematics 1021, 1022, 1550, 2019, 2085, 4005, 4181; Computer Science 1241.

Secondary Education—Physics

Teaching Major, Plan A, 28 sem. hrs.: Physics 1201 or 2101, 1202 or 2102, 1208 or 2108, 1209 or 2109, 2111, 2209, 2231, 2401, 2221; 4 sem. hr. biological science elective.

Teaching Major, Plan B, 51 sem. hrs.: Physics 1201, 1202, 1208, 1209, 2111, 2209, 2211, 2231, 2401, 4132; Chemistry 1201, 1202, 1212; Geology 1001, 1003, 1601, 1602; Zoology 1001, 1002 or Botany 1001, 1002.

Teaching Minor, 21 sem. hrs.: Physics 1201 or 2101, 1202 or 2102, 1208 or 2108, 1209 or 2109, 2111, 2209, 2231, 2401.

Secondary Education—Russian

Teaching Major, Plan A, 29 sem. hrs.: Russian 2051, 2053, 2055, 2061, 2062, 2071, 2072, 4002; 3 sem. hrs. of electives in Russian above the freshman level.

Teaching Major, Plan B, 37 sem. hrs.: Russian 1001, 2051, 2053, 2055, 2061, 2062, 2071, 2072, 4002; 6 sem. hrs. of electives in Russian.
Teaching Minor, 26 sem. hrs.: Russian 2051, 2053, 2055, 2061, 2062, 2071, 2072, 4002.

Secondary Education—Social Studies

Teaching Major, 54 sem. hrs.: Anthropology 1001; Economics 2030 and 3310 or 4010 or 4020; Geography 2061, 2062, 4001; Political Science 2051, 2056; History 1001, 1003, 2055, 2057, 2071; 6 sem. hrs. of American history (3 sem. hrs. above the 3000 level); 6 sem. hrs. of European history (3 sem. hrs. above the 3000 level); Sociology 2001.

Teaching Minor, 42 sem. hrs.: Economics 2030 and 3310 or 4010 or 4020; 6 sem. hrs. of geography selected from Geography 2061, 2062, 4001; Political Science 2051, 2056; History 1001, 1003, 2055, 2057, 2071; 3 sem. hrs. in American history above the 3000 level; 3 sem. hrs. in European history above the 3000 level; Sociology 2001.

Secondary Education—Spanish

Teaching Major, Plan A, 29 sem. hrs.: Spanish 2051, 2053, 2055, 2061, 2062; 6 sem. hrs. of electives in Spanish selected from Spanish 3071, 3072, 3073, 3074; Spanish 4602; 3 sem. hrs. of electives in Spanish above the freshman level.

Teaching Major, Plan B, 40 sem. hrs.: Spanish 2051, 2053, 2055, 2061, 2062, 3071, 3072, 3073, 3074, 4602, 4603; 6 sem. hrs. of electives in Spanish.

Teaching Minor, 26 sem. hrs.: Spanish 2051, 2053, 2055, 2061, 2062; 6 sem. hrs. of electives in Spanish selected from 3071, 3072, 3073, 3074; Spanish 4602.

Secondary Education—Speech

Teaching Major, Plan A, 34 sem. hrs.: Journalism 1700 or 2720; Speech 1020, 1050, 1061, 2022, 2025, 2026, 2040, 2063, 4125; 3 sem. hrs. of speech electives; 3 sem. hrs. of speech electives at the 4000 level.

Teaching Major, Plan B, 46 sem. hrs.: Journalism 1700 or 2720; Speech 1020, 1050, 1061, 2022, 2025, 2026, 2040, 2063, 2081, 4125; 12 sem. hrs. of speech electives at the 4000 level (may include Journalism 3720); Anthropology 1003 or Psychology 2040 or Sociology 3601.

Teaching Minor, 30 sem. hrs.: Journalism 1700 or 2720; Speech 1050, 1061, 2022, 2025, 2026, 2040, 2063, 4125; 5 sem. hrs. of speech electives.

Departments, Schools, and Curricula

DEPARTMENT OF ADMINISTRATIVE AND FOUNDATIONAL SERVICES

CHAIRMAN: Licata, Professor
ALUMNI PROFESSOR: Adams
PROFESSORS: Britt, Geske, Grady, Musemeche, Rankin, Roberts, Smith
ASSOCIATE PROFESSORS: Beeson, Ellett, Ginter, Greenfield, Hosie, Mackey, Maxcy, McJulien, Shapiro, West
ASSISTANT PROFESSORS: Hull (Adjunct), Hutchinson, Lomax, MacGregor, Pounder, St. Julien, Spears, Troxel, Williams
INSTRUCTOR: Deya

The Department of Administrative and Foundational Services has responsibility for programs in the foundations of education (historical, philosophical, cultural, research, measurement); programs in counselor education, educational media, educational administration and supervision, and library science. The department also provides services to the educational organizations in Louisiana and is the basic link to professional associations at the local, state, regional, and national level.

DEPARTMENT OF CURRICULUM AND INSTRUCTION

CHAIRMAN: Moe, Professor
PROFESSORS: Beck, Cheek, Collins, Cookston, McDuffie, Schmidt, Soderbergh, Strawitz
The Department of Curriculum and Instruction has the mission of creating an environment to develop a spirit of scholarship, quality, and excellence in meeting the needs of students preparing for elementary and secondary teaching, for special education instruction, and for other school positions throughout the state and nation. A broad general education is provided in the student's freshman and sophomore years followed by professional preparation for teaching given through school field-based courses in methods and techniques for teaching.

Six semester hours of basic ROTC may be taken as electives in the freshman and sophomore years in all curriculum offered by this department.

### CURRICULUM IN ART EDUCATION (K-12)
#### TOTAL SEM. HRS.: 137

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1011, 1440, 1847</td>
<td>9</td>
<td>Art 1361 or 1371</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1001, 1002 or other biological science</td>
<td>6</td>
<td>Art 1441, 1661, 1848, 2271, 2272</td>
<td>15</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>EDCI 2045</td>
<td>4</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
<td>EDCI electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JUNIOR YEAR</td>
<td>SEM. HRS.</td>
<td>SENIOR YEAR</td>
<td>SEM. HRS.</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Art 1761, 1849, 2879, 4273, 4466</td>
<td>15</td>
<td>Art 4889</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2030 or Political Science 2051</td>
<td>3</td>
<td>EDCI 3135, 3136, 3630</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 3160</td>
<td>3</td>
<td>HPRD 2601</td>
<td>18</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
<td>Art elective</td>
<td>3</td>
</tr>
<tr>
<td>Physical Science 1001, 1002 or other physical science</td>
<td>6</td>
<td>Art history elective</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 4070</td>
<td>3</td>
<td>Approved social studies elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

### CURRICULUM IN ELEMENTARY GRADES EDUCATION
#### TOTAL SEM. HRS.: 130

**Kindergarten Endorsement:** Early childhood education programming is carried out jointly by the Department of Curriculum and Instruction and the School of Home Economics. Early childhood courses needed for kindergarten certification/endorsement are crosslisted in both areas. Students may obtain kindergarten certification through the nursery school-kindergarten program in the curriculum in family life and environment or by obtaining a kindergarten endorsement on their elementary certificate through the Department of Curriculum and Instruction. Undergraduates in elementary education take EDCI/HEC 4055, 4057, and 4058. Holders of elementary certificates take EDCI 4020 and EDCI/HEC 4055 and 4058.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1002, 1003, 1004 or other biological science</td>
<td>8</td>
<td>Art 2271 or 2272</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>EDCI 2025</td>
<td>3</td>
</tr>
<tr>
<td>History 1001 or 1003</td>
<td>3</td>
<td>HPRD 2601, 2602</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics 1009, 1010 or other mathematics</td>
<td>6</td>
<td>History 2055</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1050</td>
<td>3</td>
<td>Physical Science 1001, 1002 or other physical science</td>
<td>6</td>
</tr>
<tr>
<td>Approved nutrition course</td>
<td>3</td>
<td>Psychology 2060, 2076</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>
### CURRICULUM IN MUSIC EDUCATION—INSTRUMENTAL MUSIC (BAND) (K-12)

TOTAL SEM. HRS.: 155

All students in the B.M.E. program shall participate in band (Music 4250, 4251, 4252), orchestra (Music 4261), or chorus (Music 4234, 4236, 4240) for four years. Large ensemble assignments are made at the discretion of the adviser and the ensemble conductors. Any request for adjustment of the rules pertaining to performance in large ensembles must be submitted to a reviewing committee.

Students wishing to be certified in more than one area (band and orchestra, band and vocal, etc.) should see the dean of the College of Education for certification requirements and proficiencies. Such programs normally require a minimum of five years to complete.

Piano proficiency at the level of Music 1133 or equivalent and satisfactory completion of six semesters of recital hour (Music 1700) are required.

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 2601 and 3 sem. hrs. of electives</td>
<td>4</td>
</tr>
<tr>
<td>Music 1700</td>
<td>4</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
</tr>
<tr>
<td>Science electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>Music 1700</td>
<td>4</td>
</tr>
<tr>
<td>Music 2300</td>
<td>3</td>
</tr>
<tr>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
</tbody>
</table>

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2045, 3170, 3171</td>
<td>10</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 2300</td>
<td>6</td>
</tr>
<tr>
<td>Music 3711, 3771, 3772</td>
<td>6</td>
</tr>
<tr>
<td>Music 4730 or 4732</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 4070</td>
<td>3</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Biological science elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136, 3630</td>
<td>18</td>
</tr>
<tr>
<td>History 2055 or 2057</td>
<td>3</td>
</tr>
<tr>
<td>Music 4751, 4752</td>
<td>4</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>1</td>
</tr>
<tr>
<td>Physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>Social studies electives</td>
<td>9</td>
</tr>
</tbody>
</table>

### CURRICULUM IN MUSIC EDUCATION—INSTRUMENTAL MUSIC (ORCHESTRA) (K-12)

TOTAL SEM. HRS.: 155

All students in the B.M.E. program shall participate in band (Music 4250, 4251, 4252), orchestra (Music 4261), or chorus (Music 4234, 4236, 4240) for four years. Large ensemble assignments are made at the discretion of the adviser and the ensemble conductors. Any request for adjustment of the rules pertaining to performance in large ensembles must be submitted to a reviewing committee.

Students wishing to be certified in more than one area (band and orchestra, band and vocal, etc.) should see the dean of the College of Education for certification requirements and proficiencies. Such programs normally require a minimum of five years to complete.

Piano proficiency at the level of Music 1133 or equivalent and satisfactory completion of six semesters of recital hour (Music 1700) are required.
<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>HPRD 2601 and 3 sem. hrs. of electives</td>
<td>4</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 2300*</td>
<td>3</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>Applied music courses</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Science electives</td>
<td>3</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>JUNIOR YEAR</td>
<td>SEM. HRS.</td>
<td>SENIOR YEAR</td>
<td>SEM. HRS.</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>EDCI 2045, 3170, 3171</td>
<td>10</td>
<td>EDCI 3135, 3136, 3630</td>
<td>18</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>History 2055 or 2057</td>
<td>3</td>
</tr>
<tr>
<td>Music 2301**</td>
<td>3</td>
<td>Music 4751, 4752</td>
<td>4</td>
</tr>
<tr>
<td>Music 3711, 3771, 3772</td>
<td>6</td>
<td>Large ensemble courses</td>
<td>1</td>
</tr>
<tr>
<td>Music 4730 or 4732</td>
<td>2</td>
<td>Physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 4070</td>
<td>3</td>
<td>Science elective</td>
<td>3</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Social studies electives</td>
<td>9</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Secondary string study***</td>
<td>3</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Biological science elective</td>
<td>3</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>SEM.</td>
<td>38</td>
<td>SEM.</td>
<td>38</td>
</tr>
</tbody>
</table>

*To include study of one brass instrument, one woodwind instrument, and percussion.

**Violinists study viola and bass; violists study violin and bass; cellists study viola and bass; bassists study viola and cello.

***Violin and viola students take one year of cello (MUS 3177); cello and bass students take one year of violin (MUS 3175).

CURRICULUM IN MUSIC EDUCATION—VOCAL MUSIC (K-12)

All students in the B.M.E. program shall participate in band (Music 4250, 4251, 4252), orchestra (Music 4261), or chorus (Music 4234, 4236, 4240) for four years. Large ensemble assignments are made at the discretion of the adviser and the ensemble conductors. Any request for adjustment of the rules pertaining to performance in large ensembles must be submitted to a reviewing committee.

Students wishing to be certified in more than one area (band and orchestra, band and vocal, etc.) should see the dean of the College of Education for certification requirements and proficiencies. Such programs normally require a minimum of five years to complete.

Keyboard majors must complete voice class (Music 1001-1002) and two semesters of private voice. Keyboard majors and voice majors must give evidence of satisfactory piano proficiency. Six semesters of recital hour (Music 1700) are required.

During the junior year, Music 3018 may be substituted for applied music for one semester.

FRESHMAN YEAR | SEM. HRS. | SOPHOMORE YEAR | SEM. HRS. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>HPRD 2601 and 3 sem. hrs. of electives</td>
<td>4</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Applied music courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
<td>Science electives</td>
<td>3</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>JUNIOR YEAR</td>
<td>SEM. HRS.</td>
<td>SENIOR YEAR</td>
<td>SEM. HRS.</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>EDCI 2045, 3170, 3171</td>
<td>10</td>
<td>EDCI 3135, 3136, 3630</td>
<td>18</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>History 2055 or 2057</td>
<td>3</td>
</tr>
<tr>
<td>Music 1018, 1019, 3711, 3749, 3750</td>
<td>13</td>
<td>Music 4751, 4752</td>
<td>4</td>
</tr>
<tr>
<td>Psychology 4070</td>
<td>3</td>
<td>Large ensemble courses</td>
<td>1</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>Science elective</td>
<td>3</td>
</tr>
<tr>
<td>Biological science elective</td>
<td>3</td>
<td>Social studies electives</td>
<td>9</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>SEM.</td>
<td>37</td>
<td>SEM.</td>
<td>41</td>
</tr>
</tbody>
</table>
CURRICULUM IN SECONDARY EDUCATION—BIOLOGY WITH A TEACHING MINOR (PLAN A)
TOTAL SEM. HRS.: 128

Choice of minor may increase total number of hours required.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201 or 1421</td>
<td>3</td>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1202 or 1422</td>
<td>3</td>
<td>Chemistry 2060</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
<td>History 2055</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>EDCI electives</td>
<td>2</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
<td>HPRD electives</td>
<td>2</td>
</tr>
<tr>
<td>Minor courses or electives</td>
<td>2</td>
<td>Minor courses or electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany 2055</td>
<td>4</td>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 2040, 3135, 3147</td>
<td>9</td>
<td>EDCI 3136, 3635</td>
<td>15</td>
</tr>
<tr>
<td>History 2057</td>
<td>3</td>
<td>Computer science elective</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
<td>Approved social science elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved social studies elective</td>
<td>3</td>
<td>Minor methods course</td>
<td>3</td>
</tr>
<tr>
<td>Biological science electives</td>
<td>6</td>
<td>Minor courses or elective</td>
<td>3</td>
</tr>
<tr>
<td>Minor courses or electives</td>
<td>2</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

CURRICULUM IN SECONDARY EDUCATION—BIOLOGY WITH NO TEACHING MINOR (PLAN B)
TOTAL SEM. HRS.: 137

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
<td>Botany 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>EDCI electives</td>
<td>2</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td></td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany 2055</td>
<td>4</td>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
<td>EDCI 3147, 3635</td>
<td>15</td>
</tr>
<tr>
<td>Geology 1001, 1002, 1601, 1602</td>
<td>8</td>
<td>HPRD 2601</td>
<td>1</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>4</td>
<td>HPRD electives</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 2078</td>
<td>3</td>
<td>Life science electives</td>
<td>7</td>
</tr>
<tr>
<td>Zoology 2160, 4149</td>
<td>7</td>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>HPRD elective.</td>
<td>1</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**CURRICULUM IN SECONDARY EDUCATION—CHEMISTRY WITH A TEACHING MINOR (PLAN A)**

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201 or 1421</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1202 or 1422</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1212 or 1431</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1432, 2261</td>
<td>6</td>
</tr>
<tr>
<td>History 2055</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550</td>
<td>3</td>
</tr>
<tr>
<td>Physics 2001, 2002</td>
<td>6</td>
</tr>
<tr>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td>Minor courses or electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry 4001</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 2262, 2363</td>
<td>5</td>
</tr>
<tr>
<td>EDCI 2040, 3135, 3147</td>
<td>9</td>
</tr>
<tr>
<td>History 2057</td>
<td>3</td>
</tr>
<tr>
<td>Approved social studies elective</td>
<td>3</td>
</tr>
<tr>
<td>Minor methods course</td>
<td>3</td>
</tr>
<tr>
<td>Minor courses or electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry 4087</td>
<td>3</td>
</tr>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3136, 3635</td>
<td>15</td>
</tr>
<tr>
<td>Computer science elective</td>
<td>3</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

**CURRICULUM IN SECONDARY EDUCATION—CHEMISTRY WITH NO TEACHING MINOR (PLAN B)**

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1421, 1422, 1431</td>
<td>8</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1432, 2261</td>
<td>6</td>
</tr>
<tr>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Physics 1201, 1202, 1208, 1209</td>
<td>8</td>
</tr>
<tr>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry 4001</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 2262, 2364</td>
<td>5</td>
</tr>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>Geology 1001, 1601</td>
<td>4</td>
</tr>
<tr>
<td>HPRD 2601 and 1 sem. hr. HPRD elective</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 2078</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1001, 1002</td>
<td>8</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry 4083, 4084</td>
<td>4</td>
</tr>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3147, 3635</td>
<td>15</td>
</tr>
<tr>
<td>Geology 1003, 1602</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry electives</td>
<td>3</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

Choice of minor may increase total number of hours required.

**TOTAL SEM. HRS.:**

- **128** for PLAN A
- **132** for PLAN B
### CURRICULUM IN SECONDARY EDUCATION—ENGLISH WITH A TEACHING MINOR (PLAN A)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 2601 and 3 sem. hrs. of HPRD electives</td>
<td>4</td>
</tr>
<tr>
<td>Biological science electives (science minor: see “Sequence in Subject-Matter Fields”)</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics electives (mathematics or science minor: Mathematics 1021, 1022)</td>
<td>6</td>
</tr>
<tr>
<td>Physical science electives (science minor: see “Sequence in Subject-Matter Fields”)</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 34**

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>English 2025, 2027, 4012</td>
<td>9</td>
</tr>
<tr>
<td>English elective selected from 3820, 3821, 3822, and 3823 and courses numbered 4011 or higher (courses in language, literary criticism and Afro-American literature recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Speech elective (1050 recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Teaching minor or electives</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 36**

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3142, 3635, and minor methods course</td>
<td>18</td>
</tr>
<tr>
<td>English 2148 or 4148 or 4149</td>
<td>3</td>
</tr>
<tr>
<td>Teaching minor or electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 35**

### CURRICULUM IN SECONDARY EDUCATION—ENGLISH WITH NO TEACHING MINOR (PLAN B)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 2601 and 3 sem. hrs. of HPRD electives</td>
<td>4</td>
</tr>
<tr>
<td>Biological science electives</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
</tr>
<tr>
<td>Physical science electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 34**

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>English 2025, 2027, 4012, and 15 sem. hrs. of English electives selected from 3820, 3821, 3822, and 3823 and courses numbered 4011 or higher (courses in language, literary criticism, and Afro-American literature recommended)</td>
<td>24</td>
</tr>
<tr>
<td>Speech electives (1050 and 2040 recommended)</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 36**

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3142, 3635</td>
<td>15</td>
</tr>
<tr>
<td>English 2148 or 4148 or 4149</td>
<td>3</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL SEM. HRS.: 28**
### CURRICULUM IN SECONDARY EDUCATION—FRENCH, LATIN, RUSSIAN, OR SPANISH WITH A TEACHING MINOR (PLAN A)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Foreign language courses</td>
<td>12</td>
</tr>
<tr>
<td>Foreign language courses</td>
<td>5</td>
<td>HPRD 2601 and 1 sem. hr. HPRD elective</td>
<td>2</td>
</tr>
<tr>
<td>Biological science electives (science minor: see &quot;Sequence in Subject-Matter Fields&quot;)</td>
<td>6</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>HPRD electives (health science or physical education minor: see &quot;Sequence in Subject-Matter Fields&quot;)</td>
<td>2</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics electives (mathematics minor: see &quot;Sequence in Subject-Matter Fields&quot;)</td>
<td>6</td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>Foreign language courses</td>
<td>6-9</td>
<td>EDCI 3143 or 3145 or 3149</td>
<td>3</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
<td>EDCI 3635 and minor methods course</td>
<td>15</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>6</td>
<td>Foreign language courses</td>
<td>0-3</td>
</tr>
<tr>
<td>Teaching minor or electives</td>
<td>7</td>
<td>Teaching minor or electives</td>
<td>12</td>
</tr>
</tbody>
</table>

31-34

### CURRICULUM IN SECONDARY EDUCATION—FRENCH, LATIN, RUSSIAN, OR SPANISH WITH NO TEACHING MINOR (PLAN B)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Foreign language courses</td>
<td>12</td>
</tr>
<tr>
<td>Foreign language courses</td>
<td>8-10</td>
<td>HPRD 2601 and 1 sem. hr. HPRD elective</td>
<td>2</td>
</tr>
<tr>
<td>Biological science electives</td>
<td>6</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>3</td>
<td>Mathematics electives</td>
<td>3</td>
</tr>
<tr>
<td>Physical science electives</td>
<td>3</td>
<td>Physical science electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
</tbody>
</table>

33-35

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
<td>Economics 2030 or Political Science 2051</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language courses</td>
<td>9-12</td>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
<td>EDCI 3143 or 3145 or 3149</td>
<td>3</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
<td>EDCI 3635</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
<td>Foreign language courses</td>
<td>3-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electives</td>
<td>0-6</td>
</tr>
</tbody>
</table>

33-36

26-29
**CURRICULUM IN SECONDARY EDUCATION—MATHEMATICS WITH A TEACHING MINOR (PLAN A)**

**TOTAL SEM. HRS.: 138**

*Based on test scores, students placed in Mathematics 1023 (5 sem. hrs.) will be required to take 33 sem. hrs. for a mathematics major with a minor. Mathematics majors must have at least 25 sem. hrs. of mathematics courses numbered 1550 or above.*

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1002 or other biological science (science minor: see &quot;Sequence in Subject-Matter Fields&quot;)</td>
<td>6</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td>Physical science electives (science minor: see &quot;Sequence in Subject-Matter Fields&quot;)</td>
<td>6</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 2019, 2057, 4005</td>
<td>9</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>Teaching minor or electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3146, 3635, and minor methods course</td>
<td>18</td>
</tr>
<tr>
<td>HPRD 2601</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics 2085, 4181</td>
<td>6</td>
</tr>
<tr>
<td>Teaching minor or electives</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

---

**CURRICULUM IN SECONDARY EDUCATION—MATHEMATICS WITH NO TEACHING MINOR (PLAN B)**

**TOTAL SEM. HRS.: 137**

*Based on test scores, students placed in Mathematics 1023 (5 sem. hrs.) will be required to take 45 sem. hrs. for a mathematics major with no minor. Mathematics majors must have at least 25 sem. hrs. of mathematics courses numbered 1550 or above.*

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Biological science electives</td>
<td>6</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td>Physical science electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1250, 1251</td>
<td>6</td>
</tr>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 2085, 4005, 4055, and 3 sem. hr. math elective at 4000 level</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3146, 3635</td>
<td>15</td>
</tr>
<tr>
<td>HPRD 2601</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics 4022, 4181</td>
<td>6</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

---

**College of Education 211**
## CURRICULUM IN SECONDARY EDUCATION—PHYSICS WITH A TEACHING MINOR (PLAN A)

**TOTAL SEM. HRS.: 130**

*Choice of minor may increase total number of hours required.*

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>History 2055</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
<td>Physics 1201, 1202, 1208, 1209</td>
<td>10</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>Social studies electives</td>
<td>6</td>
<td>Computer science elective</td>
<td>3</td>
</tr>
<tr>
<td>Biological science electives</td>
<td>4</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2040, 3135, 3147</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics 2065</td>
<td>3</td>
</tr>
<tr>
<td>Physics 2111, 2221, 2231, 2401</td>
<td>12</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
</tr>
<tr>
<td>Minor courses or electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3136, 3635</td>
<td>15</td>
</tr>
<tr>
<td>History 2057</td>
<td>3</td>
</tr>
<tr>
<td>Physics 2209</td>
<td>4</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td>Minor methods course</td>
<td>3</td>
</tr>
</tbody>
</table>

## CURRICULUM IN SECONDARY EDUCATION—PHYSICS WITH NO TEACHING MINOR (PLAN B)

**TOTAL SEM. HRS.: 133**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201</td>
<td>3</td>
<td>Chemistry 1202, 1212</td>
<td>5</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Mathematics 2057 or 2065</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
<td>Physics 2111, 2231</td>
<td>6</td>
</tr>
<tr>
<td>Physics 1201, 1202, 1208, 1209</td>
<td>8</td>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
<td>Zoology 1001 or Botany 1001</td>
<td>4</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
<td>English electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>Geology 1001</td>
<td>3</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Physics 2209, 2211, 2401, 4132</td>
<td>13</td>
</tr>
<tr>
<td>Psychology 2078</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1002 or Botany 1002</td>
<td>4</td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3147, 3635</td>
<td>15</td>
</tr>
<tr>
<td>Geology 1003, 1601, 1602</td>
<td>5</td>
</tr>
<tr>
<td>HPRD 2601 and 1 sem. hr. HPRD elective</td>
<td>2</td>
</tr>
<tr>
<td>Approved social studies electives</td>
<td>6</td>
</tr>
</tbody>
</table>

## CURRICULUM IN SECONDARY EDUCATION—SOCIAL STUDIES

**TOTAL SEM. HRS.: 137**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1002 or other biological science...</td>
<td>6</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>History 2055, 2057, 2071</td>
<td>9</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Physical Science 1002 or physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>History 1001, 1003</td>
<td>6</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>Physical Science 1001 or physical science elective</td>
<td>3</td>
<td>Sociology 2001</td>
<td>3</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>History 2055</td>
<td>9</td>
</tr>
<tr>
<td>Physical Science 1002 or physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>Sociology 2001</td>
<td>3</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td>JUNIOR YEAR</td>
<td>SEM. HRS.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Anthropology 1001</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Economics 3310 or 4010 or 4020</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 2051, 2056</td>
<td>3</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
</tr>
<tr>
<td>History (American) electives</td>
<td>3</td>
</tr>
<tr>
<td>History (European) electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>

**CURRICULUM IN SECONDARY EDUCATION—SPEECH WITH A TEACHING MINOR (PLAN A)**

TOTAL SEM. HRS.: 138

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1002 or other biological science (science minor: see “Sequence in Subject-Matter Fields”)</td>
<td>6</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>Physical Science 1002 or other physical science</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>Physical Science 1001 or other physical science</td>
<td>3</td>
<td>Speech 1020, 2022, 2026, 2040</td>
<td>10</td>
</tr>
<tr>
<td>Speech 1050, 1061</td>
<td>6</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
<td>Speech electives</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics electives (mathematics minor: see “Sequence in Subject-Matter Fields”)</td>
<td>6</td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
<td>EDCI 3148, 3635, and minor methods course</td>
<td>18</td>
</tr>
<tr>
<td>Journalism 1700 or 2720</td>
<td>3</td>
<td>HPRD 2601</td>
<td>1</td>
</tr>
<tr>
<td>Speech 2025, 2063, 4125, and 4000-level speech elective</td>
<td>12</td>
<td>Approved social studies electives</td>
<td>6</td>
</tr>
<tr>
<td>HPRD elective</td>
<td>1</td>
<td>Teaching minor or electives</td>
<td>9</td>
</tr>
<tr>
<td>Teaching minor or electives</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CURRICULUM IN SECONDARY EDUCATION—SPEECH WITH NO TEACHING MINOR (PLAN B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL SEM. HRS.: 137</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 1000</td>
<td>3</td>
<td>Anthropology 1003 or Psychology 2040</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>or Sociology 3601</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1050, 1061</td>
<td>6</td>
<td>EDCI 2040</td>
<td>3</td>
</tr>
<tr>
<td>Biological science electives</td>
<td>6</td>
<td>HPRD 2601 and 1 sem. hr. HPRD elective</td>
<td>2</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>2</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>6</td>
<td>Speech 1020, 2022, 2026, 2040</td>
<td>10</td>
</tr>
<tr>
<td>Physical science electives</td>
<td>6</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2</td>
<td>Electives or ROTC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology 1003 or Psychology 2040 or Sociology 3601</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDCI 2040</td>
<td>3</td>
<td>HPRD 2601 and 1 sem. hr. HPRD elective</td>
</tr>
<tr>
<td>Psychology 2060, 2078</td>
<td>6</td>
<td>Speech 1020, 2022, 2026, 2040</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>
### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3135, 3136</td>
<td>6</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Journalism 1700 or 2720</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2025, 2063, 4125</td>
<td>9</td>
</tr>
<tr>
<td>Speech 2081</td>
<td>3</td>
</tr>
<tr>
<td>Approved social studies elective</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>EDCI 3148, 3635</td>
<td>15</td>
</tr>
<tr>
<td>Journalism 3720 or speech electives (4000-level)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

---

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology 1001</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Geography 1001</td>
<td>3</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1009, 1010 or other mathematics</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2025, 2700, 2701</td>
<td>9</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 2601</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 2060, 2076</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 2153</td>
<td>3</td>
</tr>
<tr>
<td>Social studies elective</td>
<td>3</td>
</tr>
<tr>
<td>Physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

---

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3551</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 3112, 3113, 3701, 3708, 3720, 3721, 3722, 4704</td>
<td>26</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3137, 4705, 4720, 4728, 4749</td>
<td>24</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

---

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology 1001</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Geography 1001</td>
<td>3</td>
</tr>
<tr>
<td>HPRD electives</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1009, 1010 or other mathematics</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2025, 2700, 2701</td>
<td>9</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 2601</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 2060, 2076</td>
<td>6</td>
</tr>
<tr>
<td>Zoology 2153</td>
<td>3</td>
</tr>
<tr>
<td>Social studies elective</td>
<td>3</td>
</tr>
<tr>
<td>Physical science elective</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

---

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 3112, 3113, 3701, 3708, 3760, 3761, 3762</td>
<td>23</td>
</tr>
<tr>
<td>Human development electives (select from Home Economics 2055, HPRD 2600, 3513, Psychology 2000, 2078, 4070, Sociology 3601, 4551)</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

---

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 4704, 4705, 4760, 4761, 4762, 4789</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

---

### CURRICULUM IN SPECIAL EDUCATION (MILD/MODERATE IMPAIRMENTS OPTION)

**TOTAL SEM. HRS.: 129**

### CURRICULUM IN SPECIAL EDUCATION (SEVERE/PROFOUND IMPAIRMENTS OPTION)

**TOTAL SEM. HRS.: 129**
CURRICULUM IN SPEECH, LANGUAGE, AND HEARING SPECIALIST (K-12)
TOTAL SEM. HRS.: 146

Two hundred clock hours of supervised clinical practicum (Speech 4683) are required for certification. These are to be distributed as follows: a minimum of 25 hours in diagnostics; a minimum of 25 hours in hearing testing and auditory rehabilitation; a minimum of 37.5 hours in language disorders; a minimum of 15 hours in articulation disorders; a minimum of 15 hours in voice disorders; and a minimum of 15 hours in rhythm disorders. Practicum is graded on the same scale as course work, i.e., "A," "B," "C," "D," or "F." Credit is not given for a grade of "D" or "F"; practicum courses in which a "D" or "F" is earned must be repeated. Clock hours earned with a case for which "D" or "F" is the final grade may not be counted toward certification.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>EDCI 2025</td>
<td>3</td>
</tr>
<tr>
<td>HPRD activity courses</td>
<td>2</td>
<td>HPRD activity courses or HPRD 1600</td>
<td></td>
</tr>
<tr>
<td>History 1001, 1003 or other approved social studies</td>
<td>6</td>
<td>History 2055, 2057</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
<td>Physical Science 1001, 1002 or Physics</td>
<td>6</td>
</tr>
<tr>
<td>Speech 1050</td>
<td>3</td>
<td>2001, 2002 or Chemistry 1001, 1002</td>
<td></td>
</tr>
<tr>
<td>Zoology 1001, 1002 or Biology 1001, 1002, 1003, 1004</td>
<td>8</td>
<td>Psychology 2060, 2076</td>
<td></td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td></td>
<td>Speech 2081</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2700</td>
<td>3</td>
<td>EDAF 3200</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 2004, 2078</td>
<td>6</td>
<td>EDCI 3112, 3126, 3181, 3630</td>
<td>24</td>
</tr>
<tr>
<td>Speech 4079, 4080, 4150, 4152, 4153, 4181, 4183, 4683</td>
<td>24</td>
<td>Psychology 3083</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speech 4184, 4185, 4187, 4188, 4683</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>33</td>
<td></td>
<td>44</td>
</tr>
</tbody>
</table>

SCHOOL OF HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

DIRECTOR: Byrd, Professor
PROFESSORS: Broadhead, Fant, Nelson, Thomas
ASSOCIATE PROFESSORS: Broussard, Carter, Hall, C. Hill (Assistant Director), Lee, Magill, Norckauer, Reznik, Steben, Worthy
ASSISTANT PROFESSORS: lyriboz, Landin, Mangum, Norwood, Ojanlatva, Powers, Stickels

The School of Health, Physical Education, Recreation, and Dance offers activity courses in recreational sports such as tennis and golf and in various forms of dance in order to help students develop and maintain physical fitness as well as to provide skill and knowledge for leisure-time activities. The necessary facilities and equipment are available to students and faculty. A major function of the school is that of helping to prepare health and physical education teachers, coaches, and recreation leaders. Another major function of the school is to provide an undergraduate curriculum in dance. This program is open by audition to students who wish to pursue a professional career in dance performance or choreography.

Six semester hours of basic ROTC may be taken as electives in the freshman and sophomore years in all curricula offered by the school.
### CURRICULUM IN DANCE

**TOTAL SEM. HRS.: 129**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1001</td>
<td>3</td>
<td>Art 1441 or 2470</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>English 2027</td>
<td>3</td>
</tr>
<tr>
<td>HPRD 1127 or 1227 or 1327</td>
<td>1</td>
<td>HPRD 1801, 1805 <em>(both taken twice)</em></td>
<td>4</td>
</tr>
<tr>
<td>HPRD 1131 or 1231</td>
<td>1</td>
<td>HPRD 1153, 1804, 2500, 2801</td>
<td>8</td>
</tr>
<tr>
<td>HPRD 1132, 1134, 1600, 1800, 1801, 1805</td>
<td>9</td>
<td>Psychology 2000</td>
<td>3</td>
</tr>
<tr>
<td>Music 1751, 1752</td>
<td>6</td>
<td>Zoology 2160</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics electives</td>
<td>3</td>
<td>English elective numbered above 2000</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
<td>Social science electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPRD 1801, 1805 <em>(one taken twice)</em></td>
<td>3</td>
<td>HPRD 1801 or 1805</td>
<td>1</td>
</tr>
<tr>
<td>HPRD 4804 <em>(taken twice)</em></td>
<td>4</td>
<td>HPRD 2804 <em>(3 sem. hrs. may be dance electives)</em></td>
<td>6</td>
</tr>
<tr>
<td>HPRD 3514, 3802, 3803, 4806, 4808</td>
<td>15</td>
<td>HPRD 4802, 4804, 4805, 4807</td>
<td>11</td>
</tr>
<tr>
<td>Dance electives</td>
<td>3</td>
<td>Philosophy 2023</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy electives</td>
<td>3</td>
<td>Social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Approved speech electives</td>
<td>3</td>
<td>Sociology electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Approved speech electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**CURRICULUM IN HEALTH SCIENCE (COMMUNITY HEALTH OPTION)**

**TOTAL SEM. HRS.: 132**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1002</td>
<td>6</td>
<td>HPRD 2600, 2603</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry 1001, 1002</td>
<td>6</td>
<td>Microbiology 2051</td>
<td>4</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Psychology 2011, 2040, 2060</td>
<td>9</td>
</tr>
<tr>
<td>HPRD 1600, 1601, 2601</td>
<td>4</td>
<td>Sociology 2501, 2505</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
<td>Zoology 2160</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPRD 2500, 3602, 3603, 3660, 3663, 4601, 4608</td>
<td>20</td>
<td>HPRD 2604, 3608, 3690, 4605</td>
<td>21</td>
</tr>
<tr>
<td>HPRD activity courses</td>
<td>2</td>
<td>Home Economics 1010</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 2078</td>
<td>3</td>
<td>HPRD health electives</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 4451</td>
<td>3</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

**CURRICULUM IN HEALTH SCIENCE (SCHOOL HEALTH OPTION)**

**TOTAL SEM. HRS.: 138**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001</td>
<td>3</td>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1001, 1002</td>
<td>6</td>
<td>HPRD 2600, 2604</td>
<td>6</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Psychology 2060, 2078</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 1600, 1601, 2601</td>
<td>4</td>
<td>Sociology 2501, 2505</td>
<td>6</td>
</tr>
<tr>
<td>HPRD activity courses</td>
<td>2</td>
<td>Zoology 2160</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>6</td>
<td>Electives or ROTC</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>
### CURRICULUM IN PHYSICAL EDUCATION (K-12)

TOTAL SEM. HRS.: 134-140

All students majoring in physical education are required to have a minor and an area of specialization. Students majoring or minoring in physical education are expected to exhibit competency in a variety of sport and dance activities prior to graduation. This may be done by passing a departmental proficiency test or by receiving credit in an advanced standing examination. Majors must be competent in 12 of the following activities; minors must be competent in nine.

**Team Sports (majors—4 of the following; minors—3 of the following):** basketball, field football, flag football, softball, volleyball.

**Individual Sports (majors—4 of the following; minors—3 of the following):** archery, bowling, racquetball or handball, badminton, golf, tennis.

**Other Sports (majors—4 of the following including at least one dance; minors—3 of the following):** ballet, gymnastics and tumbling, martial arts, pistol marksmanship, swimming, wrestling, folk and square dance, jazz dance, modern dance, riflery, track and field, weightlifting/weight training.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1002 or Chemistry 1001</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 1000</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>HPRD 1404, 1600</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Social studies electives</td>
<td>6</td>
</tr>
<tr>
<td>Minor courses</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 2045</td>
<td>4</td>
</tr>
<tr>
<td>HPRD 2500, 2501, 2502, 2508, 2540</td>
<td>12</td>
</tr>
<tr>
<td>Physics 2001</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 2060</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 2160</td>
<td>3</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
<tr>
<td>Minor courses</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3112* or 3135</td>
<td>3-6</td>
</tr>
<tr>
<td>HPRD 2508, 2601, 3510, 3511, 3513, 3514, 3516</td>
<td>17</td>
</tr>
<tr>
<td>History 2055, 2057</td>
<td>6</td>
</tr>
<tr>
<td>Psychology 4070</td>
<td>3</td>
</tr>
<tr>
<td>Specialization courses</td>
<td>6</td>
</tr>
<tr>
<td>Minor courses</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38-41</strong></td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAF 3200 (to be taken with a secondary minor)</td>
<td>2</td>
</tr>
<tr>
<td>EDAF 3136* and minor methods course</td>
<td>3-6</td>
</tr>
<tr>
<td>EDCI 3630</td>
<td>12</td>
</tr>
<tr>
<td>HPRD 3515</td>
<td>3</td>
</tr>
<tr>
<td>Minor courses</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23-26</strong></td>
</tr>
</tbody>
</table>

*Students choosing the elementary physical education specialization must schedule EDCI 3112. All other students should schedule EDCI 3135, 3136.

### Areas of Specialization

- **Athletic Training, 10 sem. hrs.:** HPRD 4503, 4504, 4505
- **Coaching, 6 sem. hrs.:** HPRD 4503 and 4 hrs. from the following: HPRD 2504, 2511, 2515, 2516, 2517, 2518, 2519, 2525 (1-3 sem. hrs.), 2526
- **Dance, 6 sem. hrs.:** HPRD 1131 or 1231; 1134; 1227; and 2 sem. hrs. from the following: HPRD 1153, 1327, 1804, 4804
- **Elementary Physical Education, 6 sem. hrs.:** 6 hrs. from the following courses: HPRD 1133, 1145, 1147, 2504, 2508, 4520
- **Secondary Physical Education, 6 sem. hrs.:** 6 hrs. from the following courses: HPRD 2504, 2508, 2511, 2526, 4803, 4520
- **Physical Education for the Handicapped, 9 sem. hrs.:** HPRD 3540, 3541, 4540
- **Research, 10 sem. hrs.:** EXST 4001, HPRD 4900 (6 sem. hrs.)
UNIVERSITY LABORATORY SCHOOL

PRINCIPAL: Fox, Associate Professor

ASSISTANT PROFESSORS: Guillot, Hope (Assistant Principal)

INSTRUCTORS: Ater, Barton, Bossier, Coleman, Cowart, Dampier, Davis, Delacroix, Exner, Fabre, Fowler, Freiberg, Furr, Garner, Hallman, Harris, Harroun, Hilton, Hurst, Jendrzejewski, Mackey, McHardy, Maddox, Minchew, O'Brien, Rector, Roberts, Schooley, Sessions, Stelly, Tonore, Tucker, Turner, Wickersham

The University Laboratory School, an integral part of the College of Education, is maintained for observation, research, and pre-service field experiences in grades K through 12. The Laboratory School, therefore, maintains a staff of teachers for the purpose of giving instruction to children, demonstrating teaching procedures to student teachers and observers, developing innovative programs, conducting educational research, and acquainting pre-service and in-service teachers with approved and tested teaching procedures and viewpoints.

The Laboratory School serves as a demonstration center for educational methodology. Graduate and undergraduate students observe and participate in the use of instructional and testing materials. Graduate students and university faculty have opportunities to utilize the school for research studies.

The number of pupils that can be accommodated in the Laboratory School is limited. The admission process is designed to provide a diverse student population representative of the general population. Students who attend the Laboratory School must reside with their parents.

A registration fee is charged for each pupil in grades K through 12. These fees are payable in advance in September and January.
The College of Engineering prepares individuals for professional careers in engineering and for other technically oriented positions in industry, business, education, and government. As the problems of society become more complex and interdisciplinary in nature, a broad professional education is necessary for the engineer to meet these challenges. Solutions to societal problems require the development and application of technology within constraints established by economic, social, institutional, and political considerations. The College of Engineering addresses these issues through its departmental programs which require that graduates, in addition to being expertly trained in their chosen engineering discipline and in general engineering fundamentals, possess a thorough understanding of mathematics and the physical sciences and have a strong background in the humanities and social sciences.

The College of Engineering includes seven degree-granting departments, the Division of Engineering Research, the Hazardous Waste Research Center, the Water Resources Research Institute, and the Placement Office. Activity within the college is centered in the Center for Engineering and Business Administration (CEBA) Building. The faculty is actively engaged in design, research, and problem solving in well-equipped facilities for research and teaching. Departments within the college, the various undergraduate curricula, and the degrees which are offered are shown in the chart on the following page.

PROFICIENCY IN MATHEMATICS

Mathematical proficiency is essential to engineers and to engineering training. Accordingly, students who plan to study engineering should schedule all appropriate mathematics courses available to them in high school. Placement tests are given to all incoming freshmen, and those who do not qualify to begin university mathematics at the level prescribed in the freshman engineering program cannot expect to complete requirements for a degree in the nominal length of time. Credit for mathematics courses preliminary to analytical geometry and calculus may not be applied toward the bachelor of science degrees in the College of Engineering.
ADMISSION REQUIREMENTS

Admission to the University does not constitute acceptance into the College of Engineering or into a particular curriculum within this college. In any area where enrollment may exceed the facilities of the department, it may be necessary to limit the size of the classes in that curriculum. In such cases the department establishes criteria for admission with approval of the University administration.

Students may enter the college from Junior Division or by transfer from another division of LSU or from another approved college or university.

**Junior Division students** will be admitted to the college if they meet the following conditions:
1. completion of 24 or more semester hours of credit;
2. a grade-point average of 2.00 or better; and
3. credit for or eligibility to schedule analytical geometry and calculus for curricula leading to the various bachelor of science degrees or algebra for the Bachelor of Engineering Technology degree.

**Students from other campuses of the LSU System** will be admitted if they comply with the above requirements for admission of Junior Division students, except for transfers in petroleum engineering. Students transferring from a non-engineering discipline within the LSU System must have a 2.50 average on all course work to enter petroleum engineering. Students transferring from other engineering disciplines within the LSU System must have a 2.30 average on all course work attempted to enter petroleum engineering.

**Students from other institutions** who have completed 24 sem. hrs. and meet the mathematics requirement as listed above for Junior Division students will be admitted if they have earned at least a 2.50 average on course work attempted at U.S. institutions. In exceptional cases, transfer students who have earned more than a 2.00 average but less than a 2.50 may be admitted after the dean’s evaluation of their overall records and determination of their probability of success.
an evaluation will be performed only upon the written request of the student seeking to transfer into the college. The request is expected to include documentation supporting the exceptional nature of the appeal. All requests for review of the student’s academic record should be submitted no later than July 1 for fall semester admission, December 1 for spring semester, or May 1 for summer term.

Applicants who have failed to earn a 2.50 semester average on courses scheduled in the last two semesters of college attendance or who have a scholastic record which, if earned at LSU, would have resulted in suspension in their first period of attendance at LSU, may be denied admission even though their overall average may meet scholastic requirements for admission. Students who have transferred from other institutions into other senior colleges at LSU without meeting the 2.50 average required for admission to the College of Engineering will be considered as transfer students from other institutions when applying for admission to this college.

TRANSFER OF CREDIT FROM OTHER INSTITUTIONS

In this college, transfer credits accepted by the Office of Admissions shall be valid for degree credit only to the extent to which they satisfy courses in the curricula of the college. Transfer credits in junior and senior engineering courses will be accepted only if taken in a program accredited by the Accreditation Board for Engineering and Technology.

Credit in courses in which grades of “D” have been earned is not accepted for transfer toward the degree requirements.

Students enrolled in this college who wish to obtain credits from colleges or universities other than LSU (including other campuses of the LSU System) and who plan to use such credits toward degree requirements must be in good academic standing and must obtain prior approval in writing on a specific-course basis from the dean.

DEGREE REQUIREMENTS OF THE COLLEGE

It is the student’s responsibility to qualify for the bachelor’s degree by meeting these requirements:

1. completing one of the established curricula—any substitutions from the curricula as published must have written approval of the department chairman and the dean;
2. achieving a 2.00 average on all courses in the major field, in addition to the 2.00 average required by the University on all work taken at LSU and on the entire college record;
3. successfully completing a minimum of 30 semester hours while enrolled in the department; these hours must be required courses in the curriculum or electives approved by the department chairman;
4. initiating the checkout procedure with the departmental adviser in the semester prior to the semester in which the degree is to be awarded; the checkout is completed only when approved by the Office of the Dean and the Office of Student Records and Registration; and
5. demonstrating proficiency in English; proficiency is defined as a grade of “A” or “B” in English 1002 (1005 for international students). A student who earns a grade of “C” or “D” in English 1002 (1005 for international students) may become proficient by scoring a minimum of 298 on the English Proficiency Examination which is administered once each semester. A student who fails, or fails to take, the examination must establish proficiency in the English Writing Laboratory. The student must take the examination in the first year of enrollment in the college.

COLLEGE POLICY FOR “D” GRADES AND REPETITION OF COURSES

Only those courses in which grades of “D” or “F” were earned may be repeated. A student who earns a “D” or “F” in a course in which a minimum grade of “C” is required must register for the course again in the next regular semester in which the student is enrolled and the course is offered. Students within 24 hours of graduation cannot duplicate sophomore-level courses in the major field.

REINSTATED

A student dropped from the University who seeks readmission to this college must submit an application for reinstatement. The dean, with recommendation of the department in which the
student seeks admission, will determine whether readmission is granted and may prescribe the conditions for reinstatement.

CORRESPONDENCE AND EXTENSION CREDITS

Graduating seniors enrolled in correspondence study during their final semester must complete the course four weeks prior to commencement. The name of any student who has not completed correspondence study by that time will be removed from the list of candidates for the degree. Students who are not degree candidates in the summer may, with approval, enroll during the summer in correspondence study which will be terminated if not completed by the first day of class in the fall semester. Extensions are not normally granted.

REQUIREMENTS FOR SECOND BACHELOR'S DEGREE

Students who hold one baccalaureate degree may wish to obtain a baccalaureate degree in engineering as a second degree. To do so, they must complete a minimum of 30 semester hours, in addition to the requirements of the first discipline, and must satisfy all requirements for the second discipline, as shown in the curriculum. They must attain a minimum 2.00 average on all work scheduled while enrolled in the College of Engineering and on all work subsequent to receipt of the first degree. A student whose first degree was obtained elsewhere must also satisfy all the admission requirements of the college, as previously listed.

GRADUATE PROGRAMS

Through the Graduate School, the college offers the Master of Science, the Master of Engineering, and the Doctor of Philosophy degrees. The Master of Science program emphasizes fundamental theory and is mostly research-oriented. It is offered in agricultural, chemical, civil, electrical, hydraulic, industrial, mechanical, nuclear, and petroleum engineering. The Master of Engineering is an application-oriented degree elected by students who wish preparation for engineering practice beyond the baccalaureate degree. Students may concentrate in the above fields or in interdisciplinary areas such as materials or environmental engineering. The Doctor of Philosophy degree is awarded in the fields of chemical engineering, civil engineering, electrical engineering, engineering science, mechanical engineering, and petroleum engineering. For additional information, consult the Graduate School Catalog.

PLACEMENT SERVICES

The Center for Engineering and Business Administration Placement Office arranges for students in engineering and business administration to be interviewed on campus by recruiters from approximately 300 employers for both summer and permanent employment. Students should contact this office as soon as they register each fall semester in order to receive information concerning campus interviews. This service is also extended to students from the College of Basic Sciences; to students majoring in agribusiness, agricultural economics, agricultural mechanization, construction, industrial technology, mathematics, merchandising, and textiles and clothing communication; and to alumni.

THE ENGINEERING COUNCIL

The Engineering Council is a college-wide student organization whose members are the elected representatives of the various professional and honorary engineering student organizations. In addition to the general goal of bridging organizational gaps between the different departments, the Engineering Council sponsors several student activities including an engineering newsletter, the Engineering Athletic League, and the annual Engineers’ Week.

SPECIAL PROGRAMS

The college offers a cooperative work-study program in civil, chemical, industrial, mechanical, or electrical and computer engineering. Students alternate periods of classroom attendance and employment in industry; however, no credit is given for employment. It is the student’s responsibil-
ity to secure placement in industry. The academic requirements are identical to those for regular four-year students, but because of the time spent in industry the student will take five years or longer to complete them. This arrangement provides a measure of financial assistance for students. To enter the cooperative program, a student must have been registered in the college for at least one semester and must have: (1) passed 45 semester hours including all essential courses of the freshman program, and (2) earned an overall grade-point average of 2.40.

The College of Engineering conducts a Drafting Institute, in cooperation with the Division of Continuing Education, which is designed to prepare students to work as draftsmen. By taking additional university courses, they can acquire the competence needed for employment as engineering technicians or engineering technologists. Upon completion of the institute, any students continuing to take courses on a regular or part-time basis on the LSU campus may take advanced-standing examinations and receive degree credit for the following: Engineering Graphics 1001, 2154, 2162, and 3105. For information about the Drafting Institute or the procedures for obtaining this credit, students should contact the Department of Industrial Engineering.

Departments and Curricula

The official list of all humanities and social science electives approved by the college is available in the dean's office. The following restrictions are to be observed in the selecton of humanities and social science electives:

1. Courses in the humanities and social sciences must be selected from no more than three departments on the approved list.
2. A maximum of six sem. hrs. may be taken at the 1000 level.
3. A minimum of six sem. hrs. must be numbered 3000 or above.
4. History 1001, 1003, Geography 1001, 1003, Economics 1010, and Political Science 1001 are approved as humanities and social science electives only if scheduled during a student's freshman year.

All technical electives must have approval of the chairman of the engineering department in which the student registers. Under no circumstances may electives be chosen from remedial courses or courses which are preliminary to the first courses in engineering. Students are advised to check with their departments on the selection of these electives.

International students may substitute English 1004, 1005 for English 1001, 1002.

Six hours of credit earned in ROTC may be applied toward satisfaction of unrestricted electives in all engineering and engineering technology curricula.

DEPARTMENT OF AGRICULTURAL ENGINEERING

HEAD: Nye, Professor

For a listing of this department's faculty, see the "College of Agriculture," section of this catalog.

Agricultural engineering is the application of engineering fundamentals to the solution of problems in the production and processing of food and fiber. Agricultural engineers combine extensive education in the physical sciences with a background in the biological sciences enabling them to employ energy, labor, materials, and mechanisms in the most effective manner for supplying food, clothing, and water for people's needs. Agricultural engineers are active in planning, designing, developing, and testing engineering systems for agriculture and allied industries. Some typical areas of endeavor include mechanization and automation of agricultural production equipment and processes; development of new food processing and packaging systems; environmental control for plant and animal production; management of natural resources including soil, water, forests, and energy; design of agricultural structures; research; and consultation.

There are numerous employers of agricultural engineers in Louisiana and throughout the U.S., such as firms involved in the design, development, and production of agricultural power units and machinery; utility companies; state and federal agencies including the U.S. Army Corps of Engineers, the USDA Soil Conservation Service, and the Louisiana Department of Transportation and Development; university research and extension organizations; and engineering consulting firms.

With the need for increased food and fiber production and the increasing sophistication of agricultural production and processing practices, the demand for agricultural engineers continues to exceed the supply. The constraints of energy availability, environmental quality concerns, and the increasing portion of the world's population that demands a better life will strengthen the future demands for agricultural engineers.

The Department of Agricultural Engineering is jointly administered by the Colleges of Engineering and
Agriculture, with the agricultural engineering curriculum offered through the College of Engineering. This curriculum has had continual accreditation by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology since 1952.

**CURRICULUM IN AGRICULTURAL ENGINEERING**

**TOTAL SEM. HRS.: 135-136**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Engineering 1249</td>
<td>2</td>
<td>Agricultural Engineering 2348</td>
<td>3</td>
</tr>
<tr>
<td>Biology 1001</td>
<td>3</td>
<td>Agronomy 2051</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
<td>Biology 1002</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics 1001</td>
<td>2</td>
<td>Civil Engineering 1510, 1550; or 2500, 2510</td>
<td>3-4</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Civil Engineering 2450</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
<td>Engineering 2060</td>
<td>2</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
<td>English 3002 or ROTC</td>
<td>3-4</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2-3</td>
<td>Mathematics 2057</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physics 2101, 2102</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approved technical electives</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33-35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science degree in chemistry from Southern University and a Bachelor of Science in Chemical Engineering degree from LSU. The first three years of course work are taken principally at Southern University and the last two years principally at LSU.

**CURRICULUM IN CHEMICAL ENGINEERING**

**TOTAL SEM. HRS.: 135**

*A grade of "C" or better in each of the basic science preparatory courses completed—Chemistry 1201 and 1202, Physics 2101 and 2102 (or 1201 and 1202), and Mathematics 1550, 1552, and 2065—is required before students may register for any chemical engineering course other than Chemical Engineering 2171.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 1201</td>
<td>4</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**TOTAL:** 33-34

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Engineering 3172, 3173, 4101, 4102, 4104</td>
<td>16</td>
</tr>
<tr>
<td>Chemistry 4491, 4492</td>
<td>6</td>
</tr>
<tr>
<td>Electrical Engineering 2950</td>
<td>3</td>
</tr>
<tr>
<td>English 3002 or ROTC</td>
<td>3-4</td>
</tr>
<tr>
<td>Mechanical Engineering 2733</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** 34-35

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Engineering 4151, 4152, 4264</td>
<td>11</td>
</tr>
<tr>
<td>Mathematics 2065</td>
<td>3</td>
</tr>
<tr>
<td>Physics 1202, 1209; or 2102, 2109</td>
<td>4-5</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**TOTAL:** 33-35

**CURRICULUM IN SUGAR ENGINEERING**

**TOTAL SEM. HRS.: 133-135**

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 1201, 1208; or 2101, 2108</td>
<td>4-5</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**TOTAL:** 31-33

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Engineering 3172, 3173, 4101, 4102, 4104</td>
<td>16</td>
</tr>
<tr>
<td>Chemistry 2262, 4491</td>
<td>6</td>
</tr>
<tr>
<td>Electrical Engineering 2950</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics 1001</td>
<td>2</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Approved technical or business electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** 33

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Engineering 4151, 4152, 4264</td>
<td>11</td>
</tr>
<tr>
<td>Civil Engineering 2450</td>
<td>3</td>
</tr>
<tr>
<td>Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Approved chemical engineering electives</td>
<td>3</td>
</tr>
<tr>
<td>Approved chemical engineering laboratory elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Approved technical or business electives</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL:** 35

**DEPARTMENT OF CIVIL ENGINEERING**

**CHAIRMAN:** Seals, Professor

**PROFESSORS:** Arman, Avent, Singh, Tumay

**ASSOCIATE PROFESSORS:** Aktan, Alawady, Buckner, Gopu, Hill, Malone, Poplin, Suhayda, Tittlebaum

**ASSISTANT PROFESSORS:** Acar, Field, Gipson, Illangasekare, Pack, Roy, Voyiadjis

**INSTRUCTORS:** Kelly, Poe, Vaughn, Wolf

**OFFICE:** 3502 CEBA Building

**TELEPHONE:** (504) 388-8442
Civil engineering is the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgement to develop economic ways to utilize materials and forces of nature for the well-being of people in creating, improving, and protecting the environment; in providing facilities for community living, industry, and transportation; and in providing structures.

The civil engineering curriculum is designed to provide a broad but integrated education in the scientific, mathematical, engineering, socio-humanistic, and ethical principles that are the basis for a successful professional career. The curriculum also provides sound preparation for continued professional development through informal studies, continuing education programs, or graduate study in a specialized engineering or related field. The philosophy of the faculty is to offer students a quality education to prepare them to enter any of the fields of civil engineering. The department assists students in achieving the technological and interpersonal competencies, as well as a sensitivity to and understanding of socio-political issues, necessary for the professional practice of civil engineering.

Civil engineering graduates can practice in the fields of structural, transportation, hydraulic, water resources, geotechnical, construction, environmental, and public works engineering. They are employed by private industry as well as by local, state, and federal governmental agencies. Many are employed by private consultants and ultimately establish their own consulting engineering practices.

Typically, the successful civil engineer is a registered professional engineer who affiliates with various professional and technical societies. The department recommends that its students join and participate in the student chapter of the American Society of Civil Engineers and encourages each senior to take the Fundamentals in Engineering examination which is a partial requirement for registration as a professional engineer.

The civil engineering curriculum is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

**CURRICULUM IN CIVIL ENGINEERING**

**TOTAL SEM. HRS.: 134**

**Approved Civil Engineering Analysis Electives:** Civil Engineering 3420, 4450.

**Approved Civil Engineering Design Electives:** Civil Engineering 4140, 4300, 4310, 4400, 4420, 4425, 4600.

**Approved Civil Engineering Project Electives:** Civil Engineering 4430, 4760.

**Approved Technical Electives:** Agricultural Engineering 3374, 4274; Civil Engineering 3440, 4120, 4130, 4200, 4220, 4250, 4440, 4500, 4550, 4560, 4610, 4620, 4780; Mathematics 4038/Mechanical Engineering 4563.

Note: Analysis, design, and project elective courses may also be used as technical electives if other curricular requirements have been satisfied.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td>6</td>
<td>Civil Engineering 2200, 2450, 2720</td>
<td>9</td>
</tr>
<tr>
<td>Civil Engineering 1510, 1550</td>
<td>4</td>
<td>Civil Engineering 2710 or ROTC</td>
<td>1</td>
</tr>
<tr>
<td>Engineering Graphics 1001</td>
<td>2</td>
<td>Economics 2020 or 2030</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics 2154 or ROTC</td>
<td>2</td>
<td>Engineering 2060</td>
<td>2</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>English 3002 or ROTC</td>
<td>3</td>
</tr>
<tr>
<td>Geology 1001</td>
<td>3</td>
<td>Mathematics 2057, 2065</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
<td>Physics 2101, 2102, 2108</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approved humanities/social science elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td></td>
<td><strong>33</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 2250, 3100, 3110, 3200, 3300, 3350, 3400, 3410, 3415, 3600, 3700</td>
<td>24</td>
<td>Civil Engineering 4410, 4770</td>
<td>4</td>
</tr>
<tr>
<td>Electrical Engineering 2950</td>
<td>3</td>
<td>Mechanical Engineering 3133</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Engineering 3710</td>
<td>3</td>
<td>Approved civil engineering analysis elective</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical Engineering 3333</td>
<td>3</td>
<td>Approved civil engineering design electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approved civil engineering project elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approved humanities/social science electives</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approved technical electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td></td>
<td><strong>33</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING**

CHAIRMAN: Marshak, *Professor*

PROFESSORS: Harlow, Kak, Kinney, Porter, Tan, Voss

ASSOCIATE PROFESSORS: Ajmera, Aravena, Arazi, Cho, Conners, Ho, Nethken, Richards

ASSISTANT PROFESSORS: El-Amawy, Huner, Klinkhachorn, Latif, Mirbod, Olivier, Sharma, Trivedi

Electrical and computer engineering students receive a thorough foundation in mathematics, physics, chemistry, and introductory engineering during the first two years. Emphasis during the junior and senior
years is on advanced engineering concepts and design. This prepares students for excellent career opportunities in areas such as digital systems, computer engineering, energy conversion, power systems, communications, network design, control systems, electronics, semiconductor devices, signal processing, and electromagnetics, as well as many interdisciplinary areas. With the background in fundamental theory and laboratory practice provided in the curricula, graduates are prepared to contribute and progress in their chosen technological fields.

The basic curriculum provides a broad background in electrical engineering through the required course sequence and an in-depth background through the elective course programs. The electrical engineering electives permit students to develop a program in one of the four areas of technical specialization, as outlined below. The approved technical electives permit students to obtain more depth in the chosen area, explore other areas of electrical engineering, or explore other fields of engineering and science. The basic curriculum is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

A computer engineering option is available for students desiring more comprehensive knowledge of the principles that underlie the organization, design, and application of computer systems. This option is not ABET accredited.

A student must take all of the required courses in either the basic electrical engineering curriculum or the computer engineering option, as stated below, in order to obtain a degree in either of these fields.

Students interested in continuing their education through master's and doctoral programs are advised to seek academic counseling early and to make judicious use of their undergraduate electives.

**CURRICULUM IN ELECTRICAL ENGINEERING**

TOTAL SEM. HRS.: 136

A grade of "C" or better in Electrical Engineering 2120, Mathematics 1552, and Physics 2102 is required before students may register for any electrical engineering course other than Electrical Engineering 2720.

In order to develop expertise in at least one of the many areas of electrical engineering, elective courses may be concentrated in one of the following four areas of specialization: (1) Digital Systems—digital system design, microcomputers, and computer applications; (2) Electronics—theory, design, and fabrication of solid-state devices and design of electronic circuits and systems; (3) Energy—energy conversion, power system design and analysis, and control of power systems; and (4) Systems and Signal Processing—automatic control, networks, signal processing, and communication. Additional information concerning these areas and guidelines for selecting electives are available in the departmental office.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 2101, 2108</td>
<td>4</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering 3120, 3220, 3221, 3320, 3420, 3430, 3720, 3721, 3750, 3751</td>
<td>25</td>
</tr>
<tr>
<td>Mathematics 2057</td>
<td>3</td>
</tr>
<tr>
<td>Approved engineering (non-electrical) elective</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1250, 1251</td>
<td>6</td>
</tr>
<tr>
<td>Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering 2120, 2130, 2230, 2231, 2720</td>
<td>13</td>
</tr>
<tr>
<td>Mathematics 2090</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2102</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering 4510, 4640</td>
<td>6</td>
</tr>
<tr>
<td>Electrical engineering design electives</td>
<td>12</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved technical electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
Continuing

enrollment

appropriate

is

broadly

oriented

n

neering

well

curriculum

n

used

approved

selects

for
tri
cal,
to

Approved

Electrical

Computer

Science

Approved

Electives

Physics

Mathematics

English

Training

Engineering

3720,

YEAR

A

technologist

group

into

such

and

mechanical

as

sciences

As

The

applies

as

mechanics,

materials

science,
circuits

electronic

theory,

and

thermal

sciences

in
civil,

electrical,

and

mechanical

engineering.

With

approval

of

the

dean

of

the

College

of

Engineering,

the

student

selects

a

cohesive

group

of

teaching

electives

and

humanities

and

social

science

electives

from

the

college's

approved

list.

Only

courses

designed

for

engineering

majors

are

acceptable

in

this

curriculum,

which

has

been

used

primarily

as

preparation

for

graduate

study.

This

program

is

not

accredited

by

the

Accreditation

Board

for

Engineering

and

Technology.

ENGINEERING SCIENCE

Engineering science is an interdisciplinary curriculum leading to the Bachelor of Science in Engineering Science degree. The requirements are rather flexible within the 137 hours needed for the degree. In addition to the basic sciences and mathematics, the program includes a group of courses from various engineering disciplines such as mechanics, materials science, circuits and electronic theory, and thermal sciences in civil, electrical, and mechanical engineering. With approval of the dean of the College of Engineering, the student selects a cohesive group of technical electives and humanities and social science electives from the college's approved list. Only courses designed for engineering majors are acceptable in this curriculum, which has been used primarily as preparation for graduate study. This program is not accredited by the Accreditation Board for Engineering and Technology.

ENGINEERING TECHNOLOGY

Recognizing the growing need for individuals trained in the application of fundamental sciences and engineering concepts to many engineering problems encountered in industry today, the college established the curriculum in engineering technology in 1972. This degree program is administered by the College of Engineering.

The four-year program is designed to provide industry with technologists who can work with engineers as well as direct the work of skilled craftsmen in developing new designs, materials, or products. Like professional engineers, engineering technologists are members of the engineering team. Their training develops practice-oriented skills, as opposed to the more mathematical and theoretical capabilities of the engineer. The engineering technologist applies scientific knowledge and engineering methods in combination with technical skills to support overall engineering activities.

Training in basic engineering design technology prepares the individual for employment as an engineering assistant, production planner, tool designer, job-methods technician, product designer, customer-service engineer, specifications writer, or engineering draftsman. The curriculum is designed to produce a technologist broadly trained to carry out assignments in data acquisition and design. The curriculum also contains an elective group to give background to work effectively in a specific discipline or to carry out specialized functions appropriate to interests or needs of a particular industry. The demand for technologists to fill such assignments is greater than the current output. Thus, excellent job opportunities exist for qualified individuals.

Engineering technology students begin the mathematical sequence with college algebra. While normal entry into the curriculum is through Junior Division, some students may earn initial credits applicable to the engineering technology program through enrollment in the Drafting Institute, sponsored by the Division of Continuing Education.
CURRICULUM IN BASIC ENGINEERING DESIGN TECHNOLOGY
TOTAL SEM. HRS.: 135-136

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Engineering Graphics 1001, 1004</td>
<td>5</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1021, 1022</td>
<td>6</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>2-3</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>6</td>
</tr>
</tbody>
</table>

31-32

JUNIOR YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Mechanization 3082</td>
<td>3</td>
</tr>
<tr>
<td>or Electrical Engineering 2950</td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering 2171 or Engineering 3950, 3951</td>
<td>3-4</td>
</tr>
<tr>
<td>Civil Engineering 2400, 2405</td>
<td>6</td>
</tr>
<tr>
<td>Engineering Graphics 3105, 3151</td>
<td>5</td>
</tr>
<tr>
<td>Industrial Engineering 4104</td>
<td>3</td>
</tr>
<tr>
<td>Speech 2060</td>
<td>3</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved technical electives</td>
<td>6</td>
</tr>
</tbody>
</table>

35-36

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 1510, 1550, 2520</td>
<td>7</td>
</tr>
<tr>
<td>Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Engineering 2060</td>
<td>2</td>
</tr>
<tr>
<td>Engineering Graphics 2154, 2162</td>
<td>4</td>
</tr>
<tr>
<td>Industrial Engineering 2603</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1550</td>
<td>5</td>
</tr>
<tr>
<td>Electives or ROTC</td>
<td>3-4</td>
</tr>
</tbody>
</table>

35-36

SENIOR YEAR

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 4500</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics 4152, 4153, 4243, 4255</td>
<td>12</td>
</tr>
<tr>
<td>Finance 3200</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Engineering 4607</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical Engineering 4653</td>
<td>3</td>
</tr>
<tr>
<td>Nuclear Science 3411</td>
<td>3</td>
</tr>
<tr>
<td>Approved technical electives</td>
<td>6</td>
</tr>
</tbody>
</table>

33

DEPARTMENT OF INDUSTRIAL ENGINEERING

CHAIRMAN: Biles, Professor
PROFESSORS: Hall, Mann, Zohdi
ASSOCIATE PROFESSORS: Bruckner, Pruett, Ray
ASSISTANT PROFESSORS: Aghazadeh, Graves, Hotard, Parks
INSTRUCTORS: Pamukcu, Thomas, Vasudev

Industrial engineering involves application of scientific principles to design, installation, and improvement of integrated systems of people, materials, and equipment to provide the most effective operating and work procedures. It combines principles of human behavior with concepts of engineering procedure or analysis. Industrial engineers engage in work measurement, methods improvement, statistical quality control, plant layout, engineering economy, production control, manufacturing process, industrial automation and robotics, material handling, cost and budgetary control, and operation research studies.

The industrial engineer combines the abilities of an engineer and a manager. These include an aptitude for mathematics, statistics, and economics, as well as for the basic engineering sciences; an interest in all kinds of jobs and the machines and people who produce goods; and the ability to use technical knowledge in a practical way.

Industrial engineers' background, experience, and training give them wide acquaintance with industrial problems. Recent developments, such as widespread industrial interest in operations research and automatic data processing, have made the industrial engineers' entrance into management even more likely, for their training gives familiarity with quantitative methods of production control. At present, the demand for industrial engineers exceeds the supply, thus assuring job opportunities.

The industrial engineering curriculum is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

CURRICULUM IN INDUSTRIAL ENGINEERING
TOTAL SEM. HRS.: 136

Industrial Engineering Electives: Choose from Industrial Engineering 4382, 4453, 4486, 4490, 4540, 4607, 4785; Computer Science 3371; and Mechanical Engineering 4653. Credit may be earned for only one of the following: Industrial Engineering 4607 or Mechanical Engineering 4653.

OFFICE: 3128 CEBA Building
TELEPHONE: (504)388-5112
DEPARTMENT OF MECHANICAL ENGINEERING

CHAIRMAN: Lester, Professor

PROFESSORS: Arnas, Hartley, Maples, Matula, McPhate, Miller, Raman, Sabbaghian, Thompson, Whitehouse
ASSOCIATE PROFESSORS: Brewer, Courter, Cundy, Eaton, Yannitell
ASSISTANT PROFESSORS: Acharya, Catalano, Patel, Sehitoglu, Somerton

The mechanical engineer is primarily concerned with thermal and mechanical energy. Thermodynamics and heat transfer are the basic sciences involved in thermal energy, which includes the transmission of thermal energy (as in a boiler where the heat of the burning fuel is used to produce steam) and the conversion from thermal to mechanical energy (as in an internal combustion engine). Applications in this area include environmental control, heating and air conditioning, and refrigeration as well as power-plant design and analysis.

Mechanical energy is that associated with motion and force. Dynamics is the basic science involved, and the applications, often referred to as machine design, are numerous. The control system in an airplane transforms hydraulic energy into the precise motions of the control flaps and rudder. The power train of an automobile converts the energy output of the engine into the desired motion of the automobile. Extremely precise mechanical systems are required for tape drives, printers, etc., in the computer industry.

Some mechanical engineers work in specific industries. In the petrochemical industry, they design and maintain production and refining equipment. In the automotive, aerospace, and manufacturing industries, they design and produce mechanical components and systems.

The mechanical engineering curriculum is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

CURRICULUM IN MECHANICAL ENGINEERING

TOTAL SEM. HRS.: 135

A grade of "C" or better is required in Chemistry 1202, Mathematics 1552, and Physics 2101 (or equivalent courses) before a student may enroll in Mechanical Engineering 2333.

ROTC is optional. If it is not taken in the freshman year, an approved technical elective must be scheduled in the senior year.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>Economics 2030</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics 1001</td>
<td>2</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 2101, 2108</td>
<td>4</td>
</tr>
<tr>
<td>Speech 1061 or ROTC</td>
<td>2-3</td>
</tr>
</tbody>
</table>

35-36

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2001</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering 3950, 3951</td>
<td>4</td>
</tr>
<tr>
<td>Civil Engineering 3400</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Engineering 3201, 3302, 4362, 4425, 4510</td>
<td>15</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>6</td>
</tr>
<tr>
<td>Approved industrial engineering electives</td>
<td>3</td>
</tr>
</tbody>
</table>

34

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Engineering 3599, 4419, 4511, 4516</td>
<td>10</td>
</tr>
<tr>
<td>Mechanical Engineering 2733, 3333, 3701</td>
<td>7</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>9</td>
</tr>
<tr>
<td>Approved industrial engineering electives</td>
<td>6</td>
</tr>
</tbody>
</table>

32

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>8</td>
</tr>
<tr>
<td>Engineering Graphics 1001</td>
<td>2</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1550, 1552</td>
<td>10</td>
</tr>
<tr>
<td>Physics 2101, 2108</td>
<td>4</td>
</tr>
<tr>
<td>Approved humanities/social science electives</td>
<td>3</td>
</tr>
<tr>
<td>ROTC</td>
<td>0-3</td>
</tr>
</tbody>
</table>

33-36

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering 2450</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science 2262</td>
<td>3</td>
</tr>
<tr>
<td>Electrical Engineering 2950</td>
<td>3</td>
</tr>
<tr>
<td>English 3002 or ROTC</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Engineering 2603</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 2057</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical Engineering 2333, 2733, 2833, 3133</td>
<td>12</td>
</tr>
<tr>
<td>Physics 2102, 2109</td>
<td>4</td>
</tr>
</tbody>
</table>

34
JUNIOR YEAR  SEM. HRS.  SENIOR YEAR  SEM. HRS.
Civil Engineering 3405........................................... 4  Mechanical Engineering 3801, 4143, 4172, 4201, 4202, 4232, 4401, 4611 .......................... 13
Economics 2030................................................ 3  Approved humanities/social science electives... 9
Electrical Engineering 3950, 3951.................................. 4  Approved technical electives............................ 9-12
Mathematics 4037.................................................. 3
Mechanical Engineering 3602, 3701, 3752, 4133, 4233, 4343, 4433 .......................... 17
Approved humanities/social science elective...... 3

34

NUCLEAR ENGINEERING

A graduate program leading to the degree of Master of Science in Nuclear Engineering is available to properly qualified students who have obtained the bachelor’s degree in one of the branches of engineering or physical science or have other suitable education and experience. The program aims to develop competence in nuclear engineering and related sciences.

The Nuclear Science Center provides facilities for nuclear engineering experiments and research in areas including high-intensity irradiations, nuclear reactions, spectroscopy, radio-chemistry, radiation chemistry, nuclear reaction analysis, industrial isotope applications, nondestructive testing, health physics, radiation protection, and personnel monitoring. Opportunities are provided for research with the LSU System Network Computer Center and to participate in cooperative research programs at the National Laboratories of the United States Department of Energy.

DEPARTMENT OF PETROLEUM ENGINEERING

CHAIRMAN: Bassiouni, Associate Professor
OFFICE: 3516 CEBA Building
TELEPHONE: (504)388-5215

CAMPANILE CHARITIES PROFESSOR OF OFFSHORE MINING AND PETROLEUM ENGINEERING: Bourgoyne
LSU FOUNDATION HOPKINS P. BREAZEALE PROFESSOR: Desbrandes
PROFESSOR: Holden
ASSOCIATE PROFESSORS: Bernard, Langlinais, Whitehead
ASSISTANT PROFESSORS: Constant, Monger, Wojtanowicz
INSTRUCTORS: Aubert, McConnaughhay, Topazio

Although the petroleum engineering curriculum is designed primarily for careers in the drilling and production aspects of the petroleum industry, it is suitable for careers in related areas such as ground water hydrology, geothermal energy, solution mining, and underground storage or disposal of fluids. Professional courses in drilling and production, well design, reservoir engineering, petrophysics, well logging, and the phase behavior of hydrocarbon systems follow basic course work in mathematics, chemistry, physics, geology, and the engineering sciences. Attention is given to economic evaluation of drilling and production operations.

The department is active in obtaining summer employment in the petroleum industry for its students. The department also strongly recommends that its students join and participate as student members in the Society of Petroleum Engineers of AIME and take the Engineer-in-Training (EIT) examination during the senior year as preparation for registration as a professional engineer.

The petroleum engineering curriculum is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

CURRICULUM IN PETROLEUM ENGINEERING

TOTAL SEM. HRS.: 135

A grade of “C” or better in Mathematics 1550, 1552 and Physics 2101 is required before students may register for any petroleum engineering course other than Petroleum Engineering 2020 and 3025. In addition, a 2.00 gpa is required for all petroleum engineering courses attempted at LSU before students may register for any petroleum engineering course numbered above 3032. Credit for Petroleum Engineering 3032 (or its equivalent) will not be accepted from any institution other than LSU. Students transferring to this curriculum from institutions outside the LSU System or from non-engineering disciplines within the LSU System must have earned at least a 2.50 average on all course work attempted at U.S. institutions. Students transferring to this curriculum from other engineering disciplines within the LSU System must have earned at least a 2.30 average on all course work attempted at U.S. institutions.

A student electing ROTC in place of English 3002 must have a minimum of 3 sem. hrs. of prior credit in ROTC.
FRESHMAN YEAR

Chemistry 1201, 1202, 1212 ................................... 8
English 1001, 1002 ........................................... 6
Geology 1001, 1601 ........................................... 4
Mathematics 1550, 1552 ..................................... 10
Physics 2101, 2108 .......................................... 4
Electives or ROTC ............................................. 2-3

34-35

SEM. HRS.

SOPHOMORE YEAR

Chemistry 2261 .............................................. 3
Civil Engineering 2450 ..................................... 3
Engineering 2060 .......................................... 2
Engineering Graphics 1001 ................................ 2
English 3002 or ROTC ....................................... 3-4
Geology 1003 .................................................. 3
Mathematics 2057, 2065 ..................................... 6
Petroleum Engineering 2020 ................................ 3
Physics 2102, 2109 .......................................... 4
Approved humanities/social science electives .... 3

32-33

SEM. HRS.

JUNIOR YEAR

Civil Engineering 3400 ..................................... 3
Electrical Engineering 2950 ................................ 3
Mechanical Engineering 2833, 3133, 3333 .......... 9
Petroleum Engineering 3025, 3031, 3032, 
3034, 3036 ................................................... 13
Approved humanities/social science electives .... 6

34

SEM. HRS.

SENIOR YEAR

Petroleum Engineering 3053, 4045, 4046, 
4051, 4052, 4057, 4058, 4059, 4060 ................. 19
Approved geology elective ................................ 3
Approved humanities/social science electives .... 9
Approved technical elective ................................ 3

34

SEM. HRS.

Research Units

DIVISION OF ENGINEERING RESEARCH

DIRECTOR: Hartley, Professor

OFFICE: 3216 CEBA Building
TELEPHONE: (504) 388-6003

The Division of Engineering Research, established in 1924 as the Engineering Experiment Station, provides administrative and technical support services for units engaged in research in the College of Engineering. Services provided include word processing, accounting for grants and contracts, assistance with purchasing on grants and contracts, central machine shops, equipment maintenance and repair, and graphic arts services. In addition, the division assists the faculty with technology transfer activities which provide training and information for Louisiana industries.

The Engineering Research Council includes the Associate Dean for Research and Graduate Activities, who acts as chairman, the Director of the Division of Engineering Research, one representative from each of the departments of the college, and one representative from each institute and center affiliated with the college. The dean of the college is an ex officio member. Subject to review and approval by the dean, the Council formulates policies on matters relating to research activities in the college.

HAZARDOUS WASTE RESEARCH CENTER

DIRECTOR: Thibodeaux, Professor

OFFICE: 3418 CEBA Building
TELEPHONE: (504) 388-6770

The Hazardous Waste Research Center, an EPA Center of Excellence, supports research on hazardous wastes and the problems associated with their proper treatment and disposal. The center's comprehensive program includes basic research on incineration, treatment alternatives, and chemicals/materials interaction, applied research to help solve immediate problems, and technology transfer to communicate the advances being made. Projects are often interdisciplinary, incorporating faculty and facilities campus-wide.
The Louisiana Water Resources Research Institute fosters and supports projects in water research by using facilities and professional skills of the regular University departments. Research preference is given to projects that have a significant training feature for students in the fields of hydrogeology, surface and ground water, or the legal, engineering, and economic phases of water development.
General College provides the administrative structure for a variety of degree and nondegree programs. Three undergraduate degree programs, as shown in the following chart, are designed to meet the academic requirements for students whose career plans require undergraduate curricula that are too broad in nature to be logically or appropriately assigned to one academic school or college.
Additionally, General College currently administers nondegree programs that have been tailored to meet the academic needs of nontraditional students seeking admission to LSU. These include programs for adult special students (PASS); nonmatriculated students (NMATR); students concurrently enrolled at LSU and Southern University (SCOOP); students enrolling for the summer term only (SU); special students that are permitted to enroll but are not admitted to the University (NORAD); students enrolled in preprofessional curricula in allied health, nursing, optometry, and pharmacy; and students admitted to LSU at Alexandria but enrolled in courses sponsored by LSU.

All degree and nondegree programs are consistent with the college’s commitment of helping students plan individual programs of study which conform to high standards of excellence and of permitting students to achieve individual, professional, and educational goals of an interdisciplinary nature.

ADMISSION REQUIREMENTS

Within the framework of University regulations, students may be admitted to the college according to the following policies:

a. **Students admitted from Junior Division** must have completed a minimum of 24 semester hours with a 2.00 average on all work taken and on all work taken in the LSU System.

b. **Students admitted from other divisions of the University** are expected to meet the same requirements as those admitted from Junior Division.

c. **Transfer students** from accredited colleges and universities who have met the general entrance requirements of the University and who have pursued college courses equivalent to those offered in Junior Division may be admitted to the college on the same conditions as those governing the entrance of students from Junior Division. Transfer credits acceptable for admission purposes shall be valid for degree credit in the college only to the extent to which they represent courses acceptable in the curricula of the college. Transfer students applying for credit in any department or school of the college may be required to take a comprehensive examination before credit is allowed.

Any additional requirements for admission may be found in the individual curriculum descriptions on the following pages.

DEGREE REQUIREMENTS OF THE COLLEGE

To qualify for a particular degree in this college, a student must meet the following requirements:

1. Complete an established program of studies and be approved for the degree by the faculty and the dean of the college.

2. In addition to having satisfied the admission requirements of the college and the department concerned, satisfactorily complete a curriculum with at least a 2.00 average in all courses required for the degree and an overall 2.00 average.

3. Earn a specified number of credits while registered in the college, depending on the individual’s curricular requirements. In all cases, students transferring into the college must meet a residency requirement.

4. Attain proficiency in English by obtaining an acceptable grade in English 1002.

5. In the final year, complete the check-out of all course work required for the degree during the semester prior to the semester in which the degree is to be awarded.

STUDENT RESPONSIBILITY

Each student bears final responsibility for selecting an academic program and adhering to all published regulations and degree requirements of the college. Each student must assume responsibility for the check-out of course work required for the degree.

MAXIMUM COURSE LOAD AND CORRESPONDENCE WORK

The maximum load for which a student in this college may register is 18 semester hours during the regular semester and 10 semester hours during the summer term, including any correspondence work taken simultaneously. Exceptions to this must have approval of the dean. Students
enrolled in correspondence work must complete the final examination in the course before they will be allowed to register for the maximum of 18 hours.

Students in the college who are on scholastic probation may be placed on a restricted schedule by the dean and will remain so until their overall average has been raised sufficiently to indicate that they are capable of carrying a larger load.

**REQUIREMENTS FOR A SECOND BACHELOR’S DEGREE**

Students holding baccalaureate degrees who wish to obtain a second baccalaureate degree may do so by registering in the college and completing a minimum of 30 semester hours beyond their previous degree requirements. A minimum 2.00 average must be earned on this subsequent work.

**ADMINISTRATION AND COUNSELING**

Academic records for students enrolled in General College are maintained in the office of the dean. The counseling program in the college provides students with an opportunity to seek assistance in both academic and personal matters.

**PLACEMENT SERVICES**

Criminal justice or general studies students may use the services of the Career Opportunity Center in Himes Hall. These services include counseling, job-seeking skills workshops, job search handbooks, résumé service, career days, and on-campus recruiting and interviews.

The Center for Engineering and Business Administration (CEBA) Placement Office arranges interviews for students in construction. Students should contact this office as soon as they register each fall in order to receive information concerning job opportunities.

**Division of Interdisciplinary Studies**

**DEPARTMENT OF CONSTRUCTION**

CHAIRMAN: Kaple, Associate Professor
ASSOCIATE PROFESSORS: Nethken, Poplin
ASSISTANT PROFESSORS: Kinchen, O’Quinn, Spring
INSTRUCTOR: Rosso

The Department of Construction offers the degree of Bachelor of Science in Construction. The department recognizes that its graduates are professionals, distinct from engineers and architects. The curriculum offers a broad management and technical education which includes basic science, mathematics, and engineering. The professional component of the curriculum provides a thorough understanding of the construction industry and prepares students for management-level positions in construction.

**CURRICULUM IN CONSTRUCTION**

TOTAL SEM. HRS.: 135

*English Proficiency:* Students must obtain a grade of "B" or better in English 1002 or a grade of "C" or better in English 1003.

*Course Sequence:* Prerequisites are rigidly enforced.

*Residency:* Students must earn at least 24 of the last 30 hours offered toward the degree in residence in the Department of Construction.
FRESHMAN YEAR SEM. HRS.
Computer Science 1248 ........................................... 3
Construction 1011, 1511, 1583 ................................... 7
English 1001, 1002 .................................................. 6
Environmental Studies 1000 or ROTC .................... 2-3
Geology 1001, 1601 .................................................. 4
Mathematics 1022, 1441 ............................................ 6
Approved humanities elective ............................... 3
Approved social science elective .......................... 3

34-35

JUNIOR YEAR SEM. HRS.
Civil Engineering 3082, 3700 .................................... 4
Construction 3083, 3091, 3171, 3573, 3574, 3579 ................. 18
Industrial Education 2051 ........................................ 3
Industrial Engineering 3201 ...................................... 3
Management 3159 .................................................... 3
Management 4164 or 4167 ...................................... 3

34

SOPHOMORE YEAR SEM. HRS.
Accounting 2001, 2101 .............................................. 6
Business Communication 2071 or English 2002 .............. 3
Civil Engineering 2081, 2500, 2510 .............................. 6
Construction 2040 .................................................... 3
Economics 2030 ....................................................... 3
Physics 2001, 2002 ................................................... 6
Speech 1061 or ROTC .............................................. 3
Approved social science/humanities elective .............. 3

33-34

DEPARTMENT OF CRIMINAL JUSTICE

ACTING HEAD: Blouin, Associate Professor
PROFESSOR: Parker
ASSOCIATE PROFESSORS: Archambeault, Winfree
ASSISTANT PROFESSORS: Anderson, Elmore

The criminal justice curriculum is designed to provide a thorough overview of the field of criminal justice. The curriculum makes available to students knowledge about the causes and significance of crime, conflict, and other problems of justice. Courses include the legal, philosophical, and moral foundations of justice systems; theories and facts about the nature and causes of crime and delinquency; analysis of the operations of criminal and juvenile justice systems; and the planning and management of courts, community and institutional correctional systems, juvenile facilities, and law enforcement operations.

Through the selection of criminal justice and free electives, students can prepare for careers in specific areas of the criminal justice system. They may choose electives in juvenile justice, corrections, or enforcement. A general program may also be developed. The Master of Criminal Justice degree is available through the Graduate School.

CURRICULUM IN CRIMINAL JUSTICE
TOTAL SEM. HRS.: 130

English Proficiency: Students must obtain a grade of "C" or better in English 1002.
Residency: Students must earn at least 24 of the last 30 semester hours in residence in the Department of Criminal Justice.

FRESHMAN YEAR SEM. HRS.
Anthropology 1003, Geography 1001, History 1003, or Philosophy 1000 (select two) ..................... 6
Books and Libraries 1001 ....................................... 1
Criminal Justice 1107 ............................................. 3
English 1001, 1002 .................................................. 6
Mathematics 1015 or 1021 ....................................... 3
Mathematics 1022 or 1025 or 1100 .......................... 3
Speech 1061 ............................................................ 3
Natural science electives ....................................... 6
Electives or ROTC .................................................. 3

34

SOPHOMORE YEAR SEM. HRS.
Criminal Justice 2131, 2132, 2133, 2399 ....................... 12
English 2002 ................................................................. 3
Experimental Statistics 2000 ................................... 3
Political Science 2051, 2056 .................................... 6
Psychology 2000 ....................................................... 3
Sociology 2001 ............................................................. 3
Electives or ROTC ..................................................... 4

34
Division of General Studies and Community Education

GENERAL STUDIES

HEAD: Schmidt, Professor

OFFICE: 150 Himes Hall
TELEPHONE: (504) 388-8281

The Bachelor of General Studies degree serves the student whose career, professional, and educational goals require considerable flexibility in developing an individualized, interdisciplinary curriculum. The two interrelated components of a student's curriculum are foundation studies, which provide a firm grounding in the liberal arts, and depth studies, which are the primary focus of the student's goals. The student's unique interests, talents, and goals guide curriculum development. For this reason, the student during his or her first semester in the program must establish a curriculum contract in consultation with an academic counselor in General College. The contract and any changes during matriculation must be approved by the head of the general studies degree program and the dean of General College. A student may be dropped from the program if the contract is not developed and approved during his or her first semester in the program.

CURRICULUM IN GENERAL STUDIES

TOTAL SEM. HRS.: 129

To obtain a Bachelor of General Studies degree, a student must satisfy the following requirements.

A. FOUNDATION STUDIES (69 semester hours) represent a broad-based liberal arts education. A total of 18 hours in each of the three groups of subjects listed below plus 15 additional hours in one of the three groups as a group of concentration must be earned. The 69 hours include five additional requirements.

1. A minimum of six hours must be earned in English, including English 1002 which must be passed with a grade of "C" or better.
2. Credit must be earned in at least two mathematics courses at or above the 1000 level, excluding Mathematics 1009 and 1010.
3. Credit must be earned in at least one communications-oriented foreign language course or one applications-oriented computer language course. Foreign language courses are applied to Group I credit, and computer courses are applied to Group III credit.
4. Credit must be earned in at least three subjects from each group.
5. The group of concentration must include at least nine hours of earned credit in courses at or above the 3000 level.


Group III — Biological/Mathematical/Natural/Physical Sciences: Astronomy, Biology, Botany, Chemistry, Computer Science, Geology, Mathematics, Microbiology, Physical Science, Physics, Zoology.

B. DEPTH STUDIES (60 semester hours) serve as the primary mechanism for achieving each student's individual goal. At least 15 of the 60 hours of earned credit must be at or above the 3000 level, and at least an additional 15 of the 60 hours must be at or above the 4000 level.

C. GENERAL REQUIREMENTS.

1. No more than 24 hours can be taken in any one subject.
2. No more than 15 hours of correspondence study can be used for degree credit.
3. No more than 15 hours can be taken on a pass-fail grading basis.
4. No more than 39 hours below the 2000 level can be used for degree credit.
5. No more than four hours of HPRD activity courses and no more than six hours of ROTC can be used for degree credit.
6. At least 45 hours of credit at or above the 3000 level must be earned.
7. A 2.00 gpa in foundation studies, depth studies, the group of concentration, all work taken at LSU, and all work on the entire college record is required to graduate.
8. The last 39 hours of degree credit must be earned while in residence in the program. Correspondence work and advanced placement credit do not apply.

LSU at Alexandria Residence Program

Since LSU at Alexandria (LSUA) is a two-year institution, 3000/4000 level courses are not offered by faculty from that campus. However, a limited number of 3000/4000 level courses are offered by LSU faculty at the Resident Center on the LSUA campus. Students who have been admitted to the LSU general studies degree program may register for these courses and complete the requirements for their degrees at the LSU Resident Center. These students must meet all admission, scholastic, and degree requirements of the LSU program.

COMMUNITY EDUCATION

HEAD: Singleton, Associate Professor
OFFICE: 150 Himes Hall
TELEPHONE: (504) 388-8281

Program for Adult Special Students (PASS)

The “PASS” program involves part-time study for people who want to start or go back to the University somewhat later in life than usual. Some of the goals of this program include helping adults update their skills and add to job success, ultimately seek a degree, develop a hobby so that leisure time may be more rewarding, or simply rejuvenate the mind. Admission and registration procedures are simplified for added convenience. For additional information, see the “Admission to the University” section of this catalog.

Nonmatriculated Students (NMATR)

Nondegree-seeking students and students who meet University admission requirements but do not qualify for enrollment in Junior Division or a senior college may be considered for nonmatriculated admission. NMATR students who seek admission to a degree program should request academic advice from the office of the dean of the college in which they plan to enroll. Courses taken by NMATR students are accepted in the senior college to the extent that they apply toward the degree and are approved by the appropriate dean. All University policies regarding academic action apply to NMATR students. Enrollment in this category cannot be used to satisfy senior college residence requirements unless approved by the appropriate dean.

Not Regularly Admitted Students (NORAD)

Students who are within 12 hours of graduation at another college or university and who take courses at LSU to be transferred to that university for degree credit register as NORAD. No academic action is taken on these students.

Southern Cooperative Program (SCOOP)

Students enrolled at Southern University who take courses at LSU register as SCOOP. These students must receive approval of their course schedule from their Southern University academic dean. No academic action is taken on these students. For additional information, see the “LSU-Southern University Cooperative Programs” section of this catalog.
Summer-Term-Only Students (SU)

Students who are regularly enrolled at other colleges or universities and attend LSU for the summer term only register as SU. They are not regularly admitted students. No academic action is taken on these students.

DIVISION OF PREPROFESSIONAL PROGRAMS

Allied Health Programs

ADVISER: Abadie

General College offers two-year preprofessional curricula which will prepare students to enter the professional years of most programs leading to the bachelor's degree in the allied health fields. The curricula shown below are appropriate for the professional programs indicated. Medical technology and cytotechnology preprofessional curricula are listed in the offerings of the College of Basic Sciences.

LSU offers the final two (clinical or professional) years of Bachelor of Science degree programs in cardiopulmonary science (respiratory therapy), occupational therapy, physical therapy, and rehabilitation counseling through the LSU School of Allied Health Professions, and in dental hygiene and dental laboratory technology through the LSU School of Dentistry in New Orleans. Admission to the junior year of these programs is on a competitive basis, and applications for admission must be submitted well in advance of the date of matriculation at the Medical Center.

In addition to the bachelor's degree programs described in this catalog, the LSU School of Allied Health Professions also offers a Master of Communication Disorders, Master of Health Sciences, and a certificate program in electroencephalographic technology.

Further information on any of these programs may be obtained from the allied health adviser in General College or the LSU Medical Center, School of Allied Health Professions, in New Orleans or Shreveport.

PREPROFESSIONAL CURRICULUM

This curriculum is designed for students desiring to apply for entry into professional curricula in cardiopulmonary science (respiratory therapy), occupational therapy, medical record administration, and physical therapy. Military science or physical education skill courses are not acceptable as electives in fulfilling the 60 sem. hr. pre-allied health credit requirement. Approval of course selections must be obtained from the allied health adviser in General College or from the head of the appropriate professional department at the LSU School of Allied Health Professions; a copy of the approval must be placed in the student's file in General College.

Students enrolled in pre-occupational therapy or premedical record administration programs are required to complete only one 3 sem. hr. lecture course in chemistry. Electives for prephysical therapy students must include a total of 9 sem. hrs. of humanities and social sciences, of which at least 6 sem. hrs. must be at the sophomore level or above.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202</td>
<td></td>
<td>Chemistry 1212</td>
<td></td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td></td>
<td>English course above 2000</td>
<td></td>
</tr>
<tr>
<td>Mathematics 1021, 1022; or 1023; or 1550</td>
<td>5-6</td>
<td>Psychology 2000</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1001, 1002 or Biology 1001, 1002,</td>
<td></td>
<td>Special area requirements (see below)</td>
<td>8-17</td>
</tr>
<tr>
<td>1003, 1004</td>
<td>8</td>
<td>Approved electives</td>
<td>7-16</td>
</tr>
<tr>
<td>Approved electives</td>
<td>4-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Special Area Requirements


Medical Record Administration, 12 sem. hrs.: Vocational Education 2000; Computer Science 1240; English course numbered above 2000; Speech 2060.


PREPROFESSIONAL CURRICULUM IN REHABILITATION COUNSELING

Military science or physical education skill courses are not acceptable as electives in fulfilling the 60 sem. hr. pre-allied health credit requirement. Approval of course selections must be obtained from the allied health adviser in General College or from the head of the Department of Rehabilitation Counseling at the LSU School of Allied Health Professions. A copy of the approval must be placed in the student's file in General College.

FRESHMAN YEAR SEM. HRS. SOPHOMORE YEAR SEM. HRS.
English 1001, 1002 ....................................... 6  HPRD 2500 ............................................. 3
Mathematics 1021 .......................................... 3  Speech 2060 ............................................. 3
Psychology 2000, 2011 .................................... 6  Approved social sciences courses ................. 9-12
Sociology 2001 ............................................. 3  Approved natural sciences courses .............. 6-9
Approved English elective ................................ 3  Approved general studies courses ............. 9-12
Approved social science electives ...................... 9

30

PREPROFESSIONAL CURRICULUM IN DENTAL HYGIENE AND DENTAL LABORATORY TECHNOLOGY

Military science or physical education skill courses are not acceptable as electives in fulfilling the pre-professional requirements. Approval of course selections must be obtained from the allied health adviser in General College or from the Office of Dental Auxiliary Programs, LSU School of Dentistry in New Orleans. A copy of the approval must be placed in the student's file in General College.

FRESHMAN YEAR SEM. HRS. SOPHOMORE YEAR SEM. HRS.
Biology 1001, 1002, 1003, 1004 or Zoology 1001, 1002 ....................................... 8  Psychology 2000 ............................................. 3
Chemistry 1001, 1002 ....................................... 6  Sociology 2001 ............................................. 3
Economics 1010 ............................................. 3  English elective ........................................... 3
English 1001, 1002 .......................................... 6  Special area requirements (see below) ............ 9-12
History 1001 .................................................. 3  Approved electives ...................................... 10-12
Mathematics 1009 .......................................... 3

32

Special Area Requirements

Dental Hygiene, 12 sem. hrs.: Mathematics 1010; Philosophy 1011; one additional course in psychology; one additional course in sociology or anthropology.

Dental Laboratory Technology, 9 sem. hrs.: Physical Science 1001; two additional courses in economics or business administration.

Pre-nursing

ADVISER: Darouse
OFFICE: 153 Himes Hall
TELEPHONE: (504) 388-8245

LSU offers a pre-nursing curriculum which prepares students to enter the professional nursing curriculum leading to the Bachelor of Science in Nursing at the LSU Medical Center School of Nursing in New Orleans.

Admission to the LSU School of Nursing is on a competitive basis, and applications for admission to the sophomore year must be submitted well in advance of the anticipated date of entrance. Students are accepted in the fall and spring of each year. Applications are available in General College.

Pre-nursing requirements vary with each professional school of nursing, and entrance to each school is competitive. Prospective nursing students should obtain the entrance requirements from each school to which they will seek admission.

The following curriculum is designed for students who wish to apply for a bachelor's degree in nursing at the LSU Medical Center School of Nursing in New Orleans.

Information about other nursing programs is available from the nursing adviser in General College.
CURRICULUM IN PRE-NURSING

Students must qualify for Mathematics 1021 to be eligible to schedule Chemistry 1201.
For approved humanities electives, select courses in art, art history, foreign languages, journalism, music appreciation, philosophy, or speech. For approved social science electives, select courses in anthropology, economics, education, geography, history, or political science.

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 1001, 1003, or Zoology 1001</td>
<td>Psychology 2000</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1201, 1202</td>
<td>Sociology 2001</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>Approved humanities electives</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 1021</td>
<td>Approved social science electives</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology 2051</td>
<td>Electives</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pre-pharmacy

Students with a 2.00 average who have completed a minimum of 68 semester hours (including the courses listed below) may apply for admission to a professional school of pharmacy. After three years of satisfactory study in the professional school, the student will receive the degree of Bachelor of Science with a major in pharmacy from that school.

Completion of the following program does not assure acceptance into a degree program offered by another university. Since pharmacy schools have varying requirements, students should consult the catalogs of those schools to which they intend to apply so that they may plan their programs accordingly.

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2001</td>
<td>Mathematics 1021, 1022 or 1023, and 1431</td>
</tr>
<tr>
<td>3</td>
<td>or 1441; or 1550</td>
</tr>
<tr>
<td>Botany 1001</td>
<td>5-8</td>
</tr>
<tr>
<td>Chemistry 1201, 1202, 1212, 2261, 2262, 2364</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>Zoology 1001</td>
</tr>
<tr>
<td>Economics 2030</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Electives (approved by the college) to make a</td>
</tr>
<tr>
<td>English 1001, 1002</td>
<td>total of 68-74 sem. hrs.</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>HPRD courses</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Pre-optometry

Students with a 2.50 average and at least 60 semester hours may be eligible to apply to a professional school of optometry. After four years of satisfactory study in a professional school, the student will be awarded the degree of Doctor of Optometry from that school. The student interested in such a program should declare pre-optometry as a major field and proceed on a schedule including the courses listed below which would be equivalent to the first two years of work for a bachelor’s degree in General College.

Completion of this program does not assure acceptance into a degree program offered by another university. Since optometry schools have varying requirements, students should consult the catalogs of those schools to which they intend to apply so that they may plan their programs accordingly.

<table>
<thead>
<tr>
<th>SEM. HRS.</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 1201, 1202, 1212</td>
<td>Physics 2001, 2002, 2008, 2009; or 1201, 1202,</td>
</tr>
<tr>
<td>8</td>
<td>1208, 1209</td>
</tr>
<tr>
<td>English 1001, 1002; and 2020, 2022 or 2025, 2027</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>Zoology 1001, 1002</td>
</tr>
<tr>
<td>Foreign language courses (through 2053)</td>
<td>Electives (approved by the college) to make a</td>
</tr>
<tr>
<td>3-13</td>
<td>total of 60-68 sem. hrs.</td>
</tr>
<tr>
<td>History courses</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mathematics 1021, 1022; or 1023 or 1550</td>
<td></td>
</tr>
<tr>
<td>5-6</td>
<td>60-68</td>
</tr>
</tbody>
</table>

DIVISION OF INSTRUCTIONAL SUPPORT AND DEVELOPMENT

DIRECTOR: Rankin, Professor
ASSOCIATE DIRECTOR: Tarver

The Division of Instructional Support and Development (DISD), a unit of General College, provides a broad range of instructional support services and media resources which enhance the educational process. The various centers of the division offer services and instructional and administrative support to faculty, students, and University organizations. In some instances, charges are made for services.
The Instructional Resources Center provides audio-visual equipment and electronic repairs and installations. Equipment is delivered and returned by IRC employees at no charge for use by instructors in scheduled academic classes. The Media Production Center designs, produces, and implements instructional technology materials. Services include television production, photography, graphic design, and production of slide/tape programs. The Instructional Support Center provides access to more than 2000 film titles on a variety of subjects and a sound filmstrip collection. The Career Opportunity Center assists graduating seniors in General College and the College of Arts and Sciences in their search for employment. The center sponsors career days and on-campus recruiting by business, industry, and government. The Measurement and Evaluation Center is the central repository for ACT and many advanced-standing test results. The center supports instruction via the LSU test scoring services and administration of instructional and national tests.
Additional information about the following graduate and professional units is published in appropriate catalogs, bulletins, and brochures which may be obtained by contacting the individual unit. The Graduate School Catalog may also be obtained from the Office of Admissions.

**AUDUBON SUGAR INSTITUTE**

DIRECTOR: Polack, Professor  
ASSOCIATE PROFESSOR: Day  
OFFICE: 158 Chemical Engineering Building  
TELEPHONE: (504) 388-2211

The Audubon Sugar Institute, begun in 1887 in New Orleans as the Audubon Sugar School, has an international reputation as a center for training, research, and service for the cane sugar industry.

The 350 ton/day raw sugar factory, about one-tenth the size of a typical Louisiana factory, a unique facility for a college campus, was built on its present site in 1925. While the factory is no longer run for commercial sugar production, it provides facilities for research, instruction, and special test work. Research is dedicated to finding new processes and products that will ultimately benefit the cane sugar industry. The activities of the institute are administered through the Office of Research.

An undergraduate curriculum leading to the degree of Bachelor of Science in Sugar Engineering is offered through the Department of Chemical Engineering. No separate graduate degree is offered in sugar technology. The student obtains an M.S. or Ph.D. degree in a traditional discipline such as chemical engineering, mechanical engineering, or chemistry. Training in sugar technology is achieved through research specialization and by the student’s involvement in the technical activities of the institute.
CENTER FOR ENERGY STUDIES

EXECUTIVE DIRECTOR: Newkome, Professor
ASSOCIATE EXECUTIVE DIRECTOR: Wrighton

OFFICE: E. Fraternity Circle
TELEPHONE: (504) 388-4400

The prime objective of the Center for Energy Studies is to utilize the full potential of the University to assure Louisiana's energy future. As this objective is pursued, unique educational opportunities are provided for students working on current and future energy problems. The functions of the major organizational units within the center are described in the following paragraphs.

Research and Development Division

DIRECTOR: Newkome, Professor
ASSISTANT DIRECTOR: Baumann

OFFICE: E. Fraternity Circle
TELEPHONE: (504) 388-4400

The Research and Development Division is responsible for the development, funding, and business management of single discipline energy-related projects, as well as for the coordination of diverse interdisciplinary research ventures. Research projects are sponsored within four broad areas: (1) energy sources, (2) conservation methodologies, (3) environment-energy relationships, and (4) economic and scientific studies designed to ascertain the effects of energy variables on the citizens of Louisiana and our hemisphere.

Policy Analysis and Planning Division

DIRECTOR: Brossard, Associate Professor

OFFICE: E. Fraternity Circle
TELEPHONE: (504) 388-4400

The functions of the Policy Analysis and Planning Division involve the study of public policy regarding taxation and regulation of the energy industry. Studies focus on the needs of Louisiana with regard to its economy and related energy production, demand, and required technology. Analysis and projections provide input to decision makers in government and industry, as well as to the center administrators, to assist in the selection of research commitments.

Information Services Division

DIRECTOR: Scull, Librarian

OFFICE: E. Fraternity Circle
TELEPHONE: (504) 388-4400

Information Services offers a multi-level and multi-faceted approach to identifying, acquiring, creating, and providing energy information to researchers, public officials and employees, administrators, businessmen, civic groups, and the public. Publications, Louisiana energy information, referral and literature search service, and planning and participating in energy-related conferences are the division's major thrusts.

Institute for Environmental Studies

DIRECTOR: Jackson, Professor
PROFESSORS: Newchurch, Overton
ASSISTANT PROFESSORS: Portier, Shane, Waldon, Winston

OFFICE: 42 Atkinson Hall
TELEPHONE: (504)388-8521

The Institute for Environmental Studies coordinates programs in environmental studies. Its functions are to promote and conduct research, to disseminate knowledge, and to provide general public service directed toward conserving environmental quality.

The institute offers environmentally oriented courses and the Master of Science degree in environmental sciences, a cooperative, multidisciplinary program between LSU and SU. Four options are available: environmental toxicology and environmental management systems offered at LSU and environmental biology and environmental chemistry offered at SU. The institute also serves in a liaison capacity to assist in the effective campus-wide utilization of formal course offerings dealing with environmental topics.
The institute pursues a program of research in environmental toxicology and environmental management, utilizing the assistance of faculty members throughout the University. It also functions in a liaison capacity with other LSU research organizations concerned with environmental matters.

Nuclear Science Center

DIRECTOR: Lambremont, Professor
PROFESSOR: Courtney
ASSOCIATE PROFESSORS: Knaus, McIlhenny, Williams
ASSISTANT PROFESSOR: Lindau

The Nuclear Science Center, while providing services to the University in radiation consulting, radiation protection, and research facilities, is also involved in research and academic programs. Courses in nuclear science are offered in cooperation with several departments of instruction including nuclear options for bachelor's degree programs in chemistry and industrial technology. The center administers the programs leading to the degrees of Master of Science in Nuclear Engineering and Master of Science with a major in nuclear science. The latter program has four options: research, radiation protection, nondestructive evaluation, and radiation science (offered in cooperation with the medical staff of the Mary Bird Perkins Radiation Treatment Center).

In addition to academic and research programs, the center organizes short courses, conferences, and symposia to advise industry and the general public of nuclear applications developments pertinent to Louisiana and the south. Faculty and students cooperate with Department of Energy national laboratories as well as with other departments at LSU.

Laboratories for graduate programs and faculty research are included in the center and in the radioecology field laboratory located south of the main campus on the Ben Hur Farm.

Louisiana Mining and Mineral Resources Research Institute

OFFICE: 118 David Boyd Hall
TELEPHONE: (504) 388-6891

The Louisiana Mining and Mineral Resources Research Institute, supported equally by state and federal funds from the U.S. Department of the Interior, was established at LSU in 1979. The institute supports research encompassing exploration, processing, supply and demand, conservation, and best use of minerals; and the economic, legal, social, engineering, recreational, biological, geographic, ecological, and other aspects of mining, mineral resources, and mineral reclamation.

GRADUATE SCHOOL

DEAN: Cooper, Professor
OFFICE: 128 David Boyd Hall
TELEPHONE: (504) 388-3193

The Graduate School's purposes are to provide opportunities for advanced study and specialization, to instruct students through prolonged association with scholars in the methods of independent investigation, and to foster the spirit of scholarship and research. The Graduate School was established as a center of learning because the University recognized its duty to provide—especially for the people of Louisiana—an environment in which research and free inquiry would thrive and to make available to society the results of these activities.

Admission Requirements

Applicants meeting all requirements stated below are normally granted regular admission. Applicants who fail to meet all requirements may be admitted on probation, provided other substantial evidence of capacity to do satisfactory graduate work is presented. Such evidence might include high quality performance in post-baccalaureate work, high Graduate Record Examination scores (Graduate Management Admission Test scores, where appropriate), and other unusual achievements. Applicants who appear to be admissible on the basis of unofficial and/or incomplete transcripts of previous work and who have satisfactory scores on the GRE General (Aptitude) Test, but who are unable to supply the required records prior to registration, may be
granted provisional admission. In such cases, complete and satisfactory records must be received by the Graduate School within 60 days after the first day of registration (45 days in summer term). If these materials are not received by the date specified or if they prove to be unsatisfactory, the student will not be permitted to register for the following semester. Provisional admission does not in any way guarantee subsequent admission on an unconditional basis. An applicant meeting admission requirements but not desiring to work toward a degree at LSU may register as nonmatriculated if approved by the dean of the Graduate School and by the department in which work is proposed. A student pursuing a graduate degree program elsewhere who wishes to register at LSU as nonmatriculated for one summer term or one semester only will not be required to submit full credentials but may submit a transcript or statement of good standing from the last institution attended and a statement of the highest degree attained.

It should be noted that meeting the minimum requirements, as outlined in the following sections, does not necessarily insure acceptance into a departmental program, since departments may establish higher standards and may impose other special admission requirements and conditions.

Graduate Admission of United States Students

Admission to the Graduate School requires: (1) a bachelor's degree from an accredited college or university; (2) a minimum grade-point average of 2.50 ("A" = 4) for all undergraduate work and at least a 3.00 for all previous graduate work; (3) satisfactory academic standing at the last institution attended; (4) acceptable scores on the GRE General (Aptitude) Test (Graduate Management Admission Test is required by the Departments of Accounting, Finance, Management, Marketing, and Quantitative Business Analysis and for all applicants to the M.B.A. program); and (5) acceptance by the Graduate Committee in the applicant's area of study. Applicants who are narrowly trained or who have taken a significant amount of work on a pass-fail basis or in ungraded courses may be required to submit scores on GRE Subject (Advanced) Tests before their applications can be considered.

Graduate Admission of International Students

An applicant who has completed degree requirements outside the U.S. must present the following: (1) a complete and accurate chronological outline of all previous college-level education; (2) authorized school or university records—transcripts, mark sheets, certificates of degrees—showing all courses taken and all grades received, with certified translations if the records are in a language other than English; (3) a bachelor's degree or its equivalent, with a grade-point average equivalent to a “B” or better (3.00 out of a possible 4) on all previous graduate and undergraduate work from an accredited college or university; (4) if an assistantship is not offered, certification of the availability of sufficient funds to meet all costs while studying at LSU is needed before the letter of admission and Form I-20 will be mailed; (5) satisfactory scores on the GRE General (Aptitude) Test (GMAT where appropriate); and (6) satisfactory scores on the Test of English as a Foreign Language (TOEFL) for those applicants whose native language is not English.

A TOEFL score of at least 525 must be received before a student's application is evaluated for admission. A TOEFL score of at least 550 and an acceptable score on the Test of Spoken English (TSE) are needed for consideration for a graduate assistantship. Application for an assistantship should be made to the department in which the degree is sought. A grade-point average equivalent to a “B” or better (3.00 out of a possible 4) on all previous undergraduate work is the minimum acceptable for graduate admission.

Application deadlines for international students are July 1 for the fall semester, December 1 for the spring semester, and May 1 for the summer term. Applications received after these dates will automatically be processed for the following semester or summer term. Also, when sufficient scholastic records and acceptable evidence of English proficiency are not received early enough to determine admissibility for the semester for which application was made, consideration will be delayed until the following semester. Applicants with immigrant visas who wish to apply after the above dates will be considered on an individual basis.

International applicants whose native language is not English and who have been admitted to Graduate School must take the LSU Comprehensive English Language Test after arrival on campus and before registration. If the test results indicate a deficiency in English, the student will be required to register for the appropriate English language courses with a reduced load of graduate courses. In the case of a major deficiency in English, the Graduate School may require postponement of enrollment in graduate courses until proficiency is demonstrated.

The Graduate School will not consider for admission any person who has entered the U.S. on an I-20 issued by another institution until that person has been enrolled at the institution issuing the I-20.
An international applicant who has completed undergraduate requirements at an accredited U.S. institution should follow the regular admission procedures.

Admission Procedures

Application for admission to the Graduate School should be submitted as early as possible in the academic session immediately preceding the one in which admission is sought. Some departments require that applications be received by a specific date. For information concerning the procedures applicable to a particular field of study, write to the chairman or graduate adviser of the appropriate department. The application must be accompanied by a $20 nonrefundable application fee. An additional nonrefundable $15 late fee will be assessed for all applications received in the Office of Admissions after the following application deadlines: for the summer term, May 1; for the fall semester, July 1; and for the spring semester, December 1.

Final admission decisions are made only after receipt of all credentials which include: (1) the completed "Application for Admission" form (available from the Graduate School) and a $20 nonrefundable application fee sent directly to the Office of Admissions; (2) two copies of official transcripts from each college or university attended sent directly to the Office of Admissions by the institution (requests for transcripts of academic work done at LSU are not necessary); (3) scores on the GRE General (Aptitude) Test (GMAT, where appropriate) sent by Educational Testing Service to the Graduate School; (4) any other specific departmental requirements, such as letters of recommendation.

Admission is only for the semester requested. Persons who are admitted and do not register must make a formal request to be reconsidered for admission for a subsequent semester.

Students previously registered in Graduate School who wish to resume work after an absence of a semester or longer may be required to submit an application for readmission. Since the late application fee also applies to applications for readmission, students should determine sufficiently early whether this application is needed. Official transcripts must be submitted if any work has been taken at another institution during the time the student was not enrolled in Graduate School at LSU.

Graduate Credit

A student may receive graduate credit only for courses taught by members of the graduate faculty or other persons approved in advance by the dean of the Graduate School. Except as noted, a student may receive graduate credit only for work taken while officially enrolled as a graduate student.

Graduate Credit for LSU Seniors

A senior at LSU who needs fewer than 15 semester hours to complete requirements for the bachelor's degree, has maintained a grade-point average of at least 3.00 during the preceding year at LSU, and has a cumulative grade-point average of at least 2.50 may be permitted to register for graduate credit in courses numbered 4000-4999 provided the student registers for all the remaining courses required for graduation and for no more than 15 semester hours total. This privilege applies only during the final semester of the student's undergraduate work and is extended only upon recommendation of the dean of the student's college and approval of the dean of the Graduate School. The head of the department in which the student plans to enroll as a graduate student must also approve the courses taken for graduate credit. A student must complete all undergraduate degree credit courses in order to retain the privilege of obtaining graduate credit for the remaining courses.

Graduate Credit for Adult Special Students (GPASS)

Adult special students who hold a bachelor's degree with an overall grade-point average of at least 2.50 ("A" = 4) and who have not been enrolled in college for the last three calendar years may, with approval of the Graduate School and the appropriate department, be allowed to register for an unlimited number of hours at the 4000 level and up to six hours of credit in courses numbered 5000 and above. These six hours of credit may be taken in one or more semesters.

An adult special student who earns six hours of credit in courses numbered 5000 and above may continue to register for courses at that level only if approved for regular admission to the Graduate School. The six hours of credit earned in courses numbered 5000 and above while registered as an adult special student may be applied to a graduate degree only with approval of the Graduate School and the department offering the degree.
Accelerated Master’s Degree Program

Admission

The accelerated master’s degree program is open to superior undergraduate students who have completed at least 60 semester hours of credit (including advanced placement credit) with a grade-point average of at least 3.50 for all work taken at LSU. (To be eligible, transfer students must have a 3.50 average on all undergraduate work taken prior to attending LSU and must complete at least one semester at LSU with a GPA of 3.50 or better.)

Acceptance into the accelerated program requires approval from the following: (1) the chairman of the undergraduate department in which the student is enrolled; (2) the dean of the college in which the student is enrolled; (3) the chairman of the department or the coordinator of the interdisciplinary program in which the student proposes to work toward the master’s degree; and (4) the dean of the Graduate School. The requested approvals will be given as signatures on a form designed specifically for this program. It is the responsibility of the chairman or coordinator of the graduate program to appoint the student’s graduate faculty advisory committee.

Other admission requirements for graduate study, such as the GRE and the GMAT, will be waived until the student receives the baccalaureate degree and is ready to enter formally into Graduate School. Until that time, admission into the accelerated program will constitute provisional admission into the graduate program. Students will register as graduate students only after receiving the baccalaureate degree and satisfying departmental and Graduate School admission requirements.

Continuing eligibility for the accelerated master’s program will require maintenance of a 3.50 average in all courses which apply to the undergraduate degree and a 3.00 average in all graduate course work.

Degree and Curriculum Requirements

Master’s degrees offered under this program require a minimum of 30 semester hours of graduate credit, including at least six hours of independent study or thesis research. Requirements for the baccalaureate degree will be unaffected.

Students may take a maximum of half of the required hours for the master’s degree while enrolled as undergraduates. These hours may be applied toward the master’s degree provided a GPA of 3.00 is maintained in graduate course work and provided none of these hours apply toward the baccalaureate degree.

A minimum of half of the required hours of graduate study must be taken after the student receives the bachelor’s degree. As is required for all other master’s degrees, half of the required hours must be at the 7000 level or above. Thesis research and independent study may be counted as course work above the 7000 level.

A student may wish to apply some graduate course work toward his or her undergraduate degree. In such instances, the graduate committee can alter the distribution of course work and independent study required for the master’s degree. No course credit can be applied toward more than one degree.

CENTER FOR LATIN AMERICAN AFFAIRS

DIRECTOR: Aguilar, Professor

ASSISTANT DIRECTORS: Brossard, Associate Professor; Hilton, Professor

The purpose of the Center for Latin American Affairs is to promote scholarship, research, teaching excellence, and public service in Latin American areas. This is accomplished primarily through graduate training and research in food and nutrition, health and human resources, environmental issues and housing, energy and technology, economic issues, international trade and finance, music and fine arts, as well as Latin American culture, development, geography, history, and political and social change, with special emphasis on the Latin American community in the U.S.
SCHOOL OF LIBRARY AND INFORMATION SCIENCE

DEAN: Heim, Associate Professor
PROFESSORS: Kraft (Adjunct), Patterson
ASSOCIATE PROFESSORS: Boyce, Buell (Adjunct), Perritt, Shiflett
ASSISTANT PROFESSORS: Chatman, Krieger

Library science courses were first offered by LSU in the summer of 1926. These summer courses, given each year thereafter, culminated in the organization of the Graduate School of Library Science, which was opened in September 1931. In 1981, the name was changed to the School of Library and Information Science. The school offers preparation for positions in all types of libraries and information centers.

The school’s program is accredited by the American Library Association, and the school is a member of the Association for Library and Information Science Education.

A broad general education is the best preparation for library and information science. Undergraduates are advised to develop strong subject concentrations in the areas of their special interests and abilities, since every field of knowledge is useful in the information professions. Courses in computer science will be helpful. The School of Library and Information Science does not require a foreign language for admission; however, course work in one or more foreign languages is advisable for those who expect to prepare for careers in research or technical libraries. Students who expect to become librarians in elementary or secondary schools should plan their undergraduate programs with state teacher certification requirements in mind.

Students working toward the degree offered through the School of Library and Information Science are enrolled in the Graduate School; therefore, applicants must meet the general Graduate School requirements in addition to School of Library and Information Science requirements. Application forms may be obtained from the office of the dean or from the Office of Admissions. Admission will be based on the candidate’s scholastic record and aptitude for a career in the information professions.

Requirements for the Master of Library Science degree are as follows: (1) satisfactory completion of a minimum of 37 semester hours (a maximum of six semester hours of approved graduate-level course work from within the LSU System may be applied to the 37 semester-hour minimum requirement); (2) successful performance on a written comprehensive final examination; (3) fulfillment of the minimum residence requirement of one regular semester or one summer term as a full-time student at this University; (4) completion of the degree program in six years. Credit for individual courses taken more than six years before the completion of the program may be validated with permission of the instructor of the course and the dean, and with approval of the dean of the Graduate School. Requirements for so doing are set by the instructor.

SCHOOL OF SOCIAL WORK

DEAN: Mohan, Professor
OFFICE: 178 Old Law Building
TELEPHONE: (504) 388-5875

ASSOCIATE DEAN—ADMINISTRATION: Roundtree, Professor
ASSOCIATE DEAN—ACADEMICS: Daste, Professor
DIRECTOR OF STUDENT ADMISSIONS, SCHEDULING, EVALUATION, AND COUNSELING: Crane, Instructor
PROFESSORS: Dawson, Midgley
ASSOCIATE PROFESSORS: Balthazar, Behre, Cook, Fatout, Grenier, Hines, Rayne, Reed, Sanzenbach, Stewart
ASSISTANT PROFESSORS: Durrett, Farmer, Gibson, Glaser

The School of Social Work, a professional school at the graduate level, provides two years of social work education leading to the degree of Master of Social Work. It also provides, in cooperation with other colleges of the University, preprofessional education for social work and other related vocations. The school is a charter member of the Council on Social Work Education and is accredited by its Commission on Accreditation. Graduates are eligible for membership in the National Association of Social Workers.

A combined curriculum in arts and sciences and social work is available. Under this plan, a few selected students may be admitted to the School of Social Work following completion of their junior or year in the College of Arts and Sciences. (For details, see “Combined Curricula,” in the “College of Arts and Sciences” section of this catalog.)
The aim of the school is to offer a complete, integrated, and dynamic program of social work education. The objectives of this program are to increase the supply of competent professional personnel for the social work services; to improve the quality of preventive, restorative, and rehabilitative services of social work agencies; to improve service to people; and to enhance the economical and efficient administration of social work services.

Admission to the school is granted by its faculty on the basis of the applicant’s undergraduate record and personal qualifications. Admission requirements and procedures are described in the School of Social Work Bulletin. Juniors or seniors enrolled in other divisions of the University may register for social work courses numbered below 5000 for which they have the specific prerequisites. Graduate students in other departments may register for any social work course, except internship, for which they have the prerequisites.

Students who graduate from accredited Bachelor of Social Work programs and meet the school’s admission requirements will receive credit for SW 5208, 5209, 5213, 5214, and 5505. These students will then be required to complete the remaining 45 sem. hrs. in the curriculum. Thus, students admitted under this policy could complete their degree work in three semesters.

Minimum requirements for the M.S.W. degree include completion of the following: (a) one academic year, ordinarily two consecutive semesters, in residence at LSU; (b) 60 semester hours of credit in professional courses approved by the faculty of the school, including at least 18 semester hours in residence at LSU and specified hours in internship practice courses; (c) a satisfactory thesis or research project; and (d) a scholastic average of 3.00 and a grade of not less than "C" in any course offered for the degree.

The faculty has approved a part-time extramural graduate study program which enables students at Resident Centers in Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans, Shreveport, and Thibodaux to complete most of their course work and internships in the city where the Resident Center is located.

SCHOOL OF VETERINARY MEDICINE

DEAN: Besch, Professor
ACTING ASSOCIATE DEAN: Casey, Professor
ASSISTANT DEAN: Kerr, Professor
ASSISTANT DEAN FOR STUDENT AND PUBLIC AFFAIRS: Rhoades, Professor
COORDINATOR FOR ADVANCED STUDIES: Roberts, Professor
VETERINARY EDUCATIONAL RESEARCH: Ohlendorf, Associate Professor

Department of Epidemiology and Community Health

HEAD: Hagstad, Professor
PROFESSORS: Hugh-Jones, Rhoades
ASSOCIATE PROFESSORS: Shane, Smith
ASSISTANT PROFESSOR: Miller

Department of Veterinary Anatomy and Fine Structure

HEAD: Titkemeyer, Professor
PROFESSORS: Abdelbaki, Hillmann
ASSOCIATE PROFESSORS: Al-Bagdadi, Duffield, Haldiman, Henk

Department of Veterinary Clinical Sciences

HEAD: Lingard, Professor
PROFESSORS: Beadle, Bivin, Carter, Haynes, Hoskins, Watters
ASSOCIATE PROFESSORS: Glaze, Hedlund, Hribernik, J. J. McClure, J. R. McClure, Pechman, Shires, Turnwald
ASSISTANT PROFESSORS: Blass, Claxton, Crawford, Eilts, Foil, Holmes, Hoyt, Karns, Martin, McCoy, Memon, Murray, Neer, Olcott, Olsen, Oz, Waldron
Department of Veterinary Microbiology and Parasitology

HEAD: Storz, Professor
OFFICE: 3313 Veterinary Medicine Building
TELEPHONE: (504) 346-3312

PROFESSORS: Amborski, Barta, Besch, Corstvet, Cox, Dommert, Issel, Klei, Malone, Stewart
ASSOCIATE PROFESSOR: England (Adjunct)
ASSISTANT PROFESSORS: Schnor, Thune, Todd

Department of Veterinary Pathology

HEAD: Casey, Professor
OFFICE: 2307 Veterinary Medicine Building
TELEPHONE: (504)346-3225

PROFESSORS: Roberts, Taylor
ASSOCIATE PROFESSORS: Cho, Hodgin (Adjunct), J. Turk, M. Turk, Snider
ASSISTANT PROFESSORS: Baker, Gaunt, Gossett, Lozano, Miller, Williams

Department of Veterinary Physiology, Pharmacology, and Toxicology

HEAD: Short, Professor
OFFICE: 2536 Veterinary Medicine Building
TELEPHONE: (504)346-3202

PROFESSORS: Crawford, Ingraham, Morrisette
ASSOCIATE PROFESSORS: Flory, Kappel, Lee, Nicholson, Ruhr, Strain
ASSISTANT PROFESSORS: Caprile, Venugopal

The LSU School of Veterinary Medicine admitted its first students to the professional program during the 1973-74 academic year. The original entering class consisted of 36 students, all residents of Louisiana. Class size has increased significantly in recent years to its present maximum of 80. The school participates in the Southern Regional Education Board’s (SREB) program for education in veterinary medicine. Training contracts negotiated through SREB provide a limited number of entering spaces for qualified candidates from Arkansas. Opportunities for admission of residents of Puerto Rico have also been developed.

The school received full accreditation from the Council on Education of the American Veterinary Medical Association in April 1977.

The School of Veterinary Medicine offers the professional degree, Doctor of Veterinary Medicine. Interdepartmental Master of Science and Doctor of Philosophy degree programs in veterinary medical sciences are offered through the Graduate School.

The Professional Program

Admission Requirements

Students contemplating a career in veterinary medicine should acquire a sound foundation in the biological and physical sciences and a general knowledge of the arts and humanities in both high school and college. In addition, they should be motivated by a liking for animals, a sincere desire to serve the public, a propensity for the biological and medical sciences, and a deep interest in promotion of the health of animal and human populations. They must have a high aptitude for scientific study and must possess an excellent moral and ethical character.

Candidates for the Doctor of Veterinary Medicine degree must complete a minimum of six years of college education. This includes two or more years of preveterinary training and four years of professional training. The preveterinary requirements may be completed at LSU or any other accredited college or university offering courses of the quality and content of those prescribed in the LSU General Catalog. (See the section of this catalog entitled “College of Agriculture” for the preveterinary curriculum at LSU.)

The minimum requirement of 66 semester hours, including 23 hours of elective courses, may be completed in two years. Successful completion of a preveterinary program does not insure admission to the school for professional training. Currently, there are more qualified applicants each year than there are spaces available in the entering class. Instruction in the four-year program is available only through the School of Veterinary Medicine at LSU.

Scholastic achievement is measured by performance in the prescribed preprofessional courses. A minimum grade-point average of 2.50 (“A” = 4) in these courses is required for consideration for admission. A grade of less than “C” in a required course is unacceptable. Physical education
activity courses may not be used as electives for meeting minimum preprofessional requirements. Credit earned through advanced standing is acceptable, but is not used in the computation of grade-point averages. Evaluation of each applicant’s record in the preprofessional program is made in accordance with LSU procedures.

Credit is not granted for College Level Examination Program (CLEP) General Examinations. Granting of credit for CLEP subject examinations may be considered in those subjects recommended by various departments of the University upon receipt of test scores indicating the student meets the minimum acceptable scores required by those departments.

Admission Procedures

Admission to the School of Veterinary Medicine is granted only for the fall semester of each school year and only on a full-time basis. A prescribed number of student spaces is planned for each class, and a formal application with supporting credentials is required of each applicant.

The Committee on Admissions is responsible for determining the application procedure and for selecting the entering class in the professional curriculum. All preprofessional requirements must be completed by the end of the spring semester of the calendar year in which application is made. Formal applications from Louisiana residents may be submitted no earlier than January 1 and no later than February 15 of the calendar year in which admission is sought. Applications from residents of contract states must be received between January 1 and February 1. Students reapplying must submit a new application for each application period. Students admitted and enrolled in the school must be capable of meeting satisfactorily all requirements of the curriculum in veterinary medicine. Eligible candidates are interviewed by members of the Committee on Admissions and are carefully selected to insure that they are properly motivated, competent to undertake the rigorous course of professional study, and capable of meeting the demands of a professional career.

Academic and nonacademic qualifications are considered in the selection process. Selection for admission is based on the sum of two scores: an objective score which comprises approximately 60-70 percent of the final calculation and a subjective score which comprises the remainder.

The objective evaluation is based on scholastic achievement and standardized test scores. Official transcripts of college course grades are examined to determine scholastic achievement.

The total objective score is derived from the grade-point average (gpa) on required courses, the grade-point average on the most recent 45-60 semester hours of course work, and the results of the Medical College Admission Test.

New knowledge, especially in the sciences, is accruing at a phenomenal rate and records of students who have completed their preprofessional requirements several years prior to application will be carefully scrutinized. All required science courses should be completed within six calendar years immediately prior to application. At least one course in organic chemistry, biology, and physics must be completed in the last six years.

The Medical College Admission Test (MCAT) is given only twice a year. In order for the results to reach the committee before the end of the application period, candidates must apply for the test in the spring or summer of the year preceding their application.

The subjective evaluation of applicants is based on nonacademic qualifications considered to be relevant to the determination of the applicant’s prospective performance in the veterinary medical curriculum and in the practice of veterinary medicine. Motivation, maturity, attitude, interest, and other characteristics will be evaluated for all qualified candidates along with work experience, familiarity with animals, and reference information submitted in support of the application. These qualities are evaluated by two separate committees. The first committee reviews the supporting documents, including autobiography, letters of recommendation, and transcripts. The second committee evaluates the individual through a personal interview. These appraisals result in an average subjective score which is added to the objective score to produce the total numerical evaluation of the candidate. Through this process, the professional judgment of several faculty members is included in arriving at a final decision.

Minimum Prerequisites for Admission (66 Sem. Hrs.)

A minimum of 66 semester hours is required for admission to the preprofessional program. This must include the 43 semester hours (minimum mandatory requirements) listed below:

Biological Science, 10 sem. hrs.: Must include at least 8 sem. hrs. (two-semester course sequence with laboratory) in introductory zoology or general biology at a level appropriate for premedical students. LSU courses—Zoology 1001, 1002. The remaining biological science hours may be elected from either biological or animal science.

Inorganic Chemistry, 8 sem. hrs.: Must include laboratory and must be at a level for science or engineering majors. LSU courses—Chemistry 1201, 1202, 1212.
Organic Chemistry, 8 sem. hrs.: Must include laboratory and must be at a level for science majors. LSU courses—Chemistry 2261, 2262, 2364.

Mathematics, 5 sem. hrs.: Must be at the college algebra/trigonometry level or higher. LSU courses—Mathematics 1021, 1022. Students who qualify for more advanced math may substitute Mathematics 1023 (5 sem. hrs.) for 1021 and 1022.

Physics, 6 sem. hrs.: Must be at a level for science majors and must include mechanics, heat, sound, light, electricity, magnetism, and topics in modern physics. LSU courses—Physics 2001, 2002.

Communication Skills, 6 sem. hrs.: Must include 6 sem. hrs. of English composition. LSU courses—English 1001, 1002.

In selecting the remaining required courses for admission to the professional program, applicants should consider the following:

1. The objective of the D.V.M. program is to offer a well-rounded curriculum in veterinary medical education enabling the graduate to select from a wide variety of professional opportunities. The selection of elective courses in the preprofessional curriculum should reflect the interests and objectives of the candidate. Potential applicants should plan their programs with the recognition that these elective courses provide the only formal opportunity in the college years to obtain a broad general education.

2. Applicants who have completed advanced preparatory courses in high school are, in all probability, qualified to complete the prerequisites in four semesters. These students are encouraged to take higher level university courses when so permitted. Applicants who are inadequately prepared may find it advantageous to complete the preveterinary requirements over a longer period.

3. Although the primary objective of the applicant may be to complete the preveterinary requirements, those who have not previously obtained a baccalaureate degree are encouraged to plan for alternative career possibilities through a degree-granting program which has similar course requirements. Many other curricula which do not specify all of the requirements allow them as electives.

Since not all applicants will gain admission to the School of Veterinary Medicine on the first attempt, they should continue in degree programs while making themselves more competitive in subsequent years. Some students may elect to complete a baccalaureate degree in order to pursue graduate training during the first and second summers of the professional program.

4. Because applicants must take the MCAT in the fall preceding application, those students following a four-semester program must complete this test only four weeks after beginning the sophomore year. Appropriate preparation and selection of a curriculum to contribute to an acceptable score is strongly suggested.

Students who are enrolled at accredited institutions other than LSU must determine that courses taken conform in content and quality to descriptions contained in the latest issue of the LSU General Catalog, which can be obtained upon request from the LSU Office of Student Records and Registration (price: $2 per copy).

All requirements must be completed by the end of the spring semester of the year in which admission is sought. The MCAT must be completed in the fall preceding the year in which admission is sought.

Information concerning LSU's preveterinary medicine program is contained in the LSU General Catalog or may be obtained from the dean of the College of Agriculture.

The Graduate Program

The interdepartmental program in veterinary medical sciences provides graduate academic training in veterinary medicine. It includes intensive research training in various options. Most students engaged in advanced studies in veterinary medicine will have received the D.V.M. degree and have elected to pursue intensive postdoctoral training in one or more of the disciplinary or specialty areas of veterinary medicine.

CENTER FOR WETLAND RESOURCES

DEAN: Van Lopik, Professor
BOYD PROFESSORS: Coleman,* Patrick*
LSU FOUNDATION JAMES C. Bolton PROFESSOR OF PORTS AND WATERWAYS: Hochstein

*Members of the Department of Marine Sciences graduate faculty.
The Coastal Ecology and Fisheries Institute, the Department of Marine Sciences, the Ports and Waterways Institute, the Office of Sea Grant Development, and the Laboratory for Wetland Soils and Sediments comprise the Center for Wetland Resources.

Coastal Ecology and Fisheries Institute

DIRECTOR: Bane, Professor
OFFICE: 234 Wetland Resources Building
TELEPHONE: (504) 388-1558

The Coastal Ecology and Fisheries Institute, formerly the Coastal Ecology Laboratory, was established in 1978. This research organization focuses primarily on understanding coastal environments as ecological systems. Emphasis is placed on the study of large-scale ecological systems, systems that incorporate the interaction of biologic, geologic, hydrologic, and chemical processes in order to understand the overall functioning of the total system. A second emphasis is placed on fisheries with a focus toward understanding population dynamics, natural history, and ecophysiology of important commercial and recreational species in the context of the ecology of whole systems within which they function. People are an integral part of the large ecosystems and must be considered in the analysis; to that end social and economic aspects are studied.

Department of Marine Sciences

CHAIRMAN: Gosselink, Professor
OFFICE: 118 Wetland Resources Building
TELEPHONE: (504) 388-6308

This department offers both the Master of Science and the Doctor of Philosophy degrees, and encourages expansion of marine-related instruction in other academic departments. Overall emphasis is given to the fundamental understanding and practical application of knowledge concerning the physical, chemical, biological, geological, meteorological, economic, and legal aspects of those environments usually identified as shallow-water, nearshore, coastal, or estuarine. The more than 4700 square miles of fresh- to brackish-water marsh found in Louisiana comprise the Gulf Coast’s most important nursery ground for fisheries, and serve as a vast natural laboratory for the department’s field research. The departmental faculty hold joint appointments with one or more of the appropriate research units of the center. Some faculty of other academic departments of the University are also affiliate members of the department.

Ports and Waterways Institute

DIRECTOR: Hochstein, James C. Bolton Professor
OFFICE: 102 Wetland Resources Building
TELEPHONE: (504) 388-6299

The Ports and Waterways Institute promotes and administers the University’s maritime-related research, education, and advisory activities. Emphasis is on the solution of practical problems confronting the maritime transportation and offshore industries. Institute programs encompass inland waterways, coastal ports, and the interface between shallow- and deep-draft navigation. To achieve practical results, the institute bases its activity on analysis of all major components of water transportation and their interactions. Areas of institute expertise include assessment of waterborne commerce in international and domestic trade; market area definition and traffic allocation between competing ports; tow and oceangoing vessel operation, safety, and performance; navigation channel and lock design and capacity estimates; assessment of shoaling rates, dredging requirements, and costs; offshore facilities; and improvements in port layout and handling operations.

Admission to marine sciences programs as a major requires admission to the Graduate School and a strong bachelor’s or graduate degree in an approved field of science or engineering. Complete descriptions of all courses offered by the Department of Marine Sciences are included in this catalog.

*Members of the Department of Marine Sciences graduate faculty.
It is the institute's mission to maintain close liaison with a broad spectrum of public, private, and research/educational organizations with interests in marine transportation in the U.S. and overseas. Research and training programs are defined in response to marine and offshore industry needs. National, state, and regional benefits are assessed in defining measures and investments in waterways and ports improvements. Impact of marine and offshore industry performance on transportation costs, revenues and tariffs, employment, and industrial development are considered.

Office of Sea Grant Development

DIRECTOR: Van Lopik, Professor
OFFICE: 124 Wetland Resources Building
TELEPHONE: (504)388-1558

The Louisiana Sea Grant College Program, a part of the National Sea Grant Program, is administered by the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce. The sea grant concept uses the capabilities of educational institutions, laboratories, and public and private agencies to solve practical problems related to the development of marine and coastal resources. Three general categories of activities are called for under the sea grant mandate: training and education, with emphasis on providing people with the knowledge and skills necessary for marine resource development; applied research, aimed at developing practices, techniques, and equipment to facilitate the use of marine resources; and advisory and information programs to provide scientists, engineers, educators, industrialists, and the general public with useful information on marine resources and discoveries through publications and the marine extension service. LSU's Office of Sea Grant Development is responsible for administering research, training, and information programs approved by NOAA for sea grant funding in Louisiana. Emphasis is given to the encouragement and development of programs involving scientific and economic aspects of marine environments, usually described as shallow-water, nearshore, coastal, or estuarine.

In 1978, LSU was named a Sea Grant College—the 13th university in the nation to be so designated and the highest classification attainable in the program.

Laboratory for Wetland Soils and Sediments

DIRECTOR: Patrick, Boyd Professor
OFFICE: 104 Wetland Soils Building
TELEPHONE: (504)388-8810

Established in 1977, the Laboratory for Wetland Soils and Sediments researches sediment chemistry/plant relations in natural wetland ecosystems such as salt marshes, fresh and brackish marshes and swamps, and floodplains, and the chemical and biological behavior of plant nutrients and toxic substances in wetland ecosystems. The environmental impacts of pesticides, toxic heavy metals, hydrocarbons, and plant nutrients in wetlands are major areas of expertise.
Junior Division

LAURA F. LEMOINE, Dean
CAROLYN C. COLLINS, Assistant Dean
150 Allen Hall
(504) 388-6822

Junior Division is the academic and administrative college for all freshmen at LSU as well as that for all transfer students who have attempted less than 70 semester hours of work and do not meet requirements for admission to a senior college.

Junior Division is concerned with all types of student needs, especially those relating to choice of curricula and to personal adjustment during the transition from high school to college. Consequently, Junior Division has four chief functions: (1) to give students who have not definitely decided on a curriculum an opportunity to make an informed decision during their first year of college work; (2) to give students the benefit of professionally trained college counselors; (3) to supply the various senior colleges with a select group of students prepared to engage in specialized training and education; and (4) to coordinate and implement the University's developmental education program.

The chief administrative officer of Junior Division is the dean. The Junior Division Advisory Council advises the dean in administration of the academic affairs and policies of the division. The council serves as a liaison between the division and other academic units of the University.

COUNSELING AND FRESHMAN ORIENTATION

Every Junior Division student has access to the full-time counseling staff. Students may obtain assistance from counselors in curriculum selection, career guidance, college study skills, and in working through problems of an academic or personal nature.

To complement the counseling program, Junior Division coordinates departmental academic advising for all incoming freshmen. This system provides personal contact between each freshman student and a counselor or faculty member from the department in which the student has expressed special interest.

To aid freshmen in adjusting to college life and choosing their courses of study, a period of time prior to walk-through registration is designated as “Freshman Orientation.” This period is devoted to briefings on University requirements, meetings with senior college representatives, testing and placement in certain subject areas, and other information important to new students.
AMERICAN COLLEGE TESTING PROGRAM

Students planning to enter the University must take the test of the American College Testing Program (ACT) prior to registration. Results of the test should be sent to LSU. Scores on this test are used to place the student in courses at the most suitable level and to determine eligibility for advanced placement with credit. ACT scores are also valuable in helping the student set educational objectives.

The test is offered five times a year on a regular schedule at school and college centers throughout the U.S. and Canada and in some foreign countries. Information about registration for the test may be obtained from the Measurement and Evaluation Center, 51 Himes Hall, (504) 388-1145; any high-school guidance counselor; or the Registration Department, American College Testing Program, P.O. Box 414, Iowa City, Iowa 52240.

CURRICULUM FOR THE FRESHMAN YEAR

Freshmen who have decided on a field of study, and who want to graduate in the minimum time, should follow the freshman-year curriculum suggested by the college offering their field of study. Occasionally, because of a student's initial placement in mathematics, English, or reading, course substitutions must be made.

Freshmen who have not decided on a field of study should schedule one course in each of the following subjects or subject areas during their first semester: English, mathematics, biological or physical science, social science, and liberal arts. Credits earned in these courses usually apply toward meeting degree requirements in all areas. Students who have not decided on a field of study will have an opportunity to participate in academic and vocational counseling sessions during their first enrollment.

No Junior Division student, except by permission of the dean, will be allowed to schedule more than 19 hours in any regular semester. No student may receive credit for more than 21 hours taken in one semester.

CLASSIFICATION OF JUNIOR DIVISION STUDENTS

Students in Junior Division are classified as JD-1, JD-2, or JD-3.

Beginning freshmen are classified as JD-1; this classification will apply until they have earned a maximum of 29 semester hours of credit and have met requirements for admission to a senior college.

Students who have earned from 30-59 semester hours of credit, but who have not met requirements for admission to a senior college, are classified as JD-2.

Those who have earned 60 or more semester hours of credit, but who have not met requirements for admission to a senior college, are classified as JD-3.

Students whose cumulative record shows a total of 70 semester hours attempted may not continue to register in Junior Division.

ELIGIBILITY TO ENROLL IN COURSES NUMBERED ABOVE 1999

Junior Division students may enroll in courses numbered above 1999 only in accordance with the following regulations:

1. Courses numbered 2000-2999: For undergraduate students, sophomore level or above; for undergraduate credit only. It is not advisable for a freshman to register for a sophomore-level course which has no prerequisite unless the student has a 2.50 gpa or a composite ACT score of at least 23.

2. Courses numbered 3000-3999: For advanced undergraduate students, junior- and senior-level; for undergraduate credit only. Junior Division students may be permitted to register for courses numbered 3000-3999 only if they have 60 semester hours of credit or departmental approval.

3. Courses numbered 4000 and above: See "Course Numbering System" in the "Courses of Instruction" section of this catalog.
HONORS PROGRAM

Entering freshmen whose ACT composite scores are 27 or better are invited to apply for admission to the Division of Honors and Interdisciplinary Studies of the College of Arts and Sciences. Students who do not qualify upon entering LSU but who do exceptionally well in their first semester may apply for admission for the second semester.

The core courses of the freshman honors curriculum are Honors 1001, 1003, 2002, and 2004. The team-taught, interdisciplinary courses investigate the historical, conceptual, and cultural roots of Western civilization. Completion of these courses may satisfy the English, social science, and/or liberal arts requirement for the freshman year in most curricula.

For further information on this program see "Division of Honors and Interdisciplinary Studies," in the "College of Arts and Sciences" section of this catalog.

ADVANCED-STANDING EXAMINATIONS

Students of superior ability and preparation and students who have already gained a fundamental knowledge of subjects offered at the University may earn degree credit through advanced-standing examinations in specific courses. Further information concerning these examinations is given in the section of this catalog entitled "University Regulations."

ACADEMIC SKILLS ENHANCEMENT PROGRAM

The Academic Skills Enhancement Program (ASEP), administered by Junior Division, is designed for students who lack certain academic skills required in various standard freshman-level courses. The program consists of writing skills (English 0003 and 0006), quantitative skills (Mathematics 0091 and 0092), reading skills (JD 0010 and 0011), and study skills (JD 0003). Mathematics 0091 and 0092 are graded "A"-"F"; all other ASEP courses are graded on a pass/no credit basis. Students are required to repeat a course until they earn a passing grade. Students are placed in the program according to their levels of proficiency in each academic area and may take one or more of the ASEP courses. As a result, students should increase their chances of success in attaining their educational goals.

SPECIAL SERVICES PROGRAM

The Special Services Program is designed to provide special services for students who are underprepared to take some college courses and who are in need of services to assist them in initiating, continuing, or resuming their college education. The Special Services Program includes study skills (JD 0006), reading skills (JD 0016), tutorial assistance, counseling, career information, cultural enrichment, and referrals to other agencies and resources to resolve noneducational problems related to academic success. The goal of the program is to increase retention and graduation rates of these students. Further information may be obtained from the Special Services Office, 136 Allen Hall.

ADMISSION TO A SENIOR COLLEGE FROM JUNIOR DIVISION

Junior Division students may enter a senior college only when they:

1. earn 24 or more semester hours of credit in courses numbered 1000 and above and have at least a 2.00 grade-point average on all work attempted;
2. meet the reading proficiency requirements of Junior Division (see the "Proficiency in Reading" section, below); and
3. meet the special admission requirements of the senior college they intend to enter.

Students who have attempted 70 or more semester hours without achieving at least a 2.00 cumulative grade-point average are not eligible to remain in Junior Division and will not normally be allowed to enroll in a senior college. To continue in the University beyond the 70 hour limit, a student must have a positive recommendation from the Junior Division Advisory Council and be accepted by a senior college.
PROFICIENCY IN READING

Junior Division students whose reading skills are below the 11th-grade level, as determined by ACT scores and/or a diagnostic reading test, will be placed in a reading course. Students may not be admitted to a senior college until they pass JD 0011 or 0016 or are exempted. Satisfactory completion of one of these courses is prerequisite for transfer from Junior Division to a senior college.

SCHOLASTIC REGULATIONS FOR JUNIOR DIVISION STUDENTS

Definitions

Cumulative Average: A student’s cumulative average is calculated by dividing the total number of quality points earned by the total number of semester hours attempted.

Good Academic Standing: The typical status of a student who is not on probation and is eligible to continue in or return to the University.

Scholastic Probation

Students not on scholastic probation:

a. Students who have carried 11 semester hours or less of college work will be placed on scholastic probation if their cumulative average is less than 1.50.

b. Students who have carried from 12 to 23 semester hours will be (1) dropped from the University if their cumulative average is below 1.00 (“D”); or (2) placed on scholastic probation if their cumulative average is at least 1.00 but less than 1.50.

c. Students who have carried 24 or more semester hours of college work will be (1) dropped from the University if their cumulative average is below 1.00; or (2) placed on scholastic probation if their cumulative average is at least 1.00 but is 10 or more quality points below 2.00 (“C”).

Students on scholastic probation:

a. Students can be placed on scholastic probation only on the basis of unsatisfactory grades made in college.

b. Students on scholastic probation will be dropped from the University if their average for a given semester or summer term is less than 2.00 (“C”) on both LSU and transfer work.

c. Once placed on probation, students will remain on probation each enrollment until they have earned a 2.00 cumulative average on both LSU and transfer work.

Students Dropped from the University

a. Students who are dropped for the first time for academic reasons are not eligible for consideration for readmission until they have been out of the University for one regular semester. Readmission may be delayed or denied at the discretion of the dean.

b. Students who have been dropped twice for academic reasons must remain out of the University for at least one calendar year. They may then apply for readmission, which may be delayed or denied at the discretion of the dean.

c. Students dropped for scholastic reasons may not use credits earned at another institution during the period of their ineligibility to register in this University in fulfillment of their LSU degree requirements. However, they may register on a noncredit basis for correspondence courses offered by the University.

d. Students who have been readmitted after having been dropped for academic reasons will be on scholastic probation when they return.
Transfer Students

If enrolling in Junior Division, students from institutions outside the LSU System who qualify for admission to the University will be placed on an academic status in accordance with the above scholastic regulations.

Withdrawal Grades

A “W” will be entered on the record of any student for any course dropped within the dates specified in the “Calendar.” In extraordinary cases, the dean of a student’s college may authorize a resignation and/or a drop from a course after the last dates specified.

ATTENDANCE POLICIES

Students are expected to attend all classes regularly and punctually. The office of the dean of Junior Division gives excuses only in two situations:

a. as directed by the Office of Academic Affairs (such excuses are usually limited to groups participating in University-sponsored activities off campus); or

b. when convincing evidence is presented to Junior Division that students must miss midsemester or final examinations due to circumstances beyond their control. In such cases students may take special examinations with approval of the dean of Junior Division.

All other absences are subject to the attendance policies and procedures of instructors. Students should understand that these policies vary among instructors and that they must comply with the attendance requirements of each instructor.

Students who are reported as not attending classes for which they are registered may be dropped from the University at the discretion of the dean of Junior Division.

If circumstances cause unavoidable, extended periods of absence, students should notify the office of the dean of Junior Division, which will send an explanation to instructors concerned. Upon returning to class, students should clear all absences with each instructor.

Students who decide to withdraw from a course or from the University must do so with approval of the dean of Junior Division and through procedures prescribed by the University. Students who discontinue a class or leave school without following the official procedures are subject to permanent failing grades and/or denial of permission to reenter the University.
The School of Music's educational purpose is directed toward assisting students in the development of their innate musical talents and in helping them make the musical arts a cultural asset in their own lives and in the lives of others.

To attain these goals, the School of Music offers several curricula and special courses of vocational as well as avocational nature. These curricula are outlined in the following chart. The vocational programs prepare students to be performers, teachers, composers, and church musicians, and culminate with the undergraduate degree, Bachelor of Music, awarded through the School of Music. The Bachelor of Music Education degree, designed to train students to teach vocal and instrumental music in the public schools where state certification is required, is offered in conjunction with the College of Education (see the "College of Education," for curricula). Persons wishing a broader variety of subjects in addition to a basic foundation in music may follow one of the curricula leading to the Bachelor of Arts degree offered in conjunction with the College of Arts and Sciences (see "Curricular Requirements," and "Curricula Administered by the College," in the "College of Arts and Sciences" section of this catalog).

The first two years of a music therapy curriculum are offered at LSU. Avocational programs are offered through courses in music appreciation, the performing organizations, and through other elective courses.
The curricula in music education meet requirements of the Louisiana State Department of Education for accrediting various types of music instructors in the Louisiana public schools and are approved by the National Council for Accreditation of Teacher Education and the National Association of Schools of Music. The School of Music is an accredited institutional member of the National Association of Schools of Music.

ADMISSION REQUIREMENTS

*From Junior Division:* Students may be admitted to the School of Music from Junior Division on the bases given in the Junior Division section entitled “Admission to a Senior College from JD,” provided that they have credit for the freshman-year courses of the curriculum they plan to follow. Students must have earned an overall average of 2.00 or better in order to be admitted unconditionally to the school. Freshmen who plan to work for a degree in music should register for the courses listed in the freshman year of the music curriculum of their choice. It is recommended that freshmen register for piano during their first semester unless they can pass the proficiency test in piano.

*By Transfer:* Transfer students from other divisions of the University or from other colleges and universities who have met the general entrance requirements of the University, who have completed college courses equivalent to those offered in Junior Division, and who have passed the required audition for admission may be admitted to the school.

All transfer students must take an advisory examination in theory. This includes ear-training, keyboard work, harmonization, and analysis. The results of the examination will be used to aid in planning a practical schedule of courses consistent with the student’s training and ability. The examinations are given on the first day of registration in each semester or summer term.

AUDITIONS

*For Admission:* An audition in the major performance medium (piano, voice, etc.) is required of all students wishing to pursue curricula in the School of Music or music curricula administered through the College of Arts and Sciences, the College of Education, or Junior Division. The audition can be on campus or by tape recording. Contact the School of Music for details.

*For Applied Music Courses:* On each registration day, applied music teachers hear auditions by new students in order to determine each student’s level of proficiency. New students should schedule an audition before registering; they must do so before registration ends. Students who have been out of school for over one year and who return to continue in a performance curriculum must reaudition.

*For Ensemble Courses:* Auditions for ensemble courses will be held at stated times during registration. Students who expect to register for the first time in any of these organizations must appear at one of the hours designated for an audition. Auditions for band (Music 4250, 4251, 4252, 4253) are normally held during the regular semester preceding the semester in which the student wishes to participate. However, students may also audition during the registration period of the performance semester. For details, contact the Director of Bands.

CORRESPONDENCE AND EXTENSION CREDITS

Up to one-fourth of the number of hours required for the baccalaureate degree may be taken in correspondence and/or extension courses. Acceptance of such work is contingent upon its applicability to the student’s curriculum. Therefore, students should obtain approval from the dean of the School of Music before registering for correspondence or extension courses.

Correspondence study in theory and work in applied music done through other universities or colleges must be verified as corresponding to this University’s level of accomplishment by examination and auditions.

REQUIREMENTS FOR A SECOND BACHELOR’S DEGREE

A person holding a baccalaureate degree who wishes to obtain a second baccalaureate degree through this school must satisfactorily complete all requirements in the music curriculum selected. In addition, general University requirements for a second bachelor’s degree must be met.
GRADUATE PROGRAMS

The Graduate School offers the following degrees in the field of music: Master of Music, Master of Music Education, Master of Arts with a major in music, Doctor of Musical Arts, and Doctor of Philosophy with a major in music. The requirements for these degrees are given in the Graduate School Catalog.

Faculty and Curricula

ACTING DEAN: Sher, Professor
OFFICE: 163 Music & Dramatic Arts Building
TELEPHONE: (504) 388-3261

PROFESSORS: Abel, Brys, Constantinides, Edmunds, Foss, Guerry, Hallman, Harrison, Knowles, McKenzie, Norem, Patterson, Shambaugh
ASSOCIATE PROFESSORS: Aslanian, Astraquillo, L. Campbell, Davidson, Herlinger, Klimash, Kosmala, Kungle, O'Reilly, Rausch, Riley, Spillman, Walter, West, Wickes, Yestadt
ASSISTANT PROFESSORS: Brown, G. Campbell, Chung, Etienne, Grimes, Harris, Hayden, Jacobsen, Kendrick, Nagode, Rogers, Saxon, Watkins

All students in a B.M. curriculum must participate in band (Music 4250, 4251, 4252), orchestra (Music 4261), or chorus (Music 4233, 4234, 4236, 4240) for four years. Large ensemble assignments are made at the discretion of the adviser and the ensemble conductors. Any requests for adjustment of the rules pertaining to performance in large ensembles must be submitted to a reviewing committee. Students are not charged for private lessons or for use of school-owned instruments, lockers, equipment, or practice rooms.

After completion of 60 semester hours and with the recommendation of any faculty member, students may qualify for graduation with honors in music by satisfactorily completing six semester hours of credit in Music 3000 and by maintaining at least a 3.70 gpa. Additional details are available from the School of Music.

Electives in the freshman and sophomore years may include six semester hours of basic ROTC.

CURRICULUM IN BRASS MAJOR—MULTIPLE BRASS MINOR
TOTAL SEM. HRS.: 134

Students in this curriculum will study four years on a major instrument. They will select a chief minor brass instrument to study for two years, and two different rotating minors. The minor instrument should be played in public during the final year it is studied. Piano proficiency at the level of Music 1133 or equivalent is required.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>8</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 3711, 3771, 3772</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>English elective above 2000</td>
<td>3</td>
</tr>
<tr>
<td>Theory electives (Music 4712, 4719, 4720, 4730, 4732)</td>
<td>3</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>English electives above 2000</td>
<td>3</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 4703, 4751, 4752, 4797</td>
<td>9</td>
</tr>
<tr>
<td>Music 4721, 4722; or Music 4723 and 3 sem. hrs. of approved theory electives, including also Music 4724 and 4731</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>
## CURRICULUM IN COMPOSITION

**TOTAL SEM. HRS.: 128**

Piano proficiency, as determined by the composition faculty, and participation in the Composer's Forum are required of all composition students. Electives in such areas as computer science, acoustics, and aesthetics are recommended.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 1753, 1754, 2711, 2712, 2741, 2742</td>
<td>18</td>
</tr>
<tr>
<td>Music 1701, 1702, 1742</td>
<td>11</td>
<td>Applied music courses</td>
<td>3</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>3</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>English electives above 2000</td>
<td>6</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>8</td>
<td>Nonmusic electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 3711, 3771, 4730, 4731</td>
<td>9</td>
<td>Music 4743, 4751, 4752, 4798</td>
<td>8</td>
</tr>
<tr>
<td>Music 3741 (taken twice)</td>
<td>6</td>
<td>Music 3741 (taken twice)</td>
<td>6</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>3</td>
<td>Applied music courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>4</td>
<td>Theory electives (Music 4712, 4719, 4721, 4722, 4723, 4724)</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

## CURRICULUM IN INSTRUMENTAL MAJOR (EXCLUDING KEYBOARD INSTRUMENTS)

**TOTAL SEM. HRS.: 129**

Piano proficiency at the level of Music 1133 or equivalent is required.

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>English electives above 2000</td>
<td>6</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>6</td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 3711, 3771</td>
<td>5</td>
<td>Music 4721, 4722; or Music 4723 and 3 sem. hrs. of approved theory electives, including also Music 4724 and 4731</td>
<td>6</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Music 4751, 4752, 4797</td>
<td>7</td>
</tr>
<tr>
<td>Theory electives (Music 4712, 4719, 4720, 4730, 4732)</td>
<td>3</td>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>8</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
<td>Nonmusic electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
CURRICULUM IN ORGAN
TOTAL SEM HRS.: 129

Piano proficiency at the level of Music 1133 or equivalent is required.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>English electives above 2000</td>
<td>6</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 3711, 3757, 3758, 3771</td>
<td>11</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Theory electives (Music 4712, 4719, 4720, 4730, 4732)</td>
<td>3</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 4701, 4702, 4751, 4752, 4797</td>
<td>11</td>
</tr>
<tr>
<td>Music 4721, 4722; or Music 4723 and 3 sem. hrs. of approved theory electives, including also Music 4724 and 4731</td>
<td>6</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

CURRICULUM IN PIANO PERFORMANCE/STUDIO TEACHING PIANO
TOTAL SEM. HRS.: 130

In addition to the senior recital, piano performance majors are required to perform solos in at least four student recital programs or their equivalent throughout the period of undergraduate study. A junior recital may be elected in lieu of two such appearances with approval of the major professor.

Piano majors in studio teaching are required to perform solos in at least two student recital programs or their equivalent throughout the period of undergraduate study in addition to the senior recital. The senior recital may be a joint recital or its equivalent.

All piano majors are required to demonstrate proficiency in sight reading by the end of the fourth semester of study. Electives are to include courses in piano literature and pedagogy.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>8</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble or accompanying courses</td>
<td>2</td>
</tr>
<tr>
<td>English electives above 2000</td>
<td>6</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 3711</td>
<td>3</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Theory electives (Music 4712, 4719, 4720, 4721, 4722, 4723, 4724, 4730)</td>
<td>3</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 4721, 4722; or Music 4723 and 3 sem. hrs. of approved theory electives, including also Music 4724 and 4731</td>
<td>6</td>
</tr>
<tr>
<td>Music 4751, 4752, 4797</td>
<td>7</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble or accompanying courses</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>
SENIOR YEAR  
(STUDIO TEACHING MAJOR)  SEM. HRS.  
Music 1700 ........................................ 0  
Music 4721, 4722; or Music 4723 and 3 sem. hrs. of approved theory electives, including Music 4724 and 4731 .................. 6  
Music 4751, 4752, 4797 ......................... 7  
Music 4769 or 4770 .............................. 2  
Applied music courses .......................... 6  
Large ensemble, accompanying, or chamber music courses .................................. 2  
Electives ........................................... 12  

35

CURRICULUM IN SACRED MUSIC (WITH OPTIONS)  
TOTAL SEM. HRS.: 131  

Voice majors must satisfy piano proficiency at the Music 1133 level and complete two semesters of applied organ (Music 3133). Organ majors must complete two semesters of applied voice (Music 3130). It is recommended that electives include one or more of the following: Music 3018, 4730, 4788, 4789, 4790, and Speech 4152, 4153.

FRESHMAN YEAR  SEM. HRS.  
English 1001, 1002 .................................. 6  
Music 1700 ......................................... 0  
Music 1701, 1702, 1753, 1754 .................. 12  
Applied music courses .......................... 6  
Large ensemble courses .......................... 2  
Nonmusic electives .............................. 2  
Electives ........................................... 6  

34

JUNIOR YEAR  SEM. HRS.  
Music 1700 ......................................... 0  
Music 3711, 3748 .................................. 5  
Religious Studies 2027 or 2029 ............. 3  
Foreign language courses ..................... 10  
Applied music courses .......................... 6  
Large ensemble courses .......................... 2  
Organ majors: Music 3757, 3758; voice majors: Music 3757 and 3 sem. hrs. of electives ......... 6  

32

SOPHOMORE YEAR  SEM. HRS.  
Music 1700 ......................................... 0  
Music 2711, 2712 .................................. 8  
Religious Studies 2028 ......................... 3  
Applied music courses .......................... 6  
Large ensemble courses .......................... 2  
English electives above 2000 ................. 6  
Nonmusic electives .............................. 4  
Electives ........................................... 6  

35

SENIOR YEAR  SEM. HRS.  
Music 1700 ......................................... 0  
Music 4751, 4752, 4755, 4756, 4797 .......... 13  
Applied music courses .......................... 6  
Large ensemble courses .......................... 2  
Organ majors: Music 4701, 4702 and 5 sem. hrs. of electives; voice majors: electives .......... 9  

30

CURRICULUM IN STRING MAJOR—MULTIPLE STRINGS MINOR  
TOTAL SEM. HRS.: 132  

Students in this curriculum will study one major stringed instrument for four years. They will select a minor stringed instrument to study for two years, and will rotate study of the other two stringed instruments with one year of study each. Piano proficiency at the level of Music 1133 or equivalent is required.

FRESHMAN YEAR  SEM. HRS.  
English 1001, 1002 .................................. 6  
Music 1700 ......................................... 0  
Music 1701, 1702 .................................. 8  
Applied music (major) courses ............... 6  
Applied music (minor) courses ............... 3  
Large ensemble courses .......................... 2  
Nonmusic electives .............................. 8  

33

SOPHOMORE YEAR  SEM. HRS.  
Music 1700 ......................................... 0  
Music 1753, 1754, 2711, 2712 .................. 12  
Applied music (major) courses ............... 6  
Applied music (minor) courses ............... 3  
Large ensemble courses .......................... 2  
English electives above 2000 ................. 3  
Nonmusic electives .............................. 4  
Electives ........................................... 4  

34
### CURRICULUM IN VOICE

**TOTAL SEM. HRS.: 129**

*Two semesters or the equivalent of applied piano are required.*

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1018, 1019, 1701, 1702</td>
<td>12</td>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>English electives above 2000</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>31</strong></td>
<td></td>
<td><strong>32</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>SEM. HRS.</th>
<th>SENIOR YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language courses</td>
<td>10</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 4751, 4752, 4797</td>
<td>7</td>
</tr>
<tr>
<td>Music 3711, 3771, 3772, 4351, 4352</td>
<td>12</td>
<td>Music 4703 or Speech 4152 or 4153</td>
<td>2</td>
</tr>
<tr>
<td>Applied music courses</td>
<td>6</td>
<td>Applied music courses</td>
<td>6</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td>Theory electives (Music 4712, 4719, 4720, 4721, 4722, 4723, 4724, 4730)</td>
<td>6</td>
</tr>
<tr>
<td><strong>33</strong></td>
<td></td>
<td><strong>33</strong></td>
<td></td>
</tr>
</tbody>
</table>

### CURRICULUM IN WOODWIND MAJOR—MULTIPLE WOODWIND MINOR

**TOTAL SEM. HRS.: 134**

*Piano proficiency at the level of Music 1133 or equivalent is required. Applied music study is to include a minimum of eight semesters on a major instrument and four semesters on each of three minor instruments.*

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SEM. HRS.</th>
<th>SOPHOMORE YEAR</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1001, 1002</td>
<td>6</td>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 1700</td>
<td>0</td>
<td>Music 1753, 1754, 2711, 2712</td>
<td>12</td>
</tr>
<tr>
<td>Music 1701, 1702</td>
<td>8</td>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>4</td>
<td>English electives above 2000</td>
<td>3</td>
</tr>
<tr>
<td><strong>34</strong></td>
<td></td>
<td><strong>33</strong></td>
<td></td>
</tr>
</tbody>
</table>
JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 3711, 3771, 3772</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>English electives above 2000</td>
<td>3</td>
</tr>
<tr>
<td>Theory electives (Music 4712, 4719, 4720, 4730, 4732)</td>
<td>3</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

32

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>SEM. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1700</td>
<td>0</td>
</tr>
<tr>
<td>Music 4703, 4751, 4752, 4797</td>
<td>9</td>
</tr>
<tr>
<td>Music 4721, 4722; or Music 4723 and 3 sem. hrs. of approved theory electives, including also Music 4724 and 4731</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (major) courses</td>
<td>6</td>
</tr>
<tr>
<td>Applied music (minor) courses</td>
<td>3</td>
</tr>
<tr>
<td>Large ensemble courses</td>
<td>2</td>
</tr>
<tr>
<td>Nonmusic electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

35

CURRICULUM IN MUSIC THERAPY

LSU has a program in music therapy coordinated with Loyola University in New Orleans. Contact the dean of the LSU School of Music for information.

MUSIC CURRICULA OUTSIDE THE SCHOOL OF MUSIC

The College of Education offers the Bachelor of Music Education degree with a major in music education and concentration in instrumental music or vocal music. Students interested in music education should refer to these curricula in the “College of Education” section of this catalog.

The College of Arts and Sciences offers the Bachelor of Arts degree with a major in music and concentration in music history and literature or theory. See the “College of Arts and Sciences” section of this catalog for requirements for this degree.
The Reserve Officers Training Corps program at LSU continues the military heritage which has been part of this institution since 1860.

The Army and Air Force ROTC programs are offered for both men and women. Participation in either of the programs is optional. The purpose of the programs of both services is to develop selected college-educated students for positions of responsibility and leadership in the U.S. armed forces and to offer the student an educational experience not otherwise available in this University.

"Military science" and "aerospace studies" are the titles of the Army and Air Force ROTC programs, respectively. Both military science and aerospace studies are recognized electives, and the student may choose to pursue an Army or Air Force curriculum. Air Force ROTC cadets who are not in a curriculum including a course in mathematical reasoning must complete a three-hour course in this area approved by the professor of aerospace studies. Additionally, both Army and Air Force ROTC scholarship cadets are required to complete the equivalent of one semester in a major Indo-European or Asian language. Courses for both of these departments are listed in the section of this catalog entitled "Courses of Instruction."

Both Army and Air Force ROTC conduct two- and four-year programs. Successful completion of either will result in the student being tendered a commission in the appropriate service. In addition, financial assistance programs which cover University fees, books, laboratory fees, and related academic expenses and include a $100 monthly subsistence allowance are available for selected students. Students enrolled in the Army ROTC program may compete for scholarships of two- or three-years' duration. Students enrolled in Air Force ROTC may compete for scholarships of four- (if in five-year curriculum), three-, or two-years' duration.
ELIGIBILITY

In order to be considered for enrollment in an ROTC program, a student must: (1) be a full-time student; (2) be a U.S. citizen or an applicant for naturalization; (3) have good moral character as required by military regulations; (4) for the advanced program, be physically qualified to participate as prescribed by the Department of Defense; (5) be at least 14 years of age upon enrollment in the Air Force ROTC program, at least 15 years of age upon enrollment in the Army ROTC program, and at least 17 years of age upon enrollment in the Naval ROTC program; and (6) take and sign the Oath of Allegiance.

FOUR-YEAR PROGRAM

The four-year program is divided into two phases—the freshman/sophomore phase and the junior/senior phase. These two phases are officially called the "basic" and "advanced" programs by the Army; the Air Force designates them as the "general military course" and the "professional officer course." Students who have completed the freshman/sophomore phase may apply for the junior/senior phase. Selection for enrollment into the latter is made from those who have demonstrated that they possess the qualities necessary to qualify for a commission. Veterans and students who had junior ROTC training while in high school may be granted credit for the freshman/sophomore phase and may enter the junior/senior phase if their application is approved by the professor of military science or the professor of aerospace studies.

TWO-YEAR PROGRAM

The two-year program extends the advantages of ROTC to junior-college graduates, transfer students, and LSU students who were unable to enroll in the freshman/sophomore phase. Upon successful completion of a six-week summer training period, the student applying for the two-year program may enter the junior/senior phase. Students enrolled in the last two years of either ROTC program who are under contract will receive a $100 monthly tax-free subsistence allowance during each academic year. During the four- or six-week training period (normally between the junior and senior years for Army ROTC and between the sophomore and junior years for Air Force ROTC), they will receive one-half the pay of a second lieutenant plus travel expenses.

ARMY SIMULTANEOUS MEMBERSHIP PROGRAM

This program combines service in the Army National Guard or U.S. Army Reserve with enrollment in an ROTC program. Students who qualify join the appropriate military unit as officer trainees and attend Army basic training. They may, if approved, then enroll in the advanced Army ROTC program at LSU. ROTC instruction and training with the appropriate military unit one weekend per month and two weeks in summer are required. Students enrolled in this program will receive $100 monthly for the ROTC program plus the equivalent of a sergeant's pay for the monthly drill attendance and annual training. At the end of the advanced ROTC course, they will apply for commissions in the Army National Guard or the Army Reserve.

THE NAVAL RESERVE OFFICERS TRAINING CORPS

Through a cross-enrollment agreement between LSU and Southern University, LSU students are eligible to enroll in the Naval Reserve Officers Training Corps leading to a commission in the U.S. Navy or Marine Corps. Openings are available in the four-, three-, or two-year programs. Navy ROTC is open to male and female students, and many naval science courses are taught on the LSU campus. There is no additional cost to LSU students to cross-enroll in the NROTC program. Students incur no obligation while participating in the freshman and sophomore years. NROTC scholarship appointments are available to college students enrolled in the program who demonstrate satisfactory academic performance and aptitude for commissioned service.

Midshipmen are required to complete two semesters of mathematics courses through college algebra or higher and two semesters of a physical science in addition to naval science courses. Scholarship students have the additional requirement of completing two semesters of calculus (MATH 1550 and 1552), two semesters of physics (PHYS 2101 and 2102), one semester of foreign language, and two semesters of a technical elective if not required in their curriculum. Students who are in the second year of college, have completed one year of college mathematics, and
are in good academic standing are eligible to attend the Naval Science Institute (NSI) in Newport, Rhode Island. Successful completion of NSI, an academic and professional naval science program held for six weeks in the summer, qualifies students for enrollment in advanced NROTC courses and enables them to compete for a two-year NROTC scholarship. All costs for attending NSI are paid by the Navy, and students attending are under no obligation. 

Naval ROTC offers a wide range of career opportunities including navy and marine corps aviation; surface warfare; civil engineering corps; supply corps; marine corps artillery, infantry, and armor; and nuclear power. Students who are enrolled in a physics, chemistry, or engineering curriculum have the additional opportunity of earning a $3000 bonus as early as their junior year if selected for the Navy Nuclear Power Program. 

Information on the naval science curriculum and a listing of naval science courses may be found in the Southern University catalog. Additional details may be obtained from the Professor of Naval Science/Commanding Officer, NROTC Unit, Southern University, Baton Rouge, Louisiana 70813, (504) 771-4370.
The following is a listing of all courses of instruction offered by departments at LSU. This listing was up-to-date and as correct as possible at the time of publication of this catalog.

No credit is given for a course unless the student has been duly registered in that course. The amount of credit given for the satisfactory completion of a course is based on the number of lectures or recitations each week for one semester; for example, one credit represents one hour of lecture or recitation a week for one semester. Two hours of laboratory work (in certain courses, three hours) are considered the equivalent of one lecture or recitation hour. When a course consists entirely or partly of laboratory, that fact is stated in the description. When not otherwise specified, the course consists entirely of lectures or recitations.

The number of credit hours which a course carries per semester is listed in parentheses following the course title. If the number listed is variable, i.e. "(2-4)," the amount of credit which the student is to receive must be stated at the time of registration. Indication of variable credit does not mean that a course may be repeated for credit. If a course can be repeated for credit, that information is included in the course description.

Listing of a course does not necessarily mean that it will be offered this year. Some departments indicate in the course description the semester in which a course is usually offered. This information appears in bold type immediately after the course credit. The following legend is used: F = fall; S = spring; Su = summer; E = course offered even-numbered years; O = course offered odd-numbered years; Y = course offered yearly, semesters vary; V = course offered irregularly. If no information is given, students should contact the department to determine when the course is to be offered.

The phrases "also offered as . . . ," "see . . . ," or "same as . . ." which appear in some course descriptions, refer to honors courses or to courses that are available through more than one department. In each of these instances, only one of the courses may be taken for credit.

Since this catalog was prepared well in advance of its effective date, some courses may have been added, others may have been dropped, and additional approved changes in content may have been made.

Courses of Instruction
COURSE NUMBERING SYSTEM

An explanation of the first digit of the four-digit course numbering system follows. The meaning of the second, third, and fourth digits varies by department. See "Year Classification of Students" in the "University Regulations" section of this catalog for an explanation of the criteria for classification as a freshman, sophomore, etc.

0001-0999: Offered by the University to permit students to make up deficiencies in previous training or to improve their facility in certain basic skills; not for degree credit.

1000-1999: For undergraduate students, primarily freshmen; for undergraduate credit only. Ordinarily open to all students; in some instances upper-division students may not take these courses for degree credit.

2000-2999: For undergraduate students, sophomore level or above; for undergraduate credit only. Also open to certain freshmen (see "Eligibility to Enroll in Courses Numbered Above 1999") and to part-time beginning students in the Division of General Studies and Community Education.

3000-3999: For advanced undergraduate students, junior- and senior-level; for undergraduate credit only. These courses constitute the advanced portion of an undergraduate program leading to the bachelor’s degree.

4000-4999: For advanced undergraduate students (those who have completed a minimum of 60 semester hours), and for students in graduate and professional schools and colleges; for undergraduate or graduate credit. Undergraduates with 30 or more semester hours who are making timely progress toward a degree may be admitted to 4000-level courses. Such students must have a 3.50 or higher gpa, the appropriate prerequisites, and consent of the instructor.

5000-5999: For students in post-baccalaureate professional programs. A student in the Graduate School may take these courses for credit with approval of the student’s major department.

6000-6999: Exclusively for teachers at the elementary, secondary, and junior college levels.

7000-7999: For students in the Graduate School; for graduate credit only except as follows. Undergraduates with 75 or more semester hours who are making timely progress toward a degree may be admitted to 7000-level courses. Such students must have a 3.50 or higher gpa, the appropriate prerequisites, and consent of the instructor. Credit so earned will apply only toward undergraduate degree requirements.

8000-8999: Research courses exclusively for graduate students, primarily for students working toward the master’s degree; for graduate credit only.

9000-9999: Research courses exclusively for graduate students, primarily for advanced graduate students working toward the doctoral degree; for graduate credit only.

COURSE DESIGNATIONS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th>ABBREVIATION</th>
<th>ADMINISTERING DEPARTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>ACCT</td>
<td>Accounting</td>
</tr>
<tr>
<td>Administrative &amp; Foundational Services</td>
<td>EDAF</td>
<td>Administrative &amp; Foundational Services</td>
</tr>
<tr>
<td>Aerospace Studies</td>
<td>ASST</td>
<td>Aerospace Studies</td>
</tr>
<tr>
<td>Agricultural Economics</td>
<td>AGEC</td>
<td>Agricultural Economics &amp; Agribusiness</td>
</tr>
<tr>
<td>Agricultural Engineering</td>
<td>AGE</td>
<td>Agricultural Engineering</td>
</tr>
<tr>
<td>Agricultural Mechanization</td>
<td>AGM</td>
<td>Agricultural Engineering</td>
</tr>
<tr>
<td>Agriculture</td>
<td>AGRI</td>
<td>Agriculture (College of)</td>
</tr>
<tr>
<td>Agronomy</td>
<td>AGRO</td>
<td>Agronomy</td>
</tr>
<tr>
<td>Animal Science</td>
<td>ANSC</td>
<td>Animal Science</td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANTH</td>
<td>Geography &amp; Anthropology</td>
</tr>
<tr>
<td>Architecture</td>
<td>ARCH</td>
<td>Architecture (School of)</td>
</tr>
<tr>
<td>Art</td>
<td>ART</td>
<td>Art (School of)</td>
</tr>
<tr>
<td>Astronomy</td>
<td>ASTR</td>
<td>Physics &amp; Astronomy</td>
</tr>
<tr>
<td>Basic Sciences</td>
<td>BASC</td>
<td>Basic Sciences (College of)</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>BCH</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL</td>
<td>Botany; Zoology &amp; Physiology</td>
</tr>
<tr>
<td>Books &amp; Libraries</td>
<td>BKLI</td>
<td>Middleton Library</td>
</tr>
<tr>
<td>DESIGNATION</td>
<td>ABBREVIATION</td>
<td>ADMINISTERING DEPARTMENT</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Botany</td>
<td>BOTY</td>
<td>Botany</td>
</tr>
<tr>
<td>Business Administration</td>
<td>BADM</td>
<td>Business Administration (College of)</td>
</tr>
<tr>
<td>Business Communication</td>
<td>BCOM</td>
<td>Management</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>CHE</td>
<td>Chemical Engineering</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Chinese</td>
<td>CHIN</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>CE</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CSC</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Construction</td>
<td>CONS</td>
<td>Construction</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>CJ</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>Crop Physiology &amp; Weed Science</td>
<td>CPWS</td>
<td>Plant Pathology &amp; Crop Physiology</td>
</tr>
<tr>
<td>Curriculum &amp; Instruction</td>
<td>EDCI</td>
<td>Curriculum &amp; Instruction</td>
</tr>
<tr>
<td>Dairy Science</td>
<td>DARY</td>
<td>Dairy Science</td>
</tr>
<tr>
<td>Economics</td>
<td>ECON</td>
<td>Economics</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>EE</td>
<td>Electrical &amp; Computer Engineering</td>
</tr>
<tr>
<td>Engineering</td>
<td>ENGR</td>
<td>Engineering (College of)</td>
</tr>
<tr>
<td>Engineering Graphics</td>
<td>EGR</td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td>English</td>
<td>ENGL</td>
<td>English</td>
</tr>
<tr>
<td>Entomology</td>
<td>ENTM</td>
<td>Entomology</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>ENVS</td>
<td>Environmental Studies (Institute for)</td>
</tr>
<tr>
<td>Epidemiology &amp; Community Health</td>
<td>ECH</td>
<td>Epidemiology &amp; Community Health</td>
</tr>
<tr>
<td>Experimental Statistics</td>
<td>EXST</td>
<td>Experimental Statistics</td>
</tr>
<tr>
<td>Extension Education</td>
<td>EXED</td>
<td>Extension &amp; International Education</td>
</tr>
<tr>
<td>Finance</td>
<td>FIN</td>
<td>Finance</td>
</tr>
<tr>
<td>Fisheries</td>
<td>FISH</td>
<td>Forestry, Wildlife, &amp; Fisheries (School of)</td>
</tr>
<tr>
<td>Food Science</td>
<td>FDSC</td>
<td>Food Science</td>
</tr>
<tr>
<td>Forestry</td>
<td>FOR</td>
<td>Forestry, Wildlife, &amp; Fisheries (School of)</td>
</tr>
<tr>
<td>French</td>
<td>FREN</td>
<td>French &amp; Italian</td>
</tr>
<tr>
<td>Geography</td>
<td>GEOG</td>
<td>Geography &amp; Anthropology</td>
</tr>
<tr>
<td>Geology</td>
<td>GEOL</td>
<td>Geology</td>
</tr>
<tr>
<td>German</td>
<td>GERM</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>Greek</td>
<td>GREK</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>Health, Physical Education,</td>
<td>HPRD</td>
<td>Health, Physical Education, Recreation, &amp; Dance (School of)</td>
</tr>
<tr>
<td>Recreation, &amp; Dance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hebrew</td>
<td>HEBR</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>History</td>
<td>HIST</td>
<td>History</td>
</tr>
<tr>
<td>Home Economics</td>
<td>HEC</td>
<td>Home Economics (School of)</td>
</tr>
<tr>
<td>Honors</td>
<td>HNRS</td>
<td>Honors &amp; Interdisciplinary Studies (Division of)</td>
</tr>
<tr>
<td>Horticulture</td>
<td>HORT</td>
<td>Horticulture</td>
</tr>
<tr>
<td>Humanities</td>
<td>HUMN</td>
<td>Arts &amp; Sciences (College of)</td>
</tr>
<tr>
<td>Industrial Education</td>
<td>INED</td>
<td>Industrial &amp; Technical Education</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>IE</td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td>Interior Design</td>
<td>ID</td>
<td>Architecture (School of)</td>
</tr>
<tr>
<td>Italian</td>
<td>ITAL</td>
<td>French &amp; Italian</td>
</tr>
<tr>
<td>Japanese</td>
<td>JAPN</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>Journalism</td>
<td>JOUR</td>
<td>Journalism (School of)</td>
</tr>
<tr>
<td>Junior Division</td>
<td>JD</td>
<td>Junior Division</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>LA</td>
<td>Landscape Architecture (School of)</td>
</tr>
<tr>
<td>Latin</td>
<td>LATN</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>Latin American Studies</td>
<td>LAS</td>
<td>Latin American Affairs (Center for)</td>
</tr>
<tr>
<td>Library Science</td>
<td>LIBS</td>
<td>Library &amp; Information Science (School of)</td>
</tr>
<tr>
<td>Management</td>
<td>MGT</td>
<td>Management</td>
</tr>
<tr>
<td>Marine Sciences</td>
<td>MRSC</td>
<td>Marine Sciences</td>
</tr>
<tr>
<td>Marketing</td>
<td>MKT</td>
<td>Marketing</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MATH</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>ME</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Microbiology</td>
<td>MBI0</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Military Science</td>
<td>MILS</td>
<td>Military Science</td>
</tr>
<tr>
<td>DESIGNATION</td>
<td>ABBREVIATION</td>
<td>ADMINISTERING DEPARTMENT</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Music</td>
<td>MUS</td>
<td>Music (School of)</td>
</tr>
<tr>
<td>Nuclear Science</td>
<td>NS</td>
<td>Nuclear Science (Center)</td>
</tr>
<tr>
<td>Petroleum Engineering</td>
<td>PETE</td>
<td>Petroleum Engineering</td>
</tr>
<tr>
<td>Philosophy</td>
<td>PHIL</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Physical Science</td>
<td>PHSC</td>
<td>Physics &amp; Astronomy</td>
</tr>
<tr>
<td>Physics</td>
<td>PHYS</td>
<td>Physics &amp; Astronomy</td>
</tr>
<tr>
<td>Plant Pathology</td>
<td>PLPA</td>
<td>Plant Pathology &amp; Crop Physiology</td>
</tr>
<tr>
<td>Political Science</td>
<td>POLI</td>
<td>Political Science</td>
</tr>
<tr>
<td>Portuguese</td>
<td>PORT</td>
<td>Spanish &amp; Portuguese</td>
</tr>
<tr>
<td>Poultry Science</td>
<td>PLSC</td>
<td>Poultry Science</td>
</tr>
<tr>
<td>Psychology</td>
<td>PSYC</td>
<td>Psychology</td>
</tr>
<tr>
<td>Quantitative Business Analysis</td>
<td>QBA</td>
<td>Quantitative Business Analysis</td>
</tr>
<tr>
<td>Religious Studies</td>
<td>REL</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Russian</td>
<td>RUSS</td>
<td>Classical, Germanic, &amp; Slavic Languages</td>
</tr>
<tr>
<td>Social Work</td>
<td>SW</td>
<td>Social Work (School of)</td>
</tr>
<tr>
<td>Sociology</td>
<td>SOCL</td>
<td>Sociology</td>
</tr>
<tr>
<td>Spanish</td>
<td>SPAN</td>
<td>Spanish &amp; Portuguese</td>
</tr>
<tr>
<td>Speech</td>
<td>SPCH</td>
<td>Speech Communication, Theatre, &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication Disorders</td>
</tr>
<tr>
<td>University</td>
<td>UNIV</td>
<td>Academic Affairs (Office of)</td>
</tr>
<tr>
<td>Veterinary Anatomy</td>
<td>VAN</td>
<td>Veterinary Anatomy &amp; Fine Structure</td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>VMED</td>
<td>Veterinary Medicine (School of)</td>
</tr>
<tr>
<td>Veterinary Microbiology &amp; Parasitology</td>
<td>VMP</td>
<td>Veterinary Microbiology &amp; Parasitology</td>
</tr>
<tr>
<td>Veterinary Physiology</td>
<td>VP</td>
<td>Veterinary Pathology</td>
</tr>
<tr>
<td>Veterinary Physiology, Pharmacology, &amp; Toxicology</td>
<td>VPT</td>
<td>Veterinary Physiology, Pharmacology, &amp; Toxicology</td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>VETS</td>
<td>Veterinary Science</td>
</tr>
<tr>
<td>Vocational Agricultural Education</td>
<td>VAED</td>
<td>Vocational Agricultural Education</td>
</tr>
<tr>
<td>Vocational Education</td>
<td>VED</td>
<td>Vocational Education &amp; Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(School of)</td>
</tr>
<tr>
<td>Vocational Home Economics Education</td>
<td>VHEE</td>
<td>Vocational Home Economics Education</td>
</tr>
<tr>
<td>Vocational Trade &amp; Industrial</td>
<td>VTIE</td>
<td>Industrial &amp; Technical Education</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife</td>
<td>WILD</td>
<td>Forestry, Wildlife, &amp; Fisheries (School of)</td>
</tr>
<tr>
<td>Zoology</td>
<td>ZOOL</td>
<td>Zoology &amp; Physiology</td>
</tr>
</tbody>
</table>

**KEY TO COURSE INFORMATION**

<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th>ABBREVIATION</th>
<th>ADMINISTERING DEPARTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>E</td>
<td>Course offered even-numbered years</td>
</tr>
<tr>
<td>2001</td>
<td>O</td>
<td>Course offered odd-numbered years</td>
</tr>
<tr>
<td>(3)</td>
<td>Y</td>
<td>Course offered yearly; semesters vary</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>Course offered irregularly</td>
</tr>
</tbody>
</table>

**ACCOUNTING (ACCT)**

2000 Survey of Accounting (3) Not for degree credit in the College of Business Administration. Credit will not be given for both this course and ACCT 2001. Broad overview of information contained in financial accounting statements.

2001 Introductory Financial Accounting (3) Credit will not be given for both this course and ACCT 2000. Required of all students in the College of Business Administration. Principles and methods of accounting primarily concerned with financial data gathering and presentation in the form of general purpose external financial statements; legal and ethical obligations of the accounting profession.

2021 Intermediate Accounting—Part I (3) Prereq: grade of "C" or above in ACCT 2001 or equivalent. Accounting concepts and principles underlying preparation of financial statements; their application in measurement and reporting of selected balance-sheet items and related revenue and expense recognition.
2101 Introductory Managerial Accounting (3) Prereq: ACCT 2000 or 2001 or equivalent. Principles and methods of accounting primarily concerned with data gathering and presentation for purposes of internal management evaluation and decision making.

3021 Intermediate Accounting—Part II (3) Prereq: grade of "C" or above in ACCT 2021. Continuation of ACCT 2021; preparation and analysis of comparative statements, cash-flows, and fund statements, preparation of financial statements from incomplete data, and correction of statements.

3022 Advanced Accounting (3) Prereq: ACCT 3021. Continuation of ACCT 3021; partnerships, special sales procedures, actuarial science, corporate combination, and consolidated financial statements.


3201 Fundamental Tax Problems and Tax Planning for Individuals (3) Not open to accounting majors. Not intended to satisfy the requirements to sit for the CPA exam. For students with little or no previous work in accounting. Credit will not be given for both this course and ACCT 3221. General course in taxation; emphasis on rates, taxes, affecting the individual; federal and state income, estate, inheritance, gift, excise, and payroll taxes.

3221 Income Tax Accounting—I (3) Prereq: credit or registration in ACCT 2021. Credit will not be given for both this course and ACCT 3211. Fundamentals of federal income taxation with respect to individuals, income inclusions and exclusions, and statutory deductions in arriving at tax liability.

3222 Auditing (3) Prereq: ACCT 3021. Nature of public accounting; auditing theory, procedures, and problems; internal control; internal auditing; development of audit programs; evidential matter; and reporting.

3233 Internal Auditing—I (3) Prereq: ACCT 2021. Internal auditing standards, ethics, concepts, audit techniques, and reporting practices.

4021 Cases in Accounting Policy (3) Prereq: accounting major with senior standing. A case approach to functions of accounting; integrates previous courses in financial accounting, systems, auditing, income tax, and management uses of accounting information; emphasis on financial reporting to owners, the financial community, regulatory agencies, and the general public on results of operations of the business enterprise; legal materials pertaining to the relationship of accounting to the law.

4211 Advanced Cost Analysis (3) Prereq: ACCT 3121. Measurement, interpretation, planning, and control of manufacturing and distribution costs; budgets and budgetary control; comparison of costs of business alternatives; and other selected topics.

4221 Income Tax Accounting—II (3) Prereq: ACCT 3221. Fundamentals of federal income taxation, with respect to partners, partnerships, corporations, and shareholders.


4231 Internship in Accounting (3) Prereq: prior consent of department chairman and approval of dean. At least 12 hours per week of learning experience related to academic pursuits under the general supervision of a faculty member and direct supervision of a professional in accounting. Pass-fail grading based on the faculty member's evaluation, a written report by the professional supervisor, and a written report by the student.

4232 Advanced Auditing (3) Prereq: ACCT 3222. Audit program development and planning, statistical sampling applications in auditing, auditing EDP systems, SEC reporting, and extensions of the attestation function.

4234 Internal Auditing—II (3) Prereq: grade of "C" or above in ACCT 3233. Operation, organization, and quality control audits; organization theory.

4321 Systems Analysis and Design (3) Prereq: CSC 1240 or equivalent and credit or registration in ACCT 3121. Accounting functions in design, development, and installation of accounting systems; emphasis on computer-based applications.

4421 Governmental and Institutional Accounting (3) Prereq: ACCT 2021. Accounting, budgeting, fiscal processes, and financial records of local, state, and federal governmental bodies and of private nonprofit institutions.

4501 Petroleum Accounting (3) Prereq: ACCT 3021 and 3121. Accounting for oil and gas exploration and production; accounting for oil and gas leases, exploration costs, undeveloped properties, drilling and development operations, production, and oil and gas revenues; current issues in petroleum accounting.

5001 Financial Accounting for Management (3) Primarily for M.B.A. students; not open to accounting majors. Composition of financial statements; information processing and reporting for the purpose of understanding accounting information; legal and ethical obligations of the accounting profession.

7021 Advanced Theory of Accounts (3) Prereq: ACCT 3021 and consent of instructor; or ACCT 3022.

7023 Development of Accounting Thought and Practice (3) Prereq: consent of instructor. The historical roots of modern accounting; organizations and individuals who shaped its development, past and present research, and trends for the future.

7070 Contemporary Accounting Thought (3) Prereq: ACCT 7021.

7071 Current Topics in Financial Accounting (3) Prereq: ACCT 7021. May be taken twice for credit. Theoretical analysis of recent accounting pronouncement and current literature in accounting.

7072 Research Methodology in Accounting (3) Prereq: QBA 7024 and 7025; or equivalents. Research methodologies in accounting and tax research.

7101 Accounting for Managerial Decision Making (3) Prereq: ACCT 5001 or equivalent. Primarily for M.B.A. students; not open to accounting majors. Cost accounting and financial control systems; emphasis on assumptions underlying cost data used in decision making and control.

7122 Budgeting, Cost Analysis, and Control (3) Prereq: ACCT 3121. For accounting majors only.

7132 Behavioral Impact of Accounting Information (3) Prereq: ACCT 3121 or 7101. Effect of accounting data on users of that data; emphasis on behavioral research methodology as applied to accounting topics.
7170 Advanced Accounting Analysis for Decision Making (3) Accounting majors with credit for ACCT 3121 should take 7122.

7222 Auditing Theory and Standards (3) Prereq: ACCT 3222.

7250 Current Topics in Federal Income Taxation (3) Prereq: ACCT 3221 or equivalent. May be taken twice for credit. Tax research and planning in current major interest areas of tax law.

7251 Federal Income Taxation of Partners and Partnerships (3) Prereq: ACCT 3221 or equivalent. Analysis of tax problems in the organization and operation of partnerships, including treatment of partnership distributions, withdrawal of a partner during his or her lifetime, death of a partner, dissolution of the partnership, sales or exchanges of partnership interests; limited partnerships; special problems of family partnerships.

7252 Seminar in Taxation of Corporations and Shareholders (3) Prereq: ACCT 3221 or equivalent. Advanced analysis of the tax treatment, tax problems, and tax planning techniques involving transactions between corporations and their shareholders; transfer to a corporation; capital structure; dividends and other distributions; stock redemptions and liquidations; stock dividends and preferred stock buyouts; elections under subchapter S; special problems of professional corporations.


7254 Tax Research and Policy (3) Prereq: ACCT 3221 or equivalent. Locating and assessing federal income tax authority; communicating tax research findings; tax policy including indexing for inflation, business-pleasure combination, and personal deductions and exclusions.

7256 Internal Revenue Service Practice and Procedure (3) Prereq: ACCT 7254 or equivalent. Practices and procedures of the Internal Revenue Service; client representation.

7270 Statement and Report Presentation and Analysis (3) For accounting and finance majors only.

7301 Financial Information Systems (3) Prereq: basic knowledge of computers and programming (may be obtained concurrently with course enrollment if necessary). Same as ACCT 7371. Financial information systems, with emphasis on those utilizing electronic data processing equipment; nature and design of a system and its use in financial planning and control.

7371 Financial Information Systems (3) Same as ACCT 7301; primarily for Ph.D. candidates.

7400 Accounting Research Forum (1) May be repeated for credit. Full-time, resident graduate accounting majors must register for this course each semester. Not for degree credit for accounting majors. Pass-fail grading. Research methodology, reports, and discussion of topics of current interest in accounting.

7422 Managerial Accounting for Government Agencies (3) Prereq: ACCT 2001, 2101, and 4421. Internal budgeting and reporting systems; types of budgets; cost centers; techniques for measurement, comparison, and data collection for government agencies.

7425 Seminar in Advanced Accounting Problems (3)

7450 Seminar in Accounting Policy (3) Prereq: ACCT 7021 or equivalent. For accounting majors (M.S. degree) only; to be taken near end of course work. Accounting policy issues including international accounting, ethical considerations, and business policy implications of accounting standards.

7554 Seminar in Oil and Gas Taxation (3) Prereq: ACCT 3221 or equivalent; and ACCT 4501. Principles of oil and gas taxation; includes the property unit, conveyances, depletion, IDC, unitization agreements, and the windfall profit tax; tax planning and Louisiana law.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Predissertation Research (1-9) May be repeated for credit.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

ADMISTRATIVE AND FOUNDATIONAL SERVICES (EDAF)

GENERAL COURSES

5880 Special Topics in Education (1-3) V Prereq: consent of instructor. May be repeated for credit for a maximum of 9 sem. hrs. Direction and assistance for the practitioner in solving special or unique problems in the school organization.

7811 Seminar in Current Trends in Education (3) S Open only to students who have completed qualifying examination for the doctoral degree. Current issues and trends; sources, bibliography, and research in the student’s major.

7900 Independent Study (1-6) May be repeated for credit for a maximum of 12 sem. hrs. Open to advanced graduate students. Directed individual study under the guidance of a graduate faculty member.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Predissertation Research (1-9) Prereq: consent of department.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

4360 Foundation, Functions, and Administration of Counseling and Guidance Services (3) F Multidisciplinary foundations of guidance; major guidance functions; overview of administration of guidance programs.

4361 Elementary School Counseling (3) S For prospective elementary counselors and teachers. Principles and procedures of counseling within the elementary school program.

4364 Student Affairs in Higher Education (3) Basic concepts and issues in the college student affairs field.

4365 Basic Course in Interpersonal Communication (3) F,S,Su 2 hrs. lecture; 2 hrs. lab. For prospective counselors and teachers.

4600 Disabling Conditions: Rehabilitation and Special Education (3) V Etiology, acute phase, and chronic state of disability; emphasis on teamwork among physicians, teachers, counselors, and paramedical specialists.

4601 Rehabilitation Management (3) V Management aspects of vocational rehabilitation and its relationship to special education.
5300 Special Problems in Guidance and Counseling (3) V Prereq: consent of instructor. 1 hr. lecture; 4 hrs. lab. May be taken 3 times for credit when topics vary.

7301 Orientation to the World of Work (3) Su Prereq: EDAF 7332. Also offered as VED 7301. For elementary school counselors. Basic concepts underlying orientation, awareness, and exploration phases of the career development process.

7302 Group Dynamics and Techniques in the Elementary Schools (3) Su Prereq: EDAF 4361 and 4365. For elementary school counselors. The dynamics of small group behavior, emphasis on classroom consultation and demonstration procedures.

7330 Group Techniques and Dynamics in Counseling (3) F

7331 Counseling Theory and Techniques (3) F,Su Prereq: EDAF 4365 and either EDAF 4360 or 4361.

7332 Educational and Occupational Information (3) F,Su See VED 7332.

7333 Analysis of the Individual (3) I

7334 Vocational Counseling (3) S,Su-E Prereq: EDAF 7332 or equivalent. Also offered as VED 7334. Materials and techniques in vocational counseling of adolescents and adults.

7360 Counseling Practicum in the Elementary Schools (3-6) F,S Prereq: consent of instructor. 2 hrs. conf.; 6-18 hrs. lab in work setting. Supervised experience in elementary schools.

7362 Counseling Practicum in the Secondary Schools (3-6) F,S Prereq: consent of instructor. 2 hrs. conf.; 6-18 hrs. lab in work setting. Supervised experience in secondary schools.

7364 Counseling Practicum in Special Settings (3-6) F,S,Su Prereq: consent of instructor. 2 hrs. conf.; 6-18 hrs. lab in a work setting. Supervised experience in special settings (e.g., employment service, rehabilitation agency, mental health center, hospital, counseling center).

7365 Seminar in Counseling Practicum (3) F,S,Su Prereq: concurrent enrollment in EDAF 7360, 7362, or 7364. Consultation with professor and peers regarding special problems encountered in implementing counseling and guidance services.

7390 Advanced Counseling Theory and Techniques (3) S Prereq: EDAF 7331 or equivalent. Theoretical approaches to individual counseling.

7392 Advanced Vocational Counseling (3) Su Prereq: EDAF 7334 or equivalent. Also offered as VED 7392. Life career planning through vocational assessment and counseling; vocational counseling theory, research, and practice.

7394 Advanced Group Counseling (3) S Prereq: EDAF 7330 or equivalent. Small group counseling approaches.

7395 Family Counseling (3) F Prereq: consent of instructor. Theory and practice of family therapy; family dynamics, the role of the counselor, and theoretical approaches to conducting family therapy.

7396 Advanced Family Counseling (3) Prereq: EDAF 7395 or equivalent. Practice in assessing family dynamics; supervised experience in developing and implementing therapeutic interventions.

7397 Special Topics in Counseling (3) V Prereq: consent of instructor. 1 hr. lecture; 4 hrs. lab. May be taken twice for credit when topics vary.

7398 Field Experiences in Vocational Counseling (3) F,S,Su Prereq: EDAF 7332 and 7334. 1 hr. lecture; 4 hrs. lab. May be taken twice for credit. Also offered as VED 7398.

7399 Supervised Counseling Internship (4) V Prereq: consent of instructor. 1 hr. conf.; 18 hrs. lab. May be taken twice for credit.

EDUCATIONAL ADMINISTRATION

4400 Introduction to Educational Administration (3) F,S,Su Organization of the American educational enterprise; economic, political, social, and cultural forces which affect the administration of American education.

7400 Problems of Educational Finance (3) F,Su Financing of public elementary and secondary schools in terms of federal, state, and local sources of revenue, tax structures, budget preparation, and cost analysis.

7401 Administration of School Personnel (3) S,Su Role of the school administrator in personnel planning, staff development, and employee relationships.

7402 Organizational Research in Educational Administration (3) Prereq: EDAF 4400 and consent of instructor. Primarily for doctoral students in educational administration. Research, bibliography, and source materials; critical examination of organizational research studies.

7403 The Principalship in Elementary and Secondary Schools (3) F,S,Su Prereq: EDAF 4400 or equivalent. Duties and responsibilities of the principal for organization, administration, and supervision of elementary and secondary schools.

7404 Internship in Educational Administration (3-6) F,S,Su Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. For advanced graduate students qualified for internship in educational administration. Pass-fail grading.

7405 Individual Problem Investigation in the Organization and Administration of Education (3) F,S,Su Prereq: consent of instructor. May be taken twice for credit when problems vary. For advanced graduate students qualified to undertake problem investigation in education.

7406 Supervision of Child Welfare and Attendance (3) V Prereq: EDAF 4400 and 7450; or equivalents. The roles and functions of the supervisor of child welfare and attendance examined through seminars, field study, and individual research; includes legal provisions, history, and philosophy.

7407 Politics, Policy, and Administration in Education (3) Prereq: EDAF 4400 and consent of instructor. Primarily for doctoral students in educational administration. Critical analysis of educational policy and the process of policy development in education.

7450 Supervision of Instruction in Elementary and Secondary Schools (3) F,S,Su Theories, principles, and practices concerning the role of the supervisor in today's multicultural school settings.

7451 The Supervision of Student Teaching (3) F,S,Su Principles of planning, observing, and evaluating student teaching; participation in student conferences.

7802 Theory Development in Educational Administration (3) Prereq: EDAF 7006, 7402, and 7407, or equivalents; and consent of instructor. Primarily for doctoral students in educational administration. Critical analysis of approaches to inquiry; development of theory in educational administration.
EDUCATIONAL FOUNDATIONS

2000 Survey of Education in the United States (3) F,S,Su Not open to education majors. Credit will not be given for both this course and EDUC 1000. Historical, sociological, philosophical, psychological, and cultural development of the American educational enterprise.

4000 History of Education (3) F,S,Su Development of formal and informal education in multicultural settings from earliest times to the 20th century.

4001 History of American Education (3) F,S,Su Cultural diversity and the response of educational thought and practice in America from colonial times to the present.

4002 Survey of Philosophy of Education (3) F,S,Su Key theories of human nature, culture, and society and their bearings on the educational enterprise.

4003 Cultural Pluralism in American Education (3) Basic features of major cultures in American society from the standpoint of their impact on American education; historical approaches to educating persons from different cultures; changing roles of schools in responding to cultural pluralism.

7000 Seminar in Philosophy of Education (3) Su Prereq: EDAF 4002. Theories of education and schooling with special focus on the context of pluralistic societies as applied to students' areas of interest.

EDUCATIONAL MEDIA

3500 Utilization of Instructional Materials (3) F,S,Su Basic techniques of preparing effective instructional materials.

3550 Books and Audio-Visual Materials for Young Adult Resource Centers (3) F Selection and evaluation of printed and audio-visual materials in relation to the needs and interests of the adolescent; emphasis on the secondary school curriculum.


3552 Cataloging and Classification (3) F,S Basic principles of acquisition, organization, cataloging and classification, processing, and circulation of book and nonbook materials; the Dewey Decimal Classification, Sears Subject Headings, and AACR II.

3553 Administration of School Media Centers (3) S Role of the school media center as related to the curriculum; philosophy and objectives; services to students and faculty; standards and procedures for selection of all media.

3554 Libraries and Librarianship (3) F,S Libraries and librarianship; origin, services, importance in contemporary social order, and present-day professional library problems.

3555 Libraries as Information Centers (3) F Basic bibliographic reference sources; their selection, evaluation, and use in school media centers; community and special services.

4501 Selection and Utilization of Educational Media (3) Introduction to the field of instructional technology; characteristics of media, objective specifications, and evaluation of instructional modules and systems.

4507 Computer Technology in Education (3) Applications of computers in instruction; educational data processing, computer-assisted instruction, computer-managed instruction, and information storage and retrieval; use of micro/minicomputers.

5505 Production of Instructional Materials (3) Instructional graphics production techniques; principles of visual design and instructional message design.

5506 Utilization of Mass Media in Education (3) Organization, utilization, and integration of mass media, especially newspaper, radio, and television, in the school curriculum and educational programs; critical viewing skills and application of mass media to teaching.

7240 Critical Analysis of Current Research in Educational Media (3) F,Su Prereq: EDAF 4501 or equivalent. Critical analysis and synthesis of current literature in the field; evaluation of current research and investigations into needed research; systems approach to analyzing and solving instructional problems, with attention to media.

7420 Administering Educational Media Programs (3) F,S,Su Prereq: EDAF 4501 or equivalent; and consent of instructor. Primarily for personnel administering media centers. Budget preparation, purchase of equipment and materials, in-service training, program evaluation.


7503 Instructional Design and Development (3) S,Su Prereq: EDAF 4501. Development of skills in applying principles of instructional systems to teaching and learning problems.

7504 Photography in Education (3) S,Su Prereq: EDAF 4501. Experience and foundation in the techniques of production utilization; evaluation of educational motion pictures; preparation of still photography materials.

7505 Designing Instructional Units Using Computers (3) Prereq: EDAF 4507 and 7503; or equivalents. Instructional design for computer-assisted instruction; emphasis on learning theory, events of instruction, structuring instructional sequences for maximum content retention.

7509 Authoring Systems for Educators (3) Prereq: EDAF 4507 and 7505; or equivalents. 2 hrs. lecture; 2 hrs. lab. Authoring systems, with emphasis on SuperPILOT and LOGO for individualized learning; system variables, transfer and portability parameters, student involvement, alternative systems, and formative and summative evaluation procedures and techniques.

7512 Principles and Design of Educational Television (3) Prereq: EDAF 7502. Design, distribution, and application of educational television to learning and training; ETV distribution systems; teacher's guides; research on ETV program design variables and learning through ETV; design of an ETV facility and distribution system; management of ETV services; survey of the educational telecommunications field.

7514 Designing Photographic Messages (3) Prereq: EDAF 7504. Advanced techniques in the design of slide/tape programs, multi-image productions, photo-modification, and computer-generated slide graphics for education.

7516 Practicum in Educational Media (3-6) Prereq: EDAF 5505, 7240, and 7420; or consent of instructor. 9-18 hrs. lab. Practical experience in teaching, producing, utilizing, and administering educational media.
7517 Seminar in Educational Media (3) Prereq: EDAF 7240 and 7420; or consent of instructor. Advanced topics in instructional technology.

7520 Educational Technology in Business, Industry, and Government Agencies (3) Prereq: EDAF 7503 and one of the following: EDAF 5305, 7502, 7504. Techniques used to meet the training and development needs in business, industry, and governmental agencies.

7550 Theory and Research in Educational Technology (3) Prereq: EDAF 7240 and 7503. For advanced graduate students. Theoretical foundations and research findings in educational technology; emphasis on theories of communication, learning theories, educational psychology, and behavioral sciences as they apply to educational technology.

7791 Educational System Analysis (3) V Prereq: completion of 3 sem. hrs. in educational administration or equivalent. Same as EDC 7791. Basic techniques for designing and analyzing instructional systems; emphasis on specification of instructional objectives, design and selection of instructional alternatives, and evaluation of instructional systems.

EDUCATIONAL RESEARCH

3200 Evaluation of Instruction (2) F S Su Prereq: credit or registration in a methods course appropriate to the student's teaching level or major or minor. Principles and techniques in development, administration, scoring, and evaluation of classroom and standardized tests.

4006 Applied Statistics in Education (3) Su Credit will be given for only one of the following: EDAF/EXST 4006, EXST 4001, 4011. Same as EXST 4006. Basic statistical methods; emphasis on statistical application and interpretation of educational phenomena.

4200 Measurement and Evaluation of Student Achievement (3) F S Su Basic theory of educational measurement, principles of achievement, test construction including criterion-referenced measures, problems of measurement in subcultures, and principles of evaluation.

4249 Understanding and Applying Research in Education (3) F S Su For the master's degree and specialist student who will not write a thesis. Instructing teachers and administrators to become intelligent consumers of research.

7006 Statistical Principles—II (4) F Prereq: EDAF 4000 or equivalent. 3 hrs. lecture; 2 hrs. lab. Credit will be given for only one of the following: EDAF/EXST 7006, EXST 7003, 7004, 7005. Same as EXST 7006. Fundamental concepts of descriptive and inferential methods; correlation and regression; probability and sampling; normal, t, chi-square, and F distributions; hypothesis testing and interval estimation; analysis of variance; nonparametric chi-square tests; emphasis on educational research problems.

7016 Statistical Principles—II (4) S Prereq: EDAF/EXST 7006 or equivalent. 3 hrs. lecture; 2 hrs. lab. Credit will be given for only one of the following: EDAF/EXST 7016, EXST 7013, 7014, 7015. Same as EXST 7016. Advanced statistical procedures; analysis of variance; randomized block, factorial, and repeated measurement designs; analysis of covariance; nonparametric tests; simple, multiple, and curvilinear regression; introduction to path, canonical correlation, discriminant, and factor analyses; emphasis on educational research problems.

7201 Theory of Educational Measurement (3) F Prereq: EDAF 4200. Principles of psychometric theory as applied in the educational setting; classical measurement theory and recent psychometric techniques such as item-response theory and criterion-referenced measurement.

7202 Seminar in Educational Measurement (3) Su Prereq: EDAF 7006 and 7201. Basic theories and problems in educational measurement applied to students' areas of interest.

7220 Education Program Evaluation (3) F Prereq: EDAF 4249 and 7006; or equivalents. Current models and issues in educational evaluation as a professional practice; design and development of a comprehensive evaluation plan which includes specification of theoretical framework, problem identification, data collection/analysis procedures, report writing format, and dissemination plans.

7221 Performance Evaluation in Education (3) S Prereq: EDAF 4249 and 4249; or equivalents. Current procedures and research findings for the performance evaluation of students, teachers, and administrators; methodological, professional, and legal issues.

7241 Educational Research (3) F S Prereq: EDAF 7006 and either EDAF 4200 or 7201. Primarily for beginning doctoral students. Process and methods of research in education.

7242 Experimental Design in Education (3) S Prereq: EDAF 7241 or equivalent. Choosing statistical techniques and experimental designs most appropriate for solving specific problems; emphasis on multivariate analysis, multiple regression, and factor analysis.

7248 Research Practicum (3) V By arrangement with a local school system or other educational agency, students assist in the conduct of research under the supervision of the major professor and the cooperating agency.

AEROSPACE STUDIES (ASST)

1001, 1002 Aerospace Studies—U.S. Military Forces in the Contemporary World (1, 1) F S I hr. lecture; 1 hr. leadership lab. Air Force customs and courtesies, officership, mission, organization, and weaponry of Air Force units; strategic offensive and defensive forces, general-purpose forces, and aerospace support forces.

1109 Aerospace Studies—Private Pilot Ground Training Program (2) V Prerequisite for completion of the Air Force ROTC flying program for cadets, but open to any student. Preparation for FAA written examination for certification as private pilot; principles of flight, preflight, and systems operation; meteorology; FAA regulations; flight computer; navigation; radio navigation; communications; Airmen's Information Manual.

2003, 2004 Development of Air Power (2, 2) F S I hr. lecture; 1 hr. leadership lab. Development of air power from balloons and dirigibles through peaceful employment of U.S. air pow-
AGRICULTURAL ECONOMICS (AGEC)

1098 Studies in the Operation of Agricultural Business (3) F Organization, management, and operation of agricultural businesses.

2075 Introductory Agricultural Economics (3) F,S Role of agriculture in the general economy; economic principles applied to agricultural production, marketing, consumption, and policy problems.

2077 Principles of Agricultural Marketing (3) S Agribusiness marketing channels, institutions, costs, problems, agencies, policies.

4001 Farm Records and Accounts (3) F 2 hrs. lecture; 2 hrs. lab. Accounting procedures in keeping farm inventories, single-entry classified farm cash accounts, single enterprise accounts, double-entry enterprise accounting (farm cost accounting), and other types of farm records; use of such information in managing a farm business; federal income tax reporting for farmers.

4015 Farm Management Principles (3) F,Su Fundamental economic and business principles applied to organization and operation of the farm business.

4016 Farm Organization and Management (4) S 2 hrs. lecture; 4 hrs. lab, including 6 hr. farm field trip. Intensive farm planning; case study of management on individual farms to maximize income.

4018 Agricultural Statistics (3-4) F,Su 3 hrs. lecture; 2 hrs. lab. Statistical methods and techniques essential for economic analysis and interpretation of agricultural data.

4020 Cooperation in Agriculture (3) S Development, management, and related problems of cooperative agribusinesses.

4024 Agricultural Prices (3) S,E Methods of collection and analysis of price data, including relationships between agricultural and industrial prices.

4038 Problems and Decision Making in Agribusiness Firms (3) F-E For students planning careers in agricultural business. Identification, definition, and analysis of typical problems in agricultural business firms, emphasizing problems peculiar to such firms.

4051 Economics of Marketing Livestock, Meats, and Poultry Products (3) F Market structure and organization, pricing, trends, supply and demand, price and income elasticity, efficiency, and costs.

4052 Marketing Milk and Milk Products (3) S Market channels, characteristics, institutions, and government regulations involved in pricing and marketing of milk.

4053 Seminar in Tropical Agricultural Resource Development (1) S Economics of tropical agricultural development; opportunities for developing world trade in tropical agricultural products; potentials for improving agricultural economies and standards of living in areas dependent primarily on production of tropical agricultural products.

4060 Schedule Design and Interview Techniques (1) F Sources of data, questionnaire construction, and survey technique.

4064 Design of Samples and Surveys (3) S-O Prereq: AGEC 4018 or equivalent. Sampling theory and methods; application to related fields in social sciences and agriculture.

4067 Farm and Rural Land Appraisal (2) S Fundamentals of farm appraisal; basic techniques for determining agricultural and rural land values; practice in appraising farms and rural lands representing major farming regions of Louisiana.

4077 Research Problems (3) Independent research culminating in an oral and written research report acceptable to a faculty committee.

4082 Agricultural Finance (3) S Capital and credit needs of farms and other agribusinesses; sources of funds, costs, terms, and risks involved in use of agricultural credit.

4084 The Economics of Resource, Rural, and Community Development (3) S Characteristics of underdeveloped areas; analysis of economic and related problems and potential for development, with emphasis on the southern states.

4088 Agricultural Policy, Farm Programs, and World Food-Population Problems (3) F Analysis of policies, legislation, and programs; world food-population balance, domestic and world food supplies, demand, prices, and related problems.

4092 Applied Programming Procedures in Agriculture (3) F-E Application of linear, dynamic, recursive, and other programming procedures to economic problems in agricultural production, marketing, and resource use.

4098 Agricultural Commodity Exchanges and Futures Trading (3) F-O Functions, institutions, economic performance, and procedures involved in utilizing futures trading to minimize price change risks in producing, processing, storing, buying, selling, and financing agricultural commodities.

7003 Research Methods in Agricultural Economics (3) S-E Scientific-method and problem-solving research; acquisition of reliable knowledge; research techniques for economic problems in agriculture.

7010, 7011, 7012 Seminar in Agricultural Economics (1,1,1) S Prereq: graduate major or minor in agricultural economics. 2 hrs. seminar, reports. Offered in rotation. Pass-fail grading. Current topics and research.

7016 Agricultural Production Economics (3) F Production principles applied to use of agricultural resources, with analysis and interpretation of research data; theory of the farm firm, including costs, uncertainty, and expectations.

7018 Advanced Statistical Methods for Agriculture (3) Su Application of advanced statistical tools, matrices, simultaneous equations, curve fitting, model construction, and linear and dynamic programming in relating and analyzing agricultural and economic data.

7020 Seminar in Marketing (3) F-O Basic and applied analytical procedures in marketing research, emphasizing quantitative methods; firm theory applied to marketing.

7028 Seminar in Agricultural Policies (3) V Development of agricultural policy; emphasis on objectives, procedures, accomplishments, and consequences.

7031 Land and Natural Resource Economics (3) F-E Land use planning including economic concepts and institutional factors relating to utilization of natural resources—land, water, forests, space—emphasizing tenure, conservation, taxation, zoning, and agrarian adjustments.

7090 Advanced Methods and Research Design (3) S-O Selection and application of advanced research techniques in agricultural economics.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.
AGRICULTURAL ENGINEERING (AGE)

1249 Introduction to Agricultural Engineering Design (2) F 1 hr. lecture; 2 hrs. lab. Design philosophy and basic design tools such as microcomputers, design economics, production feasibility, and elementary statistics.

2307 Elements of Landscape Construction (3) F,S Prereq: MATH 1015 or 1022. 2 hrs. lecture; 3 hrs. lab. Theory and use of tape, level, transit, plane table, and compass; principles of area and volume calculations, land slope, drainage grades, legal land descriptions, and topographic mapping.

2348 Microcomputer Applications in Engineering (3) F Prereq: AGE 1248 or equivalent. 2 hrs. lecture; 2 hrs. lab. The microcomputer as a design and decision tool in the solution of engineering problems; operation and programming beyond the fundamentals of BASIC language; measurement and control functions; elementary numerical methods with applications in engineering problem solving; additional selected topics.

3104 Proseminar (1) F

3249, 3250 Engineering Practice (1-3, 1-3) Su only Prereq: consent of instructor. Pass-fail grading. A minimum of 6 weeks of full-time employment by an industry participant in the summer program. Same as ENGR 3049, 3050. Selected engineering problems in an industrial environment.

3306 Agricultural Power Systems (3) V Prereq: ME 2333 or 3333. 2 hrs. lecture; 3 hrs. lab. Analysis and design of agricultural power systems; thermodynamic principles related to design of internal combustion engines; combustion of fuels; engine accessories; fundamentals of mechanical hydraulic circuits; traction theory.

3352 Agricultural Structures Design (3) V Prereq: CE 2450 and 3405. Structural design for light structures; design with wood, plywood, concrete, and steel; frames and storage bins; plans, codes, and load estimation.

3374 Soil and Water Resource Engineering (3) V Prereq: CE 1510 and 1550, and credit or registration in CE 2200. Engineering analysis and design of soil and water systems in agriculture.

3989 Special Projects in Agricultural Engineering (1-4) F,S,Su Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. Library research, experimental and/or theoretical investigations, and written report in format of scientific manuscript.

4274 Irrigation and Drainage Engineering (2) V Prereq: AGE 3374. Engineering analysis and design of irrigation and drainage systems.

4293 Electrical Energy in Agricultural Systems (2) V Prereq: EE 2950. 1 hr. lecture; 3 hrs. lab. Application of electrical energy to agricultural processes and systems; design of farmstead and other electrical systems to include lighting, heating, electric machines, and control circuits.

4305 Crop Processing (3) V Prereq: ME 2333 or 3333. 2 hrs. lecture; 3 hrs. lab. Theoretical and practical considerations of processing forage crops and small grains, flow measurements, heat transfer, air moisture, temperature, vapor pressure relationships, fans, drying, material handling, manual and automatic controls, and plant layout.

4306 Farm Machinery Design (3) V Prereq: credit or registration in CE 3405. 2 hrs. lecture; 3 hrs. lab. Design and testing of machine components used in agricultural machinery, including theoretical and laboratory application of strain gauges.

4340 Environmental Engineering for Animals and Plants (3) V Prereq: ME 2333 or 3333. Basic environmental factors and their modification for optimizing animal and plant growth.

4397 Instrumentation for Biological Engineering (3) V Prereq: MATH 2057 and PHYS 2102, or senior standing, or consent of instructor. Principles of measurement for engineering research; emphasis on instrument methods for indicating, recording, or controlling temperature, pressure, and flow; instruments for composition analysis and mechanical measurements.


7302 Environmental Engineering for Plants and Animals (3) V Prereq: AGE 4354. Properties and components of the physical environment, conditioning necessary to provide a selected environment, and physiological systems affected when altering the environment of biological materials.

7303 Engineering Phases of Crop Processing (3) V Prereq: AGE 4305 or equivalent. Physical properties of agricultural crops; engineering principles as they apply to cutting, shearing, collecting, packaging, transporting, drying, handling, and storing of agricultural products.

7304 Advanced Soil and Water Resource Engineering (3) V Prereq: AGE 4274 or equivalent. Advanced topics in statistical hydrology, flow theory, drainage, irrigation, erosion, sediment transport, and sedimentation applied to agricultural fields and watersheds.

7305 Advanced Power and Machinery (3) V Prereq: AGE 3306 and 4306. Theoretical analysis of modern mechanical power sources; methods of measurement and analysis of power requirements; related theory of land locomotion.

7306 Agricultural Systems Engineering (3) V Prereq: AGE 4293 and 4305. Material handling, systems layout, linear programming, fundamental theory of particle movement, and control systems.

7909 Agricultural Engineering Research (3) F,S,Su

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

AGRICULTURAL MECHANIZATION (AGM)

2050 Farm Structures (2) F Planning of farm buildings, fences, and farmstead arrangement; functional and environmental requirements of animals, machinery, and product storage.

2059 Farm and Shop Mechanics (3) F,S 6 hrs. lab. Selection and use of hand and power tools for school and shop; use and maintenance of the basic tools used for carpentry, sheet metal, soldering, pipe fitting, masonry, wiring, and welding as related to farm shop and machinery maintenance.

2061 Mapping and Surveying (3) S 2 hrs. lecture; 2 hrs. lab. Elementary mapping and surveying, with emphasis on soil and water conservation practices, drainage, and irrigation.

2065 Power Units (3) 2 hrs. lecture; 2 hrs. lab. Management and maintenance of power units used in agriculture, forestry,
and the light construction industry; selecting proper size and type of tractor; shop and field practice in adjusting and operating internal combustion engines and associated hydraulic systems.

2066 Agricultural Field Machinery (3) F,S Selection of individual and combinations of field machines based on study of design and operating characteristics.

2094 Agricultural Chemicals Applications (2) S Selection of safe methods of chemical application, types of equipment and chemicals, cost of use, and certification of applicators.

3082 Electrification (3) V 2 hrs. lecture; 2 hrs. lab. Farm electrical distribution system; selection, operation, and use of electrically powered farm and home equipment.

3083 Farm and Power Equipment Sales and Service (2) V Organization of farm and light industrial equipment sales business; management of the business; selling, financing, servicing, and demonstration of equipment.

4030 Processing and Handling Equipment (3) V 2 hrs. lecture; 2 hrs. lab. Techniques used in processing agricultural products; principles and equipment for handling, drying, and storage of biological products such as grain, forage, fruits, vegetables, hay, fertilizer, and farm wastes.

4350 Mechanical Hydraulics (3) V 2 hrs. lecture; 2 hrs. lab. Fundamentals of hydraulics in mechanical equipment; hydraulic circuits, pumps, controls, and actuators; analysis of hydraulic circuits to determine mechanical and volumetric efficiencies and energy losses.

4981 Agricultural Mechanization Special Topics (3) F,S,Su

AGRICULTURE (AGRI)

1001 Introduction to Agriculture (1) F,S,Su All fields of agriculture; opportunities and educational requirements.

AGRONOMY (AGRO)

1021 Crop Science (3) 2 hrs. lecture; 2 hrs. lab. Basic principles of crop production.

2051 Soil Science (4) Prereq: CHEM 1002 and 1212. 3 hrs. lecture; 2 hrs. lab. Fundamental principles of soil science; properties of soils as related to plant growth.

3002 Cotton (3) S 2 hrs. lecture; 2 hrs. lab. Varieties, species, genetics, breeding, cultural practices, fiber properties, and end use of products of lint and seed.

3003 Grain Crops (3) S 2 hrs. lecture; 2 hrs. lab. Soybeans, corn, rice, oats, and other cereal crops.

3040 Soil Conservation (2) Causes and effects of soil erosion and sedimentation; methods of reducing erosion, sedimentation, and runoff.

4005 Forage Crops and Pasture Management (4) F,S 3 hrs. lecture; 2 hrs. lab. Forage crops—their adaptation, production, establishment, utilization, and management in pastures.

4008 Sugarcane (3) F 2 hrs. lecture; 2 hrs. lab. Sugarcane and its production, particularly in Louisiana.

4052 Soil Fertility and Soil Management (4) S Prereq: AGRO 2051. 3 hrs. lecture; 2 hrs. lab. Soil factors affecting crop growth; commercial fertilizers, lime, soil-improving crops; soil and tissue testing.

4055 Chemical Properties of Soil (4) F-E Prereq: AGRO 2051 and CHEM 2252. 3 hrs. lecture; 3 hrs. lab. Chemical and mineralogical properties of soils from theoretical and technical viewpoints.

4056 Soil Microbiology (4) S Prereq: AGRO 2051 and MBIO 2051. 3 hrs. lecture; 3 hrs. lab. Also offered as MBIO 4156. Soil organic matter, its decomposition and associated microorganisms; oxidation-reduction processes; nitrogen fixation.

4058 Soil Morphology and Classification (4) F 2 hrs. lecture; 4 hrs. field study and mapping. Field service fee. Origin, profile development, composition, and classification of soils; soils of Louisiana and their utilization.

4061 Rice Production (3) Su 2 hrs. lecture; 2 hrs. lab. Cultural and management practices in rice production.

4063 Field-Plot Technique (4) 3 hrs. lecture; 2 hrs. lab. Also offered as EXST 4063. Planning, conducting, and interpreting field experiments.

4064 Principles of Plant Breeding (4) S Prereq: AGRI 2072 and AGRO 4063; or equivalents. 3 hrs. lecture; 2 hrs. lab. Basic principles of breeding crop plants; application of biometric principles to interpretation of genetic data.

4078 Land Use Planning and Land Management (3) S-E Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Land use planning and land management based on chemical, mineralogical, and physical properties of soils; includes soils, plants, data bases, hydrology, and remote sensing; areas of use and management include crops, pasture, forest and woodland, metropolitan, transportation, waste disposal, wetlands, and disturbed lands.

4091 Special Topics in Crop Science (1-3) Prereq: written consent of instructor. May be repeated for credit; a total of 6 sem. hrs. may be earned in AGRO 4091 and 4092 combined.

4092 Special Topics in Soil Science (1-3) Prereq: written consent of instructor. May be repeated for credit; a total of 6 sem. hrs. may be earned in AGRO 4091 and 4092 combined.

7001 Agronomy Seminar (1) May be repeated for credit. 1 hr. seminar; reports.

7020 Application of Cytogenetics to the Improvement of Crop Plants (4) See HORT 7020.

7050 Advanced Plant Genetics (4) S-O Prereq: AGRI 2072 or ZOOI 2153 and either BCH 4083 or 4087; or equivalents. 3 hrs. lecture; 2 hrs. lab. Events and mechanisms in the eukaryotic cell cycle and gene expression; biochemical genetics of green plants.

7051 Macronutrients in Soils and Crops (4) F 3 hrs. lecture; 2 hrs. lab. Theory and current literature on the macronutrients; their influence on the growth of crop plants.

7052 Micronutrients in Soils and Crops (4) S 3 hrs. lecture; 2 hrs. lab. Theory and current literature on the micronutrients—boron, copper, zinc, manganese, iron, molybdenum, chlorine, cobalt—and their influence on growth of crop plants.
ANIMAL SCIENCE (ANSC)

1011 Introduction to Animal Science (3) F,S 2 hrs. lecture; 2 hrs. lab. Science and production of beef cattle, sheep, swine, and horses; their role in American agriculture.

2001 Farm Unit Internship (1) F,S,Su Prereq: ANSC 1011 and consent of department head. 3 hrs. work experience. May be repeated for credit for a maximum of 5 sem. hrs., one each at beef, horse, sheep, swine, and meat units. Pass-fail grading. Supervised work experience to acquaint student with animal behavior, vocational management skills, and livestock handling.

2074 Basic Horse Husbandry (3) F Prereq: ANSC 1011 or equivalent. 2 hrs. lecture; 2 hrs. lab. Basic principles of horse husbandry; origin, evolution, breeds, and functions of light horses; feeding, breeding, disease prevention, and management.

2098 Feeds and Feeding (3) F,S Prereq: consent of department head. 2 hrs. lecture; 2 hrs. lab. Not open to animal science majors. Basic principles of animal nutrition and their application in proper feeding of farm livestock.

2133 Growth and Development of Livestock (3) F 2 hrs. lecture; 2 hrs. lab. Cell, tissue, and body growth, development, and composition; patterns of tissue deposition in livestock; control and modification of normal and abnormal growth; evaluation and measurement of composition of beef, sheep, swine, and horses.

3033 Elements of Live Animal and Carcass Evaluation (3) F 1 hr. lecture; 4 hrs. lab. Basic principles and techniques involved in evaluation of meat animals and their carcasses.

3034 Advanced Live Animal and Carcass Evaluation (3) S Prereq: ANSC 3033. 1 hr. lecture; 4 hrs. lab. Advanced live animal and carcass evaluation.

3040 Classes and Grades of Livestock and Livestock Products (3) F 2 hrs. lecture; 2 hrs. lab. Practical phases of marketing; classifying, grading, preparing, and evaluating livestock and livestock products for market.

3051 Animal Science Problems (1-3) F,S,Su Prereq: consent of department head. May be repeated for credit for a maximum of 3 sem. hrs. Directed individual study of a problem in feeding, breeding, management, or marketing of farm animals.

3074 Quantitative Genetics (3) S Prereq: AGRO 7064 and credit or registration in EXST 7014; or equivalents. Genotypic and environmental values, their effects and interactions; phenotypic variances and covariances; heritability and genetic advance; homeostasis and combining ability as related to plants.

7165 Chemistry and Microbiology of Flooded Soils and Sediments (3) Same as MRSC 7165. Chemical and microbiological changes in fresh water, brackish water, and estuarine-flooded soils and sediments affecting availability of nutrients and growth of plants.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8901 Research in Crop Science (3-6) Prereq: consent of department.

8902 Research in Soil Science (3-6) Prereq: consent of department.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.
horses; nutrition, reproduction, breeding, and production in the south.

4092 Animal Science Proseminar (1) F,S Nutrition, animal breeding and production, and meat processing and preservation.

4094 Meat Technology (3) S-E Prereq: ANSC 3053; and BCH 2083 or equivalent. 2 hrs. lecture; 2 hrs. lab.

7001 Experimental Methods (2) F Prereq: credit or registration in EXST 7004 or equivalent. Scientific methods applied to animal science.

7006 Advanced Animal Genetics (3) S-E Prereq: DARY 7004 or equivalent. Application of genetic principles and theory to farm livestock populations.

7030 Energy in Nutrition (3) F Prereq: credit or registration in BCH 4084. Energy-supplying nutrients and their metabolism; energy balance; measuring food energy needs; dietary density; energy restriction and related topics.

7035 Laboratory Evaluation of Vitamins and Minerals (4) Su-O Prereq: BCH 4084 or equivalent. 2 hrs. lecture; 4 hrs. lab. Chemical methods, techniques, and laboratory equipment for basic nutrition research.

ANTHROPOLOGY (ANTH)

1001 Introduction to Physical Anthropology and Prehistory (3) F,S,Su Origin and evolution of people; evolution and its physiological bases; human prehistory; human diversity; origin and development of human culture through the rise of civilization.

1003 Introduction to Cultural and Social Anthropology (3) F,S,Su Diversity of human cultures; nature of culture, social organization, subsistence patterns, economics, law, politics, religion, language, and other institutions of culture viewed in cross-cultural perspective.

2015 Introduction to Archaeology (3) F Archaeological goals, methods, techniques, and interpretations; particular prehistoric cultural sequences or projects; interdisciplinary relationship of archaeology with other social, life, and earth sciences.

2051 Introduction to World Ethnography (3) S-E Sex roles, economic pursuits, values, beliefs, families, and other institutions of selected nonwestern peoples; implications for American culture.

2423 Introduction to Folklore (3) F See ENGL 2423.

3004 Archaeology and the Bible (3) V See REL 3004.

3015 The Archaeology of Ancient Greece (3) V See GREK 3015.

3060 Introduction to Anthropological Linguistics (3) F-E Cultural variation in language and its uses; problems of language classification and areal linguistics; practice in phonemic and morphemic analysis of nonwestern languages.

3078 Field Methods in Archaeology (3-6) Su Prereq: ANTH 2015 or equivalent. May be repeated for credit for a maximum of 6 sem. hrs. Techniques of excavation, recording, laboratory analysis, and curation of archaeological material; participation in one or more archaeological excavations.

3401 The Study of Folklore (3) S-E Also offered as ENGL 3401. History of the study of folklore; methods of collection, interpretation, and analysis of folklore materials; myth, folklore, legend, folktale, ballad, folk humor, festival, and folk speech; psychological, contextual, and structural analysis of oral literature; specific reference to the heritage of Louisiana and the South.

3909 Undergraduate Seminar in Anthropology (3) V May be taken 3 times for credit when topics vary.

4003 Indian Civilization of Middle and South America (3) S-E Ancient Maya, Aztec, and Inca civilizations; modern Indian groups in Latin America.

4004 The North American Indians (3) V Origin, distribution, language, and culture of the aboriginal population.

4010 Human Osteology (3) F-E Prereq: ANTH 1001 and BIOL 1001, or equivalents; and consent of instructor. 2 hrs. lecture; 2 hrs. lab. Examination of the human skeleton including skeletal anatomy, bone growth, bone pathology, and forensic anthropology.

4015 North American Archaeology (3) S-O

4016 Old World Archaeology (3) S-E Cultural developments in prehistory ranging from the earliest evidence of humans to the foundations of civilization.

4017 Louisiana Archaeology (3) F Prereq: ANTH 4015 or equivalent. Two overnight field trips. Archaeological data relative to the Indian cultures dating from the end of the Pleistocene period to the early historic era.

4018 Historical Archaeology (3) F-E Prereq: ANTH 2015 or equivalent. Archaeological goals, methods, and interpretations unique to the study of the historic past; colonial and plantation archaeology in the southeastern U.S.

4020 Method and Theory in Archaeology (3) Prereq: ANTH 1001 or 1003, and ANTH 2015; or equivalents. Empirical method and theory in archaeological research emphasizing the logic of scientific argument; history of American archaeology, survey of modern archaeological interpretations, types of explanation, the logic of archaeological classification, and the formation of research designs.

4023 Latin American Cultures (3) V Spanish-American cultures in Latin America; their relationship to current societal changes.
Architectural History (ARCH)

1051 Introduction to Architecture (3) The practice of architecture; development of the built environment; education of the architect; professional practice.

1153 Architectural Basic Design (3) 6 hrs. lab. Also offered as ID 1153. Two-dimensional representation of three-dimensional forms; three-dimensional modeling.

1161 Introduction to Design Process (3) F Structure and process of designing, based on a series of process stages and their interactions with specific tools related to each process stage and problem type.

1181 Introduction to Visual Communication—1 (3) 6 hrs. lab. Studio hours supported by lectures and demonstrations. Development of primary skills in freehand drawing; perspective drawings, single-view three-dimensional drawings, orthographic drawings; and development of a visual vocabulary.

1182 Introduction to Visual Communication—II (3) 6 hrs. lab. Studio hours supported by lectures and demonstrations. Development of primary skills in freehand drawing; perspective drawings, single-view three-dimensional drawings, orthographic drawings; and development of a visual vocabulary.

4025 Peoples and Cultures of Europe (3) V Ethnographic survey of the origins, distributions, languages, and cultures of traditional European peoples; problems of European transmigrants in the U.S.; concepts of culture area, peasantry, and ethnicity in the modern world.

4031 Comparative Religions (3) V Also offered as REL 4031. Religious systems in different levels of sociocultural evolution.

4040 Physical Anthropology (3) F-O Prereq: ANTH 1001; BIOL 1001, 1002; or ZOOL 1001, 1002. Human evolution, ecological adaptation, and genetic diversity.

4051 Africa (3) F-O Races and cultures of Nегroid Africa.

4053 Afro-American Cultures (3) V Subcultures of Negroes in the new world: culture theory applied to origins, development, and present distinctiveness of these cultures.

4060 Language and Culture (3) F-O Prereq: ANTH 3060 or ENGL 4010 or ENGL 4012 or SPCH 2050 or equivalent. Relationships between various aspects of language and culture.

4064 Pidgin and Creole Languages (3) S-O Prereq: ANTH 4060 or equivalent. Also offered as FREN 4064. Linguistic, sociolinguistic, and anthropological study of new languages which emerge in contact situations, particularly among peoples of different races and cultures; languages of the slave trade and European commercial expansion from the 15th through 18th centuries.

4081 Evolution of Man and Culture (3) S Man's biological and cultural evolution utilizing evidence from fossil records, archaeology, and ethnography.

4082 Social and Cultural Anthropology (3) S-O For graduate students with little or no anthropology background. Culture, society, and language in primitive and complex settings.

4083 Quaternary Paleocology (3) S-O See GEOG 4083.

4085 History of Anthropological Theory (3) F-O Major theories in all branches of anthropology; emphasis on cultural and social anthropology.

4086 Cultural Ecology (3) S-E See GEOG 4086.

4090 Ethnographic Methodology (3) F-E Theories and techniques of ethnography; emphasis on utilization of informants.

4440 Vernacular Architecture and Material Culture (3) S-E Also offered as ARCH 4440. Subject matter and instructor may vary; additional details available from department. World vernacular architecture, including indigenous and folk buildings; other forms of material culture.

4475 American Folklore (3) See ENGL 4475.

4998 Independent Reading and Research in Anthropology (1-6) F,S,Su Prereq: prior written consent of instructor. May be repeated for credit. Total credit earned in ANTH 4998 and 7999 cannot exceed 9 sem. hrs. An honors course. ANTH 4999, is also available. Supervised reading or research selected by qualified advanced students.

4999 HONORS: Independent Reading and Research in Anthropology (1-6) Same as ANTH 4998; with special honors emphasis for qualified students.

7901 Introduction to Graduate Study (1) F Same as GEOG 7901. Techniques and methods of their profession for incoming graduate students.

7906 Nature of Culture (3) V

7909 Selected Topics in Anthropology (3) V May be taken 3 times for credit when topics vary.

7954 Anthropology of Complex Societies (3) F-E Anthropological assumptions of theory and technique; problems generated by applying these assumptions to contemporary Africa, India, Latin America, and Anglo-America.

7962 Field Methods in Linguistics (3) S-E Prereq: at least one upper-division or graduate linguistics course. 2 hrs. lecture; 1 hr. individual consultation. Recording and analyzing a living non-European language and using a native-speaking informant.

7978 Advanced Field Methods in Archaeology (3-6) Su Prereq: ANTH 2015 or equivalent and at least one upper-division or graduate course in archaeology. May be repeated for credit for a maximum of 6 sem. hrs. Advanced techniques in excavation, recording, laboratory analysis, report preparation, and data analysis.

7999 Research in Anthropology (1-6) F,S,Su Prereq: prior written consent of instructor. May be repeated for credit. Total credit earned in ANTH 4998 and 7999 cannot exceed 9 sem. hrs. Individual supervision of advanced research and field work in anthropology.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.
Requisite for 2154. 12 hrs. studio. Beginning design problems in architecture; emphasis on the organization of spaces, form, and processes; fundamental architectural thought and the means of creating built form from these abstract notions.

2171 Introduction to Building Structural Systems (3) F,S,Su
Prereq: PHYS 2001 and either MATH 1431 or 1441 or 1550. Building structural mechanics (statics and strength of materials); analysis of structural elements and systems; emphasis on the selection and understanding of types of walls, footings, and structural materials; system application.

2172 Introduction to Energy Systems (3) S
Prereq: PHYS 2002 and either MATH 1431 or 1441 or 1550. Basic principles and terminology of the thermal, atmospheric, sonic, and luminous environments with regard to human comfort and architectural response.

2173 Automated Graphics for Designers (3) See EGR 2185.

2174 Introduction to Architectural Systems (3) Prereq: consent of instructor for non-architecture majors. Building systems analysis and selection; use of compatible architectural and structural systems, subsystems, and their components and assemblies, as affected by visual and spatial design criteria, physical requirements, and legal restrictions and standards.

2401 Appreciation of Architecture (3) V Not open to architecture majors. Architectural concepts and principles; architectural vocabulary, style, symbolic form characteristics, spatial character, and refinements.

2402 Introduction to Structural Forms (3) S Nonmathematical survey of structural elements and systems and their integration in the environmental design study of forces and force systems; state of stress; deformation; properties of shapes.

2481 Basic Architectural Presentation (3) V Prereq: ARCH 2151 and 2153. Types of architectural presentation; strategies and techniques used.

3000 Supervised Independent Study and Research (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. with consent of school director. Investigation of areas of interest not covered in other departmental courses.

3131 Urban Design and Planning (3) S Prereq: ARCH 3153 or equivalent. Fundamentals of urban design and planning.

3143 History of Modern Architecture—I (3) F Prereq: ARCH 2141 and 2142, or equivalents. Development of the modern movement in architecture from the late 18th century to the present.

3144 History of Modern Architecture—II (3) S Prereq: ARCH 3143 or equivalent. Continued development of modern architecture from the late 18th century to the present.

3145 Louisiana and Gulf Coastal Architecture (3) V History and development of Louisiana and Gulf Coastal architecture from the 17th century to the present.

3151, 3152 Architectural Design—I, III, IV (6,6) 3151 offered F; 3152 offered S Prereq: for 3151: ARCH 1161, 2141, 2142, 2153, 2154, 2171, 2172, 2174. ARCH 3151 is prerequisite for 3152. 12 hrs. lab. Design, presentation, and synthesis of complete “building systems” of a complex nature.

3153, 3154 Architectural Design—V, VI (6,6) 3153 offered F; 3154 offered S Prereq: for 3153: ARCH 3143, 3144, 3151, 3152, 3160, 3175, 3176. ARCH 3153 is prerequisite for 3154. 12 hrs. lab. Advanced design problems in modern buildings and building groups; construction details.

3160 Architectural Administration (3) S Prereq: ARCH 1161. Office management; organization and duties of the office staff; employment practices, personnel policy, insurance, bonds, taxes, social security, agreements, and preparation of contract documents.

3162 Project Management—I (3) V Subject matter and vocabulary; technical problems of finance, real estate, and law relative to development projects.

3163 Project Management—II (3) V Prereq: ARCH 3162. Application of operations research and systems analysis techniques to the solution of problems in architecture, construction, and urban and regional planning; management of construction projects; computer applications.

3171 Mechanical Equipment of Buildings (3) F Prereq: ARCH 2172. Type, design, installation, and performance of mechanical equipment used in buildings, including plumbing and air conditioning.

3173 Architectural Acoustics and Illumination (4) S Prereq: ARCH 3171. Principles and practice of architectural acoustics and noise control; design of artificial and natural lighting systems; design of building electrical transmission systems.


3214 Architectural Synthesis (4) F Prereq: completion of all required fourth year course work or consent of school director. Individually prescribed advanced architectural study.

3218 Architectural Synthesis (8) F Prereq: completion of all required fourth year course work or consent of school director. Individually prescribed advanced architectural study.

3221 Selected Topics in Architecture (3) V May be taken 3 times for credit with school approval. Studies in various subjects related to architecture.

3314 Architectural Synthesis (4) S Prereq: completion of all required fourth year course work or consent of school director. Individually prescribed advanced architectural study.

3318 Architectural Synthesis (8) S Prereq: completion of all required fourth year course work or consent of school director. Individually prescribed advanced architectural study.

3353 Principles and Practice of Land Development (3) Prereq: ARCH 3162 or IE 3201 or equivalent background. Environmental, physical, and financial aspects of land development; population growth; income and employment projections; regional and correlation of land values; land ownership and finance vehicles; direct and indirect infrastructure; budget and marketing structure; property and return analyses.

3441 Literature of Architecture (3) V Prereq: ARCH 2141, 2142, 3143, and 3144. Development of aesthetic theory through architectural literature.

3442 Architecture in Louisiana Wetlands (3) V Prereq: ARCH 3152 or LA 3153. Architecture as it relates to the problems and potentials unique to building in Louisiana wetlands, such as flooding, foundation problems, and problems of population density.

3453 Pattern Languages (3) V Prereq: junior standing. The concept that characteristics which make a building beautiful
can be defined and isolated through study and can be incorporated in design at all scales, from the smallest building through the largest complex of buildings.

3456 Climate and House Design (3) V Climatic impact on the design of residential buildings.

3457 Hands on Materials (3) V Prereq: ARCH 2154. 9 hrs. lab. Design and physical manipulation, construction, and/or fabrication of devices or components made primarily (but not necessarily exclusively) of steel.

3462 Industrialization of Housing (3) V The industrialization of housing—its many attempts and failures; understanding the causes behind the great number of failures.

3472 Solar Heating and Cooling of Buildings (3) V Fundamental concepts of direct thermal application of solar energy in buildings; active components and systems, both air and water.

3473 Architectural Consequences of Construction Decisions (3) V Prereq: ARCH 2153, 2154, 2171, and 2174. Modern structural materials and construction methods applied to solution of practical problems; in-depth decision making in the area of building construction.

ART (ART)

GENERAL COURSES

1001 Introduction to Fine Arts (3) Fundamental problems and concepts of art in the fields of design, sculpture, graphics, painting, and ceramics, as related to home, community, religion, commerce, and industry.

1011 Art Structure (3) 6 hrs. studio. The disciplines in art, with practice in the various media.

7041 Graduate Seminar—Three-Dimensional Art (1) May be taken 6 times for credit. Seminar with the three-dimensional art faculty for criticism and discussion.

7042 Graduate Seminar—Visiting Artist (1) May be taken 3 times for credit. Pass-fail grading. Seminar with visiting artist for criticism and discussion.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

PHOTOGRAPHY

2095 Basic Photography (3) 6 hrs. studio. Basic photographic concepts and techniques; practical and expressive application of photographic processes to the visual arts.

2096 Intermediate Photography (3) Prereq: ART 2095. 6 hrs. studio. A combination of experimental darkroom lab techniques; continuing development of black and white photography, with emphasis on creative image orientation.

3094 Advanced Photography (3) Prereq: ART 2096. 6 hrs. studio. Technical investigation of contemporary hardware and materials; critical testing of equipment, films, and printing papers; emphasis on process control; aesthetic possibilities of photography.

3096 Color Transparencies (3) Prereq: ART 2095 or equivalent. 6 hrs. studio. Combination of experimental darkroom lab techniques; continuing development of color photography, with emphasis on creative image orientation.

4041 Special Studies in Photography (3 or 6) 6 or 12 hrs. studio. May be repeated for credit for a maximum of 6 sem. hrs. Studio production of fine prints; independent individual creative research and problems in photography.

3474 Passive Solar Energy Applications for Buildings (3) V Prereq: ARCH 2172. Applications of passive solar systems for space heating and space cooling of buildings; system concepts, sizing methodology, design and construction considerations, and components.

3481 Architectural Contract Documents—II (Drawings) (3) V Prereq: ARCH 2154. Organization and preparation of specifications required to form the basis of a construction contract between the owner and a building contractor.

4440 Vernacular Architecture and Material Culture (3) See ANTH 4440.

ART EDUCATION

2271, 2272 Art Education for Elementary Schools (3,3) ART 2271 is prerequisite for 2272. 2 hrs. lecture; 2 hrs. studio. Critical analysis and evaluation of past and present concepts of art education; developing a functional art program for the elementary schools of Louisiana; art materials, techniques, and activities recommended for elementary school grades.

4241 Special Studies in Art Education (3) Research in areas directly related to the teaching of art.

4269, 4270 Art Education Workshop (3,3) Art as an integral part of the school curriculum; art activities and classroom procedures, materials, and techniques.

4273, 4274 Art Education in the Elementary and Secondary Schools (3,3) 3 hrs. seminar each. For students concentrating in art education. Developing a functional art program for elementary and secondary schools; philosophy of art education, curriculum construction, teaching methods, planning, and measuring the results of instruction.

7269 Foundations of Art Education (3) Prereq: graduate standing in art education or consent of instructor. Development of theory and philosophy leading to contemporary practices in art education.

7270 Current Practices in Art Education (3) Prereq: graduate standing in art education or consent of instructor. Contemporary trends and practices in art education; critical review of texts, journals, and other information sources.

7271, 7272 Development and Administration of an Art Education Curriculum (3,3)

PRINTMAKING

1361 Introduction to Intaglio (3) 6 hrs. studio. Basic intaglio techniques; work in black and white and color.

1371 Introduction to Lithography (3) 6 hrs. studio. Planographic printing from stones in black and white.

2362 Intermediate Intaglio (3, 6, or 9) Prereq: ART 1361. 6, 12, or 18 hrs. studio. May be repeated for credit for a maximum of 9 sem. hrs. Advanced intaglio techniques.
2372 Intermediate Lithography (3, 6, or 9) Prereq: ART 1371. 6, 12, or 18 hrs. studio. May be repeated for credit for a maximum of 9 sem. hrs. Planographic printing from stones and plates in black and white and color.

4361 Advanced Intaglio (3, 6, 9, or 12) Prereq: consent of instructor based on review of student's portfolio. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Advanced intaglio techniques.

4366 Special Studies in Printmaking (3, 6, 9, or 12) Prereq: consent of instructor based on review of student's portfolio. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Advanced work in a predetermined area of specialization.

4371 Advanced Lithography (3, 6, 9, or 12) Prereq: consent of instructor based on review of student's portfolio. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Planographic printing from stones and plates; special emphasis on color work.

7300 Graduate Printmaking (3, 6, 9, or 12) 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 36 sem. hrs.

ART HISTORY

1440 Historical Survey of the Arts (3) Prehistoric, Near-Eastern, Greek, Roman, and medieval art.

1441 Historical Survey of the Arts (3) Renaissance to modern art.

2401 Art of the Ancient Near East and Egypt (3) Development of art and architecture in the ancient Near East and Egypt over three millennia; influences of one culture on another and subsequent contributions to Western art.

2411 Oriental Art (3) Asian art; introduction to the arts of China, India, and Japan in relation to religious and philosophical beliefs which affected their production.

2469 Italian Renaissance Art (3) Italian painting, sculpture, and architecture from 1250-1600; emphasis on Giotto, Masaccio, Donatello, Michelangelo, and Leonardo da Vinci.

2470 Survey of 20th-Century Art (3) Modern art.

4401 History of Prints and Engravings (3) History of prints, engravings, and etchings from the 15th to the 20th century.

4404 The Art of Rome (3) Development of architecture, sculpture, and painting from Rome's early beginnings (600-200 B.C.) to the end of the 4th century.

4405 Early Christian and Byzantine Art (3) Painting, sculpture, and architecture of the Christian era through 12th-century Byzantium.

4406 Romanesque Art (3) Architecture, sculpture, manuscripts, and painting from the 9th through the 12th centuries in France, Germany, and England.

4409 Early Greek Art (3) Greek art to the time of the Persian Wars.

4410 Later Greek Art (3) Greek art from the time ofThemistocles to the age of Augustus.

4412 Gothic Art (3) Architecture, sculpture, and painting of Northern Europe from 1150 to 1450.

4413 German and Netherlandish Painting (3) Art of the Low Countries and Germany in the 15th and 16th centuries; emphasis on such masters as the Limbourgs, van Eyck, van der Weyden, Bosch, Dürer, Grünewald, Cranach, Altdorfer, and Bruegel.

4418 English Painting of the 18th and 19th Centuries (3) Painters of Great Britain in the 18th and 19th centuries; investigation of the causes of specific tendencies in painting.

4420 Studies in Art History (3) May be taken twice for credit when topics vary. Advanced work in a predetermined area of specialization.

4421 History of Western Decorative Arts from the Renaissance to 1850 (3) Development of decorative arts design; emphasis on furniture, with investigations of metals, textiles, ceramics, and glass; materials, constructional techniques, and socioeconomic conditions giving rise to the objects' fabrication.

4422 History of Modern Design (3) Aesthetic theory and stylistic evolution of decorative arts from mid-19th century to the present; emphasis on crafts, architectural decoration, furniture, interior design, and industrial design; Victorian period; arts and crafts movement, art nouveau, Bauhaus, and international style.

4423 Early Renaissance Painting in Italy (3) Italian painting of the 13th, 14th, and 15th centuries.

4424 High Renaissance and Mannerist Painting in Italy (3) Italian painting of the 16th century; emphasis on Leonardo da Vinci, Michelangelo, Raphael, Giorgione, and Titian.

4425 Renaissance Sculpture in Italy (3) Italian sculpture from 1250 to 1600; emphasis on Ghiberti, Donatello, Michelangelo, Giambologna.

4427 Northern Baroque Art (3) 17th-century European art outside Italy, emphasizing Rubens, van Dyck, Rembrandt, Hals, Vermeer, Poussin, and Velasquez.

4429 Baroque in Italy (3) Art and architecture in Italy from 1600 to 1750.

4433 18th-Century European Art (3) Rococo, romanticism, and neoclassicism in 18th-century European art.

4437 History of European and American Sculpture, 1840 to Present (3) European and American sculpture from 1840 to the present.

4450 19th-Century European Painting (3) History of painting in European countries from the French Revolution (1789) to 1900; emphasis on neoclassicism, romanticism, realism, impressionism, post-impressionism, and symbolism.

4451 20th-Century European Painting (3) History of painting in European countries from the beginning of the century to the present; emphasis on fauvism, cubism, constructivism, surrealism and Dada, Italian futurism, German expressionism, minimal art, and the School of Paris.

4464 Early American Art to 1900 (3) North American painting, architecture, and sculpture from the colonial beginnings to 1900; special emphasis on painting.

4465 American Painting, 1900-1950 (3) Emphasis on the relationship of artists to the social and cultural developments in America as revealed through slides, photographs, newsreels, tapes, and museums.

4466 Contemporary American Art, 1950-Present (3) History of recent American art, especially painting, from abstract expressionism through contemporary realist movements in painting, sculpture, and mixed media.

4467 Latin American Art (3) Pre-Hispanic, colonial, and contemporary architecture, painting, sculpture, and related arts throughout Latin America.

4470 History of Photography (3) History of photography from its inception in the 1830's until the present; the technological development of the medium and its inherent aesthet-
GRAPHIC DESIGN

1551 Basic Design (3) 6 hrs. studio. Design as a basic problem-solving creative activity; project dealing with mechanical and communicative utility.

2544 Letterforms (3) Prereq: ART 1551. 6 hrs. studio. Drawn letterform studies; traditional and contemporary variations.

2552 Color Design (3) Color as a functional design element of perception and visual communication.

2554 Introduction to Graphic Design (3) 6 hrs. studio. Agency-studio procedures and techniques (thumbnail sketches, layout, and comprehensives); design problems, with emphasis on letterforms commonly used in advertising/graphic design.

2555 Color in Lighting (3) 6 hrs. studio. Color effects of light on transparent, translucent, and opaque materials; color light mixing systems; display effects available through colored lighting.

2564 Basic Graphic Abstraction (3) Prereq: ART 1551 and 2552. 6 hrs. studio. Simplification of pictorial images as graphic elements.

3544 Typography (3) Prereq: ART 2544. 6 hrs. studio. Developing and understanding typographic skills through functional and aesthetic use of type.

3554 Intermediate Graphic Design (3) Prereq: ART 2554. 6 hrs. studio. The exploration of media and their roles relative to graphic design through a variety of design problems; copy preparation and specifications.

3564 Illustration for the Graphic Designer (3) Prereq: ART 3554. 6 hrs. studio. Techniques of illustration; problems of layout and product illustration.

4514 Experimental Design (4) Prereq: consent of instructor based on review of student's portfolio. 9 hrs. studio. Advanced experiential work in materials investigation, construction innovations, and test model performance evaluations.

4524 Production Techniques (3) Prereq: ART 3554. 6 hrs. studio. Basic studio and agency techniques related to reproduction problems in the field; typesetting methods and basic printing processes; paste-up techniques (keyline, blueline, and mechanical overlays).

4534 Photo-Design Application (3) Prereq: ART 3554. 6 hrs. studio. Investigation of photography as an illustration technique through a series of experimental problems; its application to layout and product illustration.

4541 Special Studies in Graphic Design (3) Prereq: consent of instructor based on review of student's portfolio. 6 hrs. studio. Advanced work in a predetermined area of specialization.

4544 Advanced Production Techniques (3) Prereq: ART 4524. 6 hrs. studio. Advanced techniques and practical experience with graphic arts equipment.

4551 Design (3) 6 hrs. studio. Problems in design related to the professional design field; methods of reproduction, exhibition techniques, and industrial and product design.

4552 Product Design (3) Prereq: consent of instructor. 6 hrs. studio. Technology, needs, and market as related to the mass-produced article; materials research; human engineering; prototype construction; presentation methods; field trips.

4555 Advanced Graphic Design (3) Prereq: ART 3554. 6 hrs. studio. Principles of visual communication through graphic design; problems in design theory and application.

4556 Advanced Design (5) Prereq: 3 sem. hrs. in advanced design course work and consent of instructor based on review of student's portfolio. 10 hrs. studio. Advanced studio work in a predetermined area of design specialization.

4557 Advanced Project in Graphic Design (5) Prereq: 3 sem. hrs. in advanced design course work and consent of instructor based on student's portfolio evaluation. Advanced studio work in a predetermined area of design specialization.

4564 Senior Graphic Design (3) Prereq: ART 4555. 6 hrs. studio. Design projects investigating problems of visual communication; individual and group projects with professional-level presentations.

4574 Graphic Design Synthesis (5) Prereq: ART 4544. 10 hrs. studio. Degree project or internship approved by design faculty committee.

7551, 7552 Graduate Design (3,3) 6 hrs. studio each.

7553, 7554, 7555, 7556 Graduate Research in Design (3 each) Prereq: consent of instructor. 6 hrs. studio each.

CERAMICS

1661 Introduction to Ceramics (3) 6 hrs. studio. Studio problems in pottery, glazing, and kiln firing.

2661 Ceramics (3, 6, or 9) Prereq: ART 1661. 6, 12, or 18 hrs. studio. May be repeated for credit for a maximum of 9 sem. hrs. Studio problems in ceramics; formulation of clay bodies and glazes; theories of kiln operation and maintenance.

3661 Intermediate Ceramics (3, 6, 9, or 12) Prereq: ART 2661 and completion of the core courses in art. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Open only to ceramics majors. Studio problems in contemporary concepts of ceramics.

4641 Special Studies in Ceramics (3, 6, 9, or 9) Prereq: 6 sem. hrs. of credit in ART 4661. May be repeated for credit for a maximum of 12 sem. hrs. Advanced studio work in predetermined area of specialization.

4661 Advanced Ceramics (3, 6, 9 or 12) Prereq: ART 3661 and/or approval of portfolio by ceramics faculty. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 24 sem. hrs. Studio problems in ceramics.

4671 Ceramic Sculpture (3, 6, 9, or 12) Prereq: ART 1762 and consent of instructor. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Clay as a medium for sculpture.

4681 Glassblowing (3, 6, 9, or 12) Prereq: completion of the core courses in art. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs.

4691 Senior Project (3) Prereq: 12 sem. hrs. of credit in ART 4661. 6 hrs. studio. May be taken twice for credit. Proposal and execution of a ceramics or stained glass project under the direction of a major professor.
7600 Graduate Ceramics (3, 6, 9, or 12) 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 36 sem. hrs.

JEWELRY/METALSMITHING

2655 Basic Jewelry/Metalsmithing (3) 6 hrs. studio. Piercing, construction, cold connection, soldering, forming, and stone setting; studio problems in bronze, copper, and sterling silver.

2656 Jewelry/Metalsmithing: Casting (3) Prereq: ART 2655 or equivalent. 6 hrs. studio. May be taken twice for credit. Sand, cuttle bone, steam, vacuum, and centrifugal casting; studio work in bronze, sterling silver, and gold.

4651 Special Studies in Jewelry/Metalsmithing (3 or 6) Prereq: consent of instructor. 6 hrs. studio for each 3 sem. hrs. of credit. May be repeated for credit for a maximum of 6 sem. hrs. Studio work in a predetermined area of specialization; emphasis on a single technique or material.

4655 Advanced Jewelry/Metalsmithing (3 or 6) Prereq: ART 2656 or equivalent. 6 hrs. studio for each 3 sem. hrs. of credit. May be repeated for credit for a maximum of 6 sem. hrs. Advanced studio problems in forging, forming, reproduction processes, and construction techniques; emphasis on historical and contemporary jewelry/metal-smithing.

STAINED GLASS

1645 Introduction to Stained Glass (3) 6 hrs. studio. Two-dimensional design fundamentals; analysis of phenomena of light and color; elementary techniques of flat glass construction.

2645 Stained Glass (3) Prereq: ART 1011, 1847, 1848, and consent of instructor. 6 hrs. studio. Limited enrollment. Materials fee. Design and execution of stained glass windows; craftsmanship and differentiation of styles and techniques.

2646 Stained Glass (3) Prereq: ART 2552, 2645, and consent of instructor. 6 hrs. studio. Limited enrollment. Materials fee. Design and execution of stained glass windows; craftsmanship and differentiation of styles and techniques.

3645, 3646 Stained Glass (3, 3) Prereq: ART 2645 and 2646. 6 hrs. studio. Limited enrollment. Materials fee. Intermediate stained glass; design and execution of stained glass panels; emphasis on conceptualizing within the medium; lectures on the early history of glass.

4645 Stained Glass (3, 6, or 9) Prereq: ART 2645, 3646, and consent of instructor. 6 hrs. studio for each 3 sem. hrs. of credit. May be repeated for credit for a maximum of 9 sem. hrs. Limited enrollment. Materials fee. Advanced stained glass; design and execution of stained glass panels; emphasis on conceptualizing within the medium; lectures on contemporary stained glass.

4648 Stained Glass (3 or 6) Prereq: 9 sem. hrs. in ART 4045. 6 hrs. studio for each 3 sem. hrs. of credit. May be repeated for credit for a maximum of 6 sem. hrs. Limited enrollment. Materials fee. Independent experimentation in stained glass terminating in a senior exhibition.

7645 Graduate Stained Glass (3 or 6) Prereq: consent of instructor. 6 or 12 hrs. studio. May be repeated for credit for a maximum of 6 sem. hrs. Limited enrollment. Materials fee. Student-centered creative activity emphasizing personal expression with the medium and invention of unique possibilities; problems involved with large-scale commissions.

7647 Graduate Research in Stained Glass (3, 6, 9, or 12) Prereq: consent of instructor. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 36 sem. hrs. Limited enrollment. Materials fee.

SCULPTURE

1761 Sculpture—I (3) 6 hrs. studio. Development of three-dimensional forms; various theories, methods, and materials.

1762 Sculpture—II (3) 6 hrs. studio. Studies in sculpture using appropriate materials and processes.

2761 Intermediate Sculpture (3, 6, or 9) Prereq: consent of instructor based on review of student's portfolio. 6, 12, or 18 hrs. studio. May be repeated for credit for a maximum of 9 sem. hrs. Assigned projects on figurative and nonfigurative sculpture, using various materials and methods.

4741 Special Studies in Sculpture (3) Prereq: consent of instructor based on review of student's portfolio. 6 hrs. studio. Advanced studio work in predetermined area of specialization.

4761 Advanced Sculpture (3, 6, 9, or 12) Prereq: consent of instructor based on review of student's portfolio. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 15 sem. hrs. Student projects with personal choice of concepts, materials, and methods.

7700 Graduate Sculpture (3, 6, 9, or 12) 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 24 sem. hrs.

PAINTING AND DRAWING

1847 Drawing and Composition (3) 6 hrs. studio. Basic principles of observation; emphasis on graphic analysis and delineation of spatial structure.

1848 Drawing and Composition (3) 6 hrs. studio. Studies from the live model; introduction of graphic representation, structure, and form.

1849 Introduction to Painting (3) 6 hrs. studio/lecture. Basic studio practice and theory in painting; traditional and modern materials and terminology; value and color experiences involving simple forms in space.

2879 Intermediate Drawing and Composition (3) Prereq: ART 1848. 6 hrs. studio. Imaginative composition utilizing the figure, still-life, and landscape forms.

2881 Painting (3) Prereq: ART 1847 and 1848. 6 hrs. studio. Studio problems in still-life directed toward conceptual attitudes; analysis of structure and color in composition; individual criticism, class discussion.

2882 Painting (3) Prereq: ART 1847. 1848, and 2881. 6 hrs. studio. Studio approaches to abstraction; thematic problems based on the figure and nature forms, synthesizing form and experience; individual criticism, class discussion.

2883 Water Media Painting (3) Prereq: ART 1847 and 1848. 6 hrs. studio. Objects and landscape; composition in water-soluble media on paper.

4800 Senior Project (5) Prereq: ART 4883 or 4884. 10 hrs. studio. Proposal and execution of a painting project.

4841 Special Studies in Painting (3, 6, or 9) Prereq: consent of instructor based on review of student's portfolio. 6, 12, or 18 hrs. studio. May be repeated for credit for a maximum of 9 sem. hrs. Advanced studio work in a predetermined area of specialization.
Figure Painting (3, 6, 9, or 12) Prereq: ART 2879, 2881, and 2882. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Studies from the nude model.

Intermediate Painting (3, 6, 9, or 12) Prereq: ART 2881 or 2883. 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Contemporary concepts in painting; approaches to imagery, symbolism, empathy; individual criticism, class discussion.

Advanced Painting (3) Prereq: ART 2883 and 883. 9 hrs. studio. Research into advanced visual schema through self-initiated studio problems.

Landscape and Portrait Painting (3) On-location and studio development of rural and urban subjects; traditional and modern approaches to the head and the clothed figure; slide presentations, individual and group criticism.

Advanced Figure Drawing (3) Prereq: ART 2879 or equivalent. 6 hrs. studio. Study of the human figure using various media.

Advanced Drawing Workshop (3, 6, 9, or 12) Prereq: 6 sem. hrs. of drawing, 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 12 sem. hrs. Directed studies for advanced students.

Graduate Painting (3, 6, 9, or 12) 6, 12, 18, or 24 hrs. studio. May be repeated for credit for a maximum of 24 sem. hrs.

ASTRONOMY (ASTR)

The Solar System (3) Prereq: MATH 0092 or equivalent or an ACT math score of at least 21. Credit will not be given for both this course and ASTR 1111, 1112. Fundamental principles of the solar system.

Stellar Astronomy (3) Prereq: MATH 0092 or equivalent or an ACT math score of at least 21. Credit will not be given for both this course and ASTR 1111, 1112. Fundamental principles of stellar astronomy.

Astronomy Laboratory (1) 2 hrs. lab. Accompanies ASTR 1101; visual observations of positions of celestial bodies with application to star charts and globes; visual and photographic observations with 1½-inch refractor and 4-inch reflectors; principles of time determination and position determination.

Astronomy Laboratory (1) 2 hrs. lab. Accompanies ASTR 1102; visual and photographic observations of sun, stars, and nebulae with 1½-inch refractor and 4-inch reflectors; analysis of light from terrestrial and celestial sources; interpretation of astronomical data.

Introducory Astronomy (3.3) Prereq: MATH 1021 and 1022; or MATH 1023; or eligibility for MATH 1550. ASTR 1111 is prerequisite for 1112. Credit will not be given for both these courses and ASTR 1101 and 1102. Principally for students in physical sciences or science education. Applications of physical principles to the study of the solar system (1111) and to stellar systems (1112).

Current Topics in Astronomy and Astrophysics (3) S Prereq: ASTR 1101, 1102, or 1111, 1112. Primarily for non-science students. Topics of current interest in astronomy; recent topics include extraterrestrial intelligence, black holes, exploration of the solar system.

Introductory Astrophysics (3.3) V Prereq: PHYS 1202 or 2102 or consent of instructor. ASTR 4221 is prerequisite for 4222. Sun, stars, and stellar systems; results and problems of modern astrophysical research.

Modern Observational Techniques (3) V Prereq: ASTR 1111, 1112 and MATH 1552, 1 hr. lecture; 6 hrs. lab. Modern astronomical observations and reductions; the telescope, astronomical photography, spectroscopic and photoelectric observations and reductions.

Special Topics in Observational Astronomy (3) V May be taken twice for credit when topics vary. One topic scheduled each time course is offered; current topics include astronomical photography and spectroscopic and photoelectric observations and reductions.

Problems in Astronomy (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 3 sem. hrs. Individual reading and theoretical and/or experimental work on advanced problems.

Astronomy for Teachers (4) Su, V For teachers and students in the College of Education. Cannot be taken for degree credit by physics majors. General astronomy including the solar system, stellar astronomy, and stellar systems.

Special Topics in Stellar Astronomy (3) V May be repeated for credit. One topic scheduled each time course is offered; current topics include stellar atmospheres, stellar interiors, binary stars, and high-energy astrophysics.

Special Topics in Galactic Astronomy (3) V May be repeated for credit. One topic scheduled each time course is offered; current topics include the interstellar medium, stellar motions, galactic structure, and extragalactic astronomy.

Seminar in Astronomy (1-6) V May be repeated for credit for a maximum of 6 sem. hrs. Topics vary.

BASIC SCIENCES (BASC)

Topics in Physical Science for Elementary School Teachers (3) Su only May be taken 3 times for credit when topics vary. Selected topics in physical science.

BIOCHEMISTRY (BCH)

Laboratory Expenses: Students registering for laboratory courses in biochemistry must make indemnifying deposits. Instructions and forms for making deposits will be provided at the first meeting of the laboratory. Students unable to show a receipt for their deposit by the end of the second class period will not be permitted to continue in the course.

Prerequisites: All prerequisites in biochemistry courses should be rigidly observed.
Corequisites: A student may not continue in a course if the corequisite course is dropped prior to the last day of the midsemester examination period.


2084 Elementary Biochemistry Laboratory (1) F,S Prereq: one semester of chemistry laboratory, CHEM 2060, and credit or registration in BCH 2083. 3 hrs. lab. Not for degree credit for students in the College of Basic Sciences. Deposit.

2155 Morphologic Hematology (3) F,S Prereq: ZOOL 1001 and 1002. 2 hrs. lecture; 3 hrs. lab. Also offered as MBIO 2155. Deposit. Cytology of normal and pathological human blood and marrow; blood grouping and blood coagulation.

2280 Introduction to Biochemistry (1) V Prereq: 8 sem. hrs. of chemistry. Not open to students with credit for any other biochemistry lecture course. Nature of biochemical problems; scientific approach to their solution.

2950 Research Internship (1) F,S,Su May be taken 4 times for credit. Introduction to research in biochemistry by association with a departmental research group.

3058 Quantitative Laboratory (3) F,S Prereq: CHEM 2251. 1 hr. lecture; 6 hrs. lab. Deposit. Quantitative analysis oriented toward biochemical and clinical determinations.

3999 Undergraduate Research (1-3) F,S,Su May be repeated for credit for a maximum of 4 sem. hrs.; permission to receive more than a total of 4 sem. hrs. must be obtained from the department head. Individual reading, conference, and laboratory work on biochemical problems.

4001 Physical Chemistry (3) F,S Prereq: CHEM 2261 and PHYS 2002; MATH 1550 desirable. Theoretical chemistry; emphasis on solutions, equilibria, and topics of interest to students in agricultural and biological sciences.

4083 Principles of Biochemistry (3) F Prereq: CHEM 2262. Credit will be given for only one of the following: BCH 4083, 4087, 4393. BCH 4083 and 4084 are designed for students in life sciences curricula requiring a more thorough knowledge of biochemistry than is presented in a one-semester course. Fundamentals of biochemistry; structural and functional properties of carbohydrates, lipids, nucleic acids, and proteins; enzyme kinetics and mechanisms and cellular bioenergetics.

4084 Principles of Biochemistry (3) S Prereq: BCH 4083. Credit will not be given for both this course and BCH 4394. A continuation of BCH 4083; metabolism of carbohydrates, lipids, amino acids, and nucleotides; molecular biology and biochemistry of cellular DNA synthesis and repair and of protein synthesis.

4087 Basic Biochemistry (3) F,S Prereq: CHEM 2262. Credit will be given for only one of the following: BCH 4083, 4087, 4393. Cellular macromolecules; production and utilization of energy by the cell; major metabolic pathways and their control.

4089 Veterinary Biochemistry (3) See VMED 5101.

4385 Biochemistry Laboratory (3) F,S Prereq: credit or registration in BCH 4083 or 4087 or 4393. 1 hr. lecture; 6 hrs. lab. Deposit. Modern and basic laboratory techniques in biochemistry including spectrophotometry, dialysis, chromatography, electrophoresis, centrifugation, radioisotopes, enzymology, and metabolic regulation.

4390 Information Retrieval in the Sciences (1) F,S Prereq: senior or graduate standing or consent of instructor. Modern methods of information retrieval from abstracts, scientific research literature, published computerized index programs, and key-word citation systems; proper techniques in data presentation.

4393 General Biochemistry (3) F Prereq: CHEM 2262 and 4491. Credit will be given for only one of the following: BCH 4083, 4087, 4393. Introductory course; principles of biochemistry from the standpoint of foundations in analytical, organic, and physical chemistry.

4394 General Biochemistry (3) S Prereq: BCH 4393 or equivalent. Credit will not be given for both this course and BCH 4084. A continuation of BCH 4393, with emphasis on metabolism.

4397 Biochemical Reaction Mechanisms (3) S Prereq: BCH 4393 and CHEM 2262. Basic concepts of biochemical reaction mechanisms.

4595 Physical Chemistry of Macromolecules (3) V Prereq: CHEM 2262 and 4492. Also offered as CHEM 4595. Theory and physical techniques appropriate for study of conformational and dilute solution properties of polypeptides, proteins, nucleic acids, polysaccharides, and synthetic polymers.

7163 Advanced Technology of Molecular Biology—Genetic Aspects (3) V Prereq: credit or registration in BCH 7280 or MBIO 7162. 1 hr. lecture; 6 hrs. lab. Same as MBIO 7163. Theoretical techniques used to study mutation, chromosomal mapping, conjugation, and transduction in bacteria and their phages.

7164 Advanced Technology of Molecular Biology—Biochemical Aspects (3) V Prereq: credit or registration in BCH 7280 or MBIO 7162. 1 hr. lecture; 6 hrs. lab. Same as MBIO 7164. DNA cloning (between prokaryotes), mapping of restriction enzyme cutting sites, sequencing, heteroduplex, ultracentrifugation, and gel electrophoresis; principles of genetics emphasized.

7280 Biochemistry of Nucleic Acids (3) V Prereq: BCH 4083 or 4393 or equivalent. Organic chemistry and biochemistry of nucleic acids; biochemical mechanisms of gene action; review of recent literature.

7281 Advanced Biochemistry (3) V Prereq: BCH 4084. Biochemical aspects of living cells; emphasis on metabolic systems and research techniques.

7282 Biochemical Regulation and Control (3) V Prereq: BCH 4084 or 4394 or equivalent. Regulation of biochemical systems by levels of metabolites and enzymes, protein-protein interactions, actions of hormones and neuroendocrine systems, and metabolic systems.

7284 Chemistry of the Proteins (3) V Prereq: CHEM 4491 or BCH 4001; and BCH 4083 or equivalent. Conformations of fibrous and globular proteins; their interactions with small and large molecules.

7285 Advanced Enzymology (3) S-O Prereq: one semester of physical chemistry and credit or registration in BCH 4084 or 4394. Principles involving action of enzymes on a molecular level; includes kinetics, inhibition, pH effects, active site, coenzymes, reaction mechanism, and protein structure of enzymes.

7286 Seminar (1) F,S May be repeated for credit. Reports and discussions on topics of current interest in biochemistry.

7287 Special Topics in Biochemistry (1-3) V Prereq: BCH 4394 or equivalent. May be repeated for credit for a maximum of 8 sem. hrs. Modern biochemistry topics of current interest.
7288 Lipids and Membranes (3) V Prereq: BCH 4084 or 4304. Chemistry and biochemistry of lipids and membranes; analytical methods for lipids; biosynthesis of complex lipids; organization and function of biological membranes.

7289 Biochemistry of Viruses (3) V Prereq: BCH 4084 or 4304 or equivalent. Biochemistry and molecular biology of representative bacterial, animal, and plant viruses; includes virus attachment to and penetration of host cells; replication, transcription, and translation of viral genes; virion morphogenesis and assembly; virus-induced host cell modifications; emphasis on structure-function relationships.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Procedures and Problems in Biochemical Research (1-9) F,S,Su For predoctoral research or for specific experience under the direction of a biochemistry faculty member. May be repeated for credit. Pass-fail grading. Experimental research methods, design and performance of experiments, and analysis and interpretation of data.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

BIOLY (BIOL)

1001, 1002 General Biology (3,3) BIOL 1001 and 1003 may not be taken for credit by students who have had ZOOL 1001 or 1002; BIOL 1002 and 1004 may not be taken for credit by students who have had BOTY 1001 or 1002. Zoology majors must take ZOOL 1001 and 1002, not BIOL 1001, 1002, 1003, 1004. Basic principles of biology.

1003, 1004 General Biology Laboratory (1,1) Prereq: credit or registration in BIOL 1001 and 1002. Zoology majors must take ZOOL 1001, 1002, not BIOL 1001, 1002, 1003, 1004. 2 hrs. lab. Lab to accompany BIOL 1001, 1002.

BOOKS AND LIBRARIES (BKLI)

1001 Library Research Methods and Materials (1) Fundamentals of library research; emphasis on individual students' major fields and interests.

BOTANY (BOTY)

1001, 1002 General Botany (4,4) 3 hrs. lecture; 2 hrs. lab. Credit will not be given for both these courses and BIOL 1002, 1004.

2015 Genetics and Society (3) Prereq: BIOL 1001 and 1002. Not a prerequisite for other genetics courses. For non-science majors. Also offered as ZOOL 2015. Genetics as it affects society; basic, human, and population genetics; testing for mutagenic and carcinogenic agents; genetic engineering; potential dangers and ethical problems.

2046 Plant Ecology (4) 2 hrs. lecture; 4 hrs. lab. Ecological principles pertaining to plant populations and communities and their environmental interactions.

2055 Flora of Louisiana (4) 2 hrs. lecture; 4 hrs. lab. 2 Saturday field trips. Field service fee. Major plant groups and communities of Louisiana; field identification, natural history, and ecology.

3060 Introductory Plant Physiology (4) See CPWS 3060.

3900 Undergraduate Botanical Research (1-4) Prereq: consent of instructor. May be repeated for credit for a maximum of 8 sem. hrs.

4020 Taxonomy and Ecology of Aquatic Plants (3) 1 hr. lecture; 4 hrs. lab; extended field trips. Also offered as FISH 4020 and WILD 4020. Field service fee. Taxonomy, ecology, distribution, and economic significance of aquatic plants in Louisiana.

4024 Plant Anatomy (4) Prereq: introductory botany or biology course. 2 hrs. lecture; 4 hrs. lab. Structure and development of vascular plants; emphasis on seed plants.

4026 Cytology (3) Prereq: a minimum of 6 sem. hrs. of biological science. Structure of plant and animal cells, including "typical" and specialized cells of both prokaryotes and eukaryotes; emphasis on historical developments in establishment of current theories.

4034 Morphology of Vascular Plants (4) Prereq: introductory botany or biology course. 2 hrs. lecture; 4 hrs. lab. Field service fee. Phylogenetic survey of plant form and development among vascular plants from ferns and related forms through gymnosperms and angiosperms.

4041 Plant Taxonomy (4) Prereq: introductory botany or biology course. 2 hrs. lecture; 4 hrs. lab. Field service fee. Principles of identification, classification, and nomenclature; their application to select groups of vascular plants.

4042 Projects in Plant Taxonomy (3) Prereq: BOTY 4041 or equivalent. 1 hr. conference; 4 hrs. lab. Individual instruction; student responsible for selecting a plant taxonomy project related to interests.

4052 Phycology (4) Prereq: one year of biological science. 2 hrs. lecture; 4 hrs. lab. Field service fee. Freshwater and marine algae, including morphology, biology, ecological role, and economic significance.

4054 Introductory Mycology (4) 3 hrs. lecture; 3 hrs. lab. Same as PLPA 4054. Field service fee. Developmental morphology, taxonomy, and adaptive strategies of fungi; interactions of fungi with plants and animals.

4056 Lichenology and Bryology (4) Prereq: one year of biological science. 2 hrs. lecture; 4 hrs. lab. Field service fee. Lichen and bryophyte morphology, physiology, ecology, and systematics; practice in identification.

4132 Eukaryotic Molecular Genetics (3) Prereq: Zool 2153; BCH 4084 recommended. Same as MBIO 4132 and ZOOL 4132. Molecular genetics, primarily in higher eukaryotes; gene structure and packaging in chromosomes; gene transcription and mRNA processing; translation; gene regulation; genetics in development; genetics of cancer; immunogenetics; genetic engineering in eukaryotes.

4153 Principles of Ecology (3) See ZOOL 4153.

4172 Plant Microtechnique (3) Prereq: BOTY 4024 or equivalent. 1 hr. lecture; 4 hrs. lab. Technique of and practice in making permanent slides.

4253 Principles of Ecology Laboratory (2) See ZOOL 4253.
4299 Genetics of the Evolutionary Process (3) Prereq: ZOOL 2153 or equivalent. Also offered as ZOOL 4299. Genetic mechanisms relevant to the process of evolution; mechanisms generating genetic variability and arrangement of that variability.

4308 Plants in Coastal Environments (3) See MRSC 4308.

4653 Marine Botany (4) Su only Prereq: 12 hrs. in biological science, including some botany. Four weeks at Gulf Coast Research Laboratory, Ocean Springs, Mississippi.

7025 Advanced Plant Anatomy (3) Prereq: BOTY 4024 or equivalent. Analysis of meristematic activity and growth patterns in vascular plants; basis and mechanisms of differentiation and experimental studies of normal growth processes.

7032 Advanced Mycology: Ascomycetes and Deuteromycetes (4) See PLPA 7032.

7043 Advanced Plant Taxonomy (4) Prereq: ZOOL 2153 or AGRI 2072, and BOTY 4041; or equivalents. 3 hrs. lecture; 3 hrs. lab. Fundamentals of natural variation and evolution; taxonomic features of plant variation.

7044 Agrostology (3) Prereq: BOTY 4041 or equivalent. 1 hr. lecture; 4 hrs. lab. Field service fee. Morphology, classification, identification, and economic importance of grasses and grasslike plants.

7053 Advanced Phycology (4) Prereq: BOTY 4052 or equivalent. 2 hrs. lecture; 4 hrs. lab. Field service fee. Ultrastructure and biochemistry of various groups of algae; includes economically important algae, algae as a source of protein, and algae and the environment.

7056 Advanced Mycology: Lower Fungi (4) Prereq: BOTY 4054 or equivalent. 3 hrs. lecture; 3 hrs. lab. Same as PLPA 7056. Taxonomy, biology, and ecology of flagellated fungi and zygomycetes; ultrastructural morphology, genetics, and pathogenicity; collection, isolation, and identification of fungi from a variety of substrates and habitats.

7061 Plant Growth and Development (3) See CPWS 7061.

7063 Plant Metabolism (3) See CPWS 7063.

7065 Mineral Nutrition of Plants (3) Prereq: BOTY 3060. Same as CPWS 7065. Requirements and physiological functions of mineral nutrients in plants.

7066 Mineral Nutrition of Plants Laboratory (1) Prereq: credit or registration in BOTY 7065. 3 hrs. lab. Same as CPWS 7066. Laboratory techniques and experiences pertinent to plant nutrition.

7067 Selected Topics in Plant Physiology (2) Prereq: consent of instructor. May be repeated for credit. Same as CPWS 7067. Mineral nutrition, metabolism, growth and development, and herbicides.

7068 Current Literature in Plant Physiology (1) See CPWS 7068.

7082 Research Methods in Plant Ecology (3) Prereq: BOTY 2046 or equivalent. 2 hrs. lecture; 3 hrs. lab. Field service fee. Methods used in description and analysis of vegetation.

7083 Population and Community Ecology (3) Prereq: ZOOL 4153 or equivalent. Also offered as ZOOL 7083. Population growth and regulation, life history phenomena, energy budgets, evolutionary ecology, competition, predation, phenologies, and succession.

7250 Organelle Genetics (3) Prereq: BCH 4084 and ZOOL 2153; or equivalents. Organelle biogenesis, structure and packaging of organelle genomes, segregation and transmission patterns of organelle genes, mapping, and molecular mechanisms of transmission.

7701 Electron Microscopy (2) Same as GEOL 7701, ME 7701, MBIO 7701, and ZOOL 7701. Transmission and scanning electron microscopy; x-ray analysis of biological and nonbiological materials; theory, operation, and application of the instruments.

7702 Transmission Electron Microscopy Laboratory: Biological Materials (3) Prereq: credit or registration in BOTY 7701 or equivalent. 9 hrs. lab. Same as MBIO 7702 and ZOOL 7702. Preparation of biological specimens for transmission electron microscopy; use of the electron microscope.

7703 Scanning Electron Microscopy Laboratory: Biological Materials (2) Prereq: credit or registration in BOTY 7701 or equivalent. 6 hrs. lab. Same as MBIO 7703 and ZOOL 7703. Preparation of biological specimens for scanning electron microscopy; use of the S-500 SEM.

7797 Tropical Biology: An Ecological Approach (1-8) See LAS 7797.

7980 Research Seminar (1) Prereq: consent of department chairman. Reports and discussions on topics of current interest.

7990 Problems and Research (3)

7995 Independent Study (1-3) V Prereq: consent of instructor. May be repeated for credit for a maximum of 8 sem. hrs. Directed individual readings under the guidance of a graduate faculty member.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Problems and Research (3-5) For doctoral students only.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

BUSINESS ADMINISTRATION (BADM)

0999 Career Planning and Placement (1) Suggested for second semester juniors. How to seek employment; phases of job hunting involved with planning a career, exploring strengths, planning and preparing resumes and related letters, using resumes, preparing and conducting interviews, and psychological testing.

1001 Introduction to Business (3) May not be taken by students in the College of Business Administration. Operation of the business firm; function of the businessman; nature of economic system within which private enterprise operates; orientation to collegiate business education.

3200 Records Management (3) Principles of records creation, retention, transfer, and disposal; organization and management of stored records; coding, microfilming, and retrieval of information; use of manual, mechanical, and computer means of storing and retrieving information.

3400 Office Management (3) Facilitating office work through management of environment, organization, communication, personnel, systems, productivity, and cost factors.

3500 Administrative Assistant Practicum (3) Prereq: BCOM 2071 and VED 3000; senior standing required for students in the College of Business Administration. 2 hrs. lecture; 3
hrs. lab. Responsibilities and duties of the administrative assistant; business knowledge and skills used to develop keyboarding, formatting, machine operations, records management skills, decision making, and human relations abilities.

3600 Information Processing (3) Prereq: VED 2000 and 2001. 3 hrs. lecture; 2 hrs. lab. Concepts of information processing; a systems approach for improving efficiency of business communications; emphasis on information processing management and orientation to automatic typewriting/text-editing systems and dictating/transcribing equipment.

7270 Seminar in New Developments in Business Administration (3)

7800 Behavioral Sciences Applied to Business and Industry (3) Established principles of human behavior; relevance of these behavioral factors to motivation, effective communication, conflict resolution, decision-making, the concept of change, and the meaning of work in an individual's life.


8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Predissertation Research (1-9) May be repeated for credit.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

BUSINESS COMMUNICATION (BCOM)

2071 Business Communication (3) Prereq: ENGL 1002. Communication theory and its application to business; composing the basic forms of business communication, including correspondence and reports.

3070 Business Report Writing (3) Prereq: BCOM 2071. Development of report writing skills with emphasis on clarity in accounting, management, and marketing reports; sources and use of primary and secondary business data; evaluation of research; problem analysis; organization, make-up, and writing of business reports; strategies of oral presentations.

4073 International Business Communications (3) Prereq: BCOM 2071 or equivalent. Factors affecting international business communications; emphasis on those which promote or impede successful communication; traditional and innovative media and effective communication within the multinational corporation.

4200 Managerial Communication (3) Prereq: BCOM 2071. Theory and application of oral and written communication essential to the management process; relation of communication to management style, training, information processing, and other management functions.

4500 Special Topics in Business Communications (3) Selected topics of current interest.

5072 Business Communication—I (1) Basic application of written communication principles as they relate to business writing; includes reports and résumé preparation.

5073 Business Communication—II (1) Also offered as SPCH 5060. Analysis and application of business knowledge to administrative reporting problems; instruction and practice in oral presentations of administrative reports.

7260 Seminar in Business Communications (3) Role of communication in the business context; relationship of information and the effect of different communication formats on the functional areas of accounting, finance, management, and marketing.

CHEMICAL ENGINEERING (CHE)

2171 Chemical Engineering Fundamentals—Material and Energy Balances (3) Prereq: MATH 1550 and CHEM 1202. Emphasis on basic principles and concepts used to make chemical engineering calculations; techniques used in these calculations applied to typical industrial problems.

2176 Mathematical Modeling of Chemical Engineering Systems (3) Prereq: MATH 2065 and CSC 2260. Basic concepts and techniques used in analysis of engineering processes; mathematical description of physical systems and application of modern computers to solution of resulting equations.

3172 Chemical Engineering Thermodynamics (3) Prereq: CHE 2171 and credit or registration in CHEM 4491. Basic concepts and chemical engineering applications of thermodynamics; emphasis on flow processes and real gas thermodynamics.

3173 Heterogeneous Equilibrium (3) Prereq: CHE 3172. Theory of vapor-liquid, liquid-liquid, and solid-liquid equilibrium, including the effects of chemical reactions; application of thermodynamic theory to the correlation of equilibrium data and the prediction of equilibrium compositions.

3249, 3250 Engineering Practice (1-3, 1-3) Su only Prereq: consent of instructor. Pass-fail grading. A minimum of 6 weeks of full-time employment by an industry participating in the summer program. Same as ENGR 3049, 3050. Selected engineering problems in an industrial environment.

3271, 3272 Senior Projects (1-2, 1-2) Prereq: consent of department. Pass-fail grading. Experimental and theoretical investigations including library research.

4101 Transport Sciences: Momentum Transfer (3) Prereq: CE 2450, CHE 2171, and MATH 2065. Fundamentals of momentum transfer, with applications to the fluid problems of engineering.


4104 Engineering Measurements Laboratory (3) Prereq: CHE 4101 and credit or registration in CHE 4102. 2 hrs. lecture; 3 hrs. lab. Laboratory work to accompany CHE 4101 and 4102.

4151 Unit Operations Design (4) Prereq: CHE 3173 and 4102. 3 hrs. lecture; 3 hrs. lab. Unit operations analyzed as applications of chemical engineering fundamentals and transport sciences; use of these principles in design calculations.

4171 Process Economics and Optimization (3) Prereq: credit or registration in CHE 4151. Application of optimization principles to the economic design of chemical engineering unit operations.
4172 Process Design (3) Prereq: CHE 4151 and 4171. 2 hrs. lecture; 3 hrs. lab. Chemical plant design from initial concept through definitive design; includes flow diagrams, plant location, operations, safety, and waste disposal.

4173 Computer-Aided Process Design (2) Prereq: credit or registration in CHE 4172. Solution of material and energy balances for large-scale process flow sheets without incorporation of detailed unit operations models.

4190 Chemical Reaction Engineering (3) Prereq: CHE 3173 and 4101; or equivalents. Basic principles of reactor design; selection of best design alternatives; achievement of optimum reactor operation.

4198 Process Dynamics (3) Prereq: MATH 2065 or equivalent. 2 hrs. lecture; 3 hrs. lab. Principles and practice of process dynamics and automatic control; mathematical modeling of process dynamics, feedback control, and feedforward control.

4204 Technology of Petroleum Refining (3) Prereq: CHE 4151. Catalytic and thermal processes used in petroleum refining; application of scientific and engineering principles in processes such as catalytic cracking, reforming, coking, alkylation, isomerization, and hydroprocessing; emphasis on applied catalysis and its impact on engineering design.

4205 Technology of Petrochemical Industry (3) Prereq: CHE 4151. Processes used in the manufacture of petroleum-based chemicals; application of scientific and engineering principles involved in the production of hydrogen, alcohols, olefins, aromatics, aldehydes, ketones, acids, rubber, and other polymers; emphasis on catalysis by transition-metal complexes.

4253 Introduction to Industrial Pollution Control (3) Prereq: CHE 4102 or equivalent introductory course in transport science. Quantitative application of chemical engineering principles to removal of objectionable components from effluents, with emphasis on industrial processing effluents; currently available techniques for controlling air and water pollution and solid wastes; concept of pollution control through basic process alterations developed by specific examples.

4260 Biochemical Engineering (3) Prereq: credit or registration in CHE 4190 or equivalent. Application of chemical engineering fundamentals to microbiological and biochemical systems; problems peculiar to industrial operations involving microbial processes; growth conditions and requirements, metabolisms, product separations, enzyme catalysis, sterilization, and aseptic operations.

4262 Unit Operations Laboratory (2) Prereq: CHE 4104 and 4151. 6 hrs. lab. Obtaining and interpreting data needed to solve typical problems in design or operation of chemical engineering equipment.

4285 Principles of High Polymers (3) Prereq: CHE 4101 and CHEM 4491. Solution and solid-state properties of high polymers; microstructure of polymer chains and effect on macromolecular physical properties of the final plastics.

4296 Development of Mathematical Models (3) Prereq: CHE 2176 and 4102; or equivalents. Mathematical descriptions of systems encountered in chemical engineering developed from basic principles; lumped parameter systems, distributed parameter systems, formulation of ordinary and partial differential equations, continuous and discrete analogs, and matrix formulations; models developed for systems ranging from simple elements to plant-scale.

7120 Chemical Engineering Thermodynamics (3) Thermodynamic properties, first and second laws of thermodynamics, entropy, Maxwell relations, and relationship of thermodynamic properties to intermolecular forces; physical equilibrium with emphasis on partial free energy, fugacity, Raoult's law, K-values, equations of state, and activity coefficients; chemical equilibrium and free energies.

7130 Fundamentals of Transport Phenomena (3) Foundations of heat, mass, and momentum transfer in continua; laminar flow; boundary layer theory; turbulence; buoyancy-induced flows; heat and mass transfer by diffusion, convection, and turbulence.

7140 Chemical Reactor Design Methods (3) Basic principles of chemical kinetics, fluid flow, heat transfer, and mass transfer used in design of chemical reactors; chemical equilibria, chemical kinetics, design of isothermal reactors, effects of non-ideal flow, non-isothermal reactors, and solid-gas catalytic reactions.

7302 Administration of Engineering and Technical Personnel (3) See IE 7642.

7312 Analysis of Chemical Engineering Process Data (3) Analysis of data obtained from chemical pilot plants and commercial process units; methods used to obtain maximum fundamental information from such data; relationships between actual performance of chemical process systems and that expected from governing chemical and physical laws.

7314 Optimization (3) Techniques of optimization including analytical methods, linear and nonlinear programming, geometric and dynamic programming, and variational methods with application to systems of interest to chemical engineers.

7352 Distillation and Other Separation Processes (3) Mathematical models, phase equilibria, and calculation procedures related to design and behavior of distillation columns, absorbers, extractor-settlers, etc.; emphasis on computer techniques.

7512 Advanced Chemical Engineering Analysis (3) Prereq: CHE 4296, 7120, 7130, and 7140; or equivalents. May be taken twice for credit with consent of department. Topics in chemical engineering analysis, such as perturbation methods, matched asymptotic expansions, vector and tensor calculus, and numerical techniques.

7522 Advanced Chemical Engineering Thermodynamics (3) Prereq: CHE 4296, 7120, 7130, and 7140; or equivalents. May be taken twice for credit with consent of department. Topics important to the thermodynamics of chemical engineering processes, such as nonequilibrium systems, irreversible processes, and prediction of thermodynamic properties.

7532 Advanced Chemical Engineering Fluid Mechanics (3) Prereq: CHE 4296, 7120, 7130, and 7140; or equivalents. May be taken twice for credit with consent of department. Topics important in chemical engineering flow processes, such as turbulence, boundary layer theory, hydrodynamic stability, compressible flow, multiphase flow, chemically reacting flows, and non-Newtonian fluids.

7534 Advanced Chemical Engineering Heat Transfer (3) Prereq: CHE 4296, 7120, 7130, and 7140; or equivalents. May be taken twice for credit with consent of department. Topics important in chemical process heat transfer, such as phase change and moving boundary problems, heat transfer mechanisms, natural and forced convection, radiation, and combined heat and mass transfer.

7536 Advanced Chemical Engineering Mass Transfer (3) Prereq: CHE 4296, 7120, 7130, and 7140; or equivalents. May be taken twice for credit with consent of department. Topics relating to the transport of mass in chemical engineering processes, such as diffusional operations, models for mass transfer in multicomponent, multiphase, stationary, flowing, and reacting systems.
CHEM 7261. Preparation and characterization of high polymers; typical commercial procedures for plastics production.

7592 Design Problems in Chemical Engineering (3) Prior to registration students should discuss a prospective design problem with faculty member under whom they plan to study and obtain departmental approval. Integration of technology into design of systems or plants for accomplishing specific objectives; students work under faculty direction; emphasis on producing a design package considering technical, economic, safety, and scheduling aspects of the project; design problem cannot be directly related to student's research.

7594 Computer-Aided Design (3) Prereq: CHEM 4296, 7120, 7130, and 7140; or equivalents. May be taken twice for credit with consent of department. Advanced treatment of topics important in the computer-aided design and simulation of chemical process industries, such as sequential modular flow sheeting, simultaneous solution schemes, decomposition strategies, and various simulation languages.

7700 Advanced Topics in Chemical Engineering (3) May be taken 3 times for credit with consent of instructor. One or more phases of advanced chemical engineering practice.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

CHEMISTRY (CHEM)

Laboratory Expenses: Students registering for laboratory courses in chemistry must make indemnifying deposits. Instructions and forms for making deposits will be provided at the first meeting of the laboratory. Any student unable to show a receipt for a deposit by the end of the second class period will not be permitted to continue in the course.

Prerequisites: All prerequisites in chemistry courses should be rigidly observed.

Corequisites: A student may not continue in a course if the corequisite course is dropped prior to the last day of the midsemester examination period.

1001 General Chemistry for Non-Science Majors (3) Prereq: ACT math score of at least 21 or eligibility for MATH 1021. Credit will not be given for both this course and CHEM 1201 or 1421. For students whose curricula require only one year of chemistry or physical science. Modern chemical theory and principles; descriptive chemistry of selected elements and compounds; the role of chemistry in the modern world.

1002 General Chemistry for Non-Science Majors (3) Prereq: CHEM 1001 or 1201 or 1421. Credit will not be given for both this course and CHEM 1202 or 1422. Continuation of CHEM 1001; organic chemistry and biochemistry; polymers, pollution, and pharmaceuticals.

1004 General Chemistry Laboratory (2) Prereq: credit or registration in CHEM 1002. 6 hrs. lab. Credit will not be given for both this course and CHEM 1212 or 1431. Breakage deposit. Selected experiments in fundamental and applied chemistry as well as biochemistry.

1201 Basic Chemistry (3) Prereq: ACT math score of at least 23 or eligibility for MATH 1021 or a more advanced math course. Credit will not be given for both this course and CHEM 1001 or 1421. For science/engineering curricula. Modern chemical theories and principles; quantitative approach and problem solving; descriptive chemistry of selected elements and compounds.

1202 Basic Chemistry (3) Prereq: CHEM 1201 or 1421. Credit will not be given for both this course and CHEM 1002 or 1422. For science/engineering curricula. Continuation of CHEM 1201; more theory with emphasis on solution chemistry and a quantitative approach; descriptive chemistry of selected elements and compounds from the main groups and the first transition series.

1212 Basic Chemistry Laboratory (2) Prereq: credit or registration in CHEM 1202 or 1422. 6 hrs. lab. Credit will not be given for both this course and CHEM 1004 or 1431. Breakage deposit. Basic laboratory operations including selected unit experiments and introductory inorganic qualitative analysis.

1421 Introductory Chemistry (3) Prereq: ACT math score of at least 27 or eligibility for MATH 1550. Credit will not be given for both this course and CHEM 1001 or 1201. Chemistry majors who qualify should take this course. For well-prepared students with a special interest in chemistry.

1422 Introductory Chemistry (3) Prereq: CHEM 1421, or CHEM 1201 with consent of dean of the college. Generally, consent given to students with grade of "B" or better in CHEM 1201. Chemistry majors who qualify should take this course. Credit will not be given for both this course and CHEM 1002 or 1202. A continuation of CHEM 1421.

1431 Introductory Experimental Chemistry (2) S Prereq: credit or registration in CHEM 1422, or credit or registration in CHEM 1202 for chemistry majors. 1 hr. lecture; 3 hrs. lab/demonstration. Credit will not be given for both this course and CHEM 1004 or 1212. For chemistry majors and other well-prepared students with special interest in chemistry. Breakage deposit. Fundamental chemical operations, a
selection of experiments, and elementary quantitative techniques.

1432 Introductory Analytical Chemistry (3) F Prereq: CHEM 1431, or CHEM 1212 for chemistry majors, or credit or registration in CHEM 1421 with consent of the dean. 1 hr. lecture; 6 hrs. lab. Intended to follow CHEM 1431. Exceptionally well-prepared students who want to complete the 1400 sequence in one year may be allowed to schedule 1432 before 1431. Breakage deposit. Fundamentals of quantitative and qualitative inorganic analysis.

2060 Organic Chemistry (3) Prereq: CHEM 1202. Credit will not be given for both this course and CHEM 2261. Aliphatic and aromatic compounds; biological aspects of organic chemistry.

2251 Quantitative Analysis (3) Prereq: CHEM 1202. Theory of gravimetric, titrimetric, and colorimetric chemical analysis.

2252 Quantitative Analysis Laboratory (2) Prereq: CHEM 1212 and 2251. 6 hrs. lab. Breakage deposit. Fundamental techniques of quantitative analysis.

2261 Organic Chemistry (3) Prereq: CHEM 1202 or 1422. Credit will not be given for both this course and CHEM 2060. Representative classes of organic compounds; emphasis on varied professional goals of students, e.g., life sciences, physical sciences, engineering.

2262 Organic Chemistry (3) Prereq: CHEM 2261. Continuation of CHEM 2261.

2364 Organic Chemistry Laboratory (2) Prereq: CHEM 1212; and CHEM 2060 or credit or registration in CHEM 2262. 6 hrs. lab. Same as CHEM 2463. Breakage deposit. Fundamental laboratory operations of organic chemistry.

2463 Organic Chemistry Laboratory (2) S Same as CHEM 2364; primarily for chemistry majors. Breakage deposit.

2464 Organic Chemistry Laboratory (2) F Prereq: CHEM 2364. 6 hrs. lab. Breakage deposit. Organic preparations and qualitative organic analysis.

2900 Research Internship (1) Prereq: CHEM 1201 or 1431. May be taken 6 times for credit; no more than 8 sem. hrs. of credit may be earned in CHEM 2900 and 3900. May be elected on recommendation of professor directing the work. Introduction to chemical research by association with departmental research group.

3900 Chemical Problems (1-3) Prereq: CHEM 4492. May be repeated for credit for a maximum of 4 sem. hrs.; no more than 8 sem. hrs. of credit may be earned in CHEM 2900 and 3900. May be elected on recommendation of professor directing the work and consent of the dean of the college. Introduction to chemical research methods.

4150 Environmental Chemistry (2) F Prereq: One course each in quantitative analysis and organic chemistry. Also offered as ENVS 4101. Air and water environmental pollution.

4160 Industrial Organic Chemistry (3) S Prereq: CHEM 2262. Leading types of organic synthesis considered as unit processes.

4491, 4492 Physical Chemistry (3,3) Prereq: MATH 1552; PHYS 1202 or 2102; and CHEM 1202, 1422, or equivalent; all three courses with a grade of "C" or better. CHEM 4491 is prerequisite for CHEM 4492. Principles of theoretical chemistry.

4493 Physical Chemistry Laboratory (2) S Prereq: PHYS 1209 or 2109; CHEM 1212 or 1432; and credit or registration in CHEM 4492. 6 hrs. lab. Breakage deposit. Selected experiments in physical chemistry.

4551 Elemental Analysis by Instrumental Methods (3) S Prereq: credit or registration in CHEM 4491. 2 hrs. lecture; 3 hrs. lab. Breakage deposit. Emission spectroscopy, flame photometry, atomic absorption, X-ray absorption, fluorescence, diffraction, nuclear science, statistics and reliability of results, and sampling.

4552 Instrumental Characterization of Organic Compounds (2) Prereq: credit or registration in CHEM 4492. Molecular analysis, NMR, IR, and UV spectroscopy, mass spectroscopy, chromatography, thermal analysis, and combination of techniques.


4554 Industrial Analytical Methods (3) V Prereq: CHEM 2262 and 4492. Developments in separation methods.

4561 Intermediate Physical-Organic Chemistry (3) F Prereq: CHEM 2262 and 4492. Selected topics in kinetics, reaction mechanisms, applications of quantum mechanics to organic chemistry, and related topics in physical-organic chemistry.

4562 Intermediate Organic Chemistry (3) S Prereq: CHEM 2262. Selected topics in synthesis, natural products chemistry, stereochemistry, reaction mechanisms, and related topics in structural and synthetic organic chemistry.

4570 Advanced General Inorganic Chemistry (3) Prereq: credit or registration in CHEM 4492. For advanced undergraduates and beginning graduate students. Principles in advanced inorganic chemistry; modern interpretations.

4581 Introduction to Mathematical Chemistry (3) V Prereq: MATH 2057 and credit or registration in CHEM 4491. Mathematical methods of chemistry, with application to selected chemical problems.

4594 Introduction to Chemical Physics (3) F Prereq: CHEM 4492 and MATH 2057. Continuation of CHEM 4492; quantum chemistry.

4595 Physical Chemistry of Macromolecules (3) V See BCH 4595.

4596 Theoretical Chemistry (3) S Prereq: CHEM 2262 and 4492. Advanced treatment of fundamental principles of physical chemistry; advanced thermodynamics.

4660 Topics in History of Chemistry (2) Prereq: consent of instructor. May be taken 3 times for credit when topics vary. Selected topics in history of chemistry; emphasis on development of concepts of structure, bonding, molecular shapes, reactions, and reaction mechanism.

4661 Topics in History of Chemistry (1) Coreq: CHEM 4660. May be taken 3 times for credit when topics vary. Research paper on approved topic.

6001 Chemistry Instruction through Demonstration and Experiments (3) Prereq: one year of college chemistry. 2 hrs. lecture; 3 hrs. lab. Demonstration techniques for junior and senior high school instruction; hands-on experience.

6051 Modern Analytical Methods in Chemistry for High School Teachers (3) Prereq: one year of college chemistry. 2 hrs. lecture; 3 hrs. lab. Modern analytical separations and molecular characterizations including principles and experiments of ultraviolet, infrared, nuclear magnetic resonance, mass spectroscopy, and chromatography.

7251 Elemental Analysis (2) V Modern analytical methods for elemental analysis including atomic absorption; atomic emission including plasma; X-ray emission; ESCA-Auger; neutron activation analysis.
7252 Nonspectroscopic Analytical Chemistry (2) V Nonspectroscopic analytical chemistry including electrochemistry, thermal analysis, chromatography, coordination chemistry, organic reagents, and catalyzed and induced reactions.

7253 Molecular Analysis (2) V Modern analytical methods for molecular characterization including infra-red, Fourier transform infra-red, ultraviolet, nuclear magnetic resonance, mass spectroscopy, chromatography, gas chromatography, and X-ray diffraction.

7261 Polymerization and Polycondensation Processes (4) V See CHE 7582.

7271 Inorganic Chemistry of Nontransitional Elements (2) V Prereq: CHEM 4570 or equivalent. Chemistry of nontransitional elements including selected nonmetal chemistries (e.g., B, Si, N, P, S, F), pre- and post-transition metal chemistries, and kinetics and mechanisms of reactions of nonmetallic compounds.

7272 Inorganic Chemistry of Transitional Elements (2) V Prereq: CHEM 4570 or equivalent. Chemistry of transitional elements including structural chemistry, coordination chemistry, organometallic chemistry; theories of the coordinate bond and their application to spectra, magnetism, and kinetics and mechanisms of complexes.

7290 Statistical Mechanics and Thermodynamics (3) V Methods of statistical mechanics of independent and interacting particles including ideal gases, real gases, crystals, other solids, liquids, solutions, and chemical equilibria; advanced topics and areas of current research.

7291 Quantum Chemistry (3) V Methods of quantum mechanics applied to molecular spectra, chemical bonding, and other chemical properties; oscillators, rotators, hydrogen-like wave functions, perturbation and variation theories, configuration interaction, pi-electron systems, spin, and empirical methods.

7292 Special Topics in Chemical Physics (2) V Specialized areas of physical chemistry.

7750 Special Topics in Analytical Chemistry (2) May be taken 6 times for credit. Modern methods and techniques of analytical chemistry.

7760 Special Topics in Organic Chemistry (2) May be taken 6 times for credit. Specialized areas of current interest in organic chemistry.

7770 Special Topics in Inorganic Chemistry (2) May be taken 6 times for credit. Advanced treatment of areas of current interest in modern inorganic chemistry.

8000 Seminar (1-12 per sem.) Students who receive 6 hrs. of credit for this course cannot obtain more than 9 hrs. of credit for CHEM 8900. "S"/"U" grading.

8900 Procedures and Problems in Chemical Research (1-12) Open only to students of proven ability or exceptional potential. Students who receive 6 hrs. of credit for CHEM 8000 cannot obtain more than 9 hrs. of credit in this course. Pass-fail grading. Experimental research methods, design and execution of experiments, and analysis and correlation of experimental data.

9000 Dissertation Research (1-12 per sem.) Prereq: 6 hrs. of credit in CHEM 8000 or 8900. "S"/"U" grading.

CHINESE (CHIN)

1001 Introduction to Chinese (5) Spoken Chinese and character writing; drill in Chinese dialogs in the language laboratory.

2051 Intermediate Chinese (5) Spoken and written Chinese; beginning readings; dialog drill in the language laboratory.

CIVIL ENGINEERING (CE)

In the Department of Civil Engineering, the second digit of the course number denotes the subject areas of the courses as follows: 0—construction (excluding 8000, 8001, 9000); 1—sanitary; 2—fluids (hydraulics); 3—geotechnical; 4—structures; 5—surveying; 6—transportation; 7—general; 9—architecture.

1510 Elementary Surveying and Measurements (3) Prereq: eligibility for MATH 1550 and credit or registration in CE 1550. Plane surveying, theory of measurements, use of surveying equipment, field and office work for boundary surveys, topographic mapping, construction surveys, and route surveys.

1550 Elementary Surveying Laboratory (1) Prereq: credit or registration in CE 1510. 3 hrs. lab. Laboratory to accompany CE 1510.


2200 Fluid Mechanics (3) Prereq: CE 2450. Same as ME 2833. Statics and dynamics of continuous liquids and gases; control volume laws; conservation of mass, momentum, and energy; dimensional analysis and similarity; applications to pipe flows, boundary layers, isentropic compressible flow.

2250 Hydraulic Laboratory (1) Prereq: CE 2200 3 hrs. lab. Measurement and calibration of hydraulic machinery; pump and turbine efficiency; flow in pipelines; viscosity; discharge coefficients.

2450 Statics (3) Prereq: MATH 1552. Vectorial treatment of resultants and equilibrium of force systems, centroids and centers of gravity, fluid statics, friction.

2500 Elementary Surveying (2) Prereq: MATH 1015, 1022, or 1023. Primarily for those desiring a terminal course in elementary surveying. Theory, use, and application of tape, level, and transit.

2510 Elementary Surveying Laboratory (1) Prereq: credit or registration in CE 2500. 3 hrs. lab. Laboratory to accompany CE 2500.

2520 Advanced Surveying (3) Prereq: CE 1510 and 1550. For students who wish to meet the requirement of 6 hrs. of sur-
veying to take the Surveyor's Licensing Exam. Higher order surveying, triangulation, state coordinate system, horizontal and vertical curves; earthwork; astronomical observations.

2710 Introduction to Civil Engineering (1) Prereq: CE 2081. Not open to civil engineering majors. Basic technical and professional aspects of civil engineering education and practice.

2720 Computational Methods in Civil Engineering (3) Prereq: ENGR 2060, MATH 2057, and credit or registration in MATH 2065. Numerical techniques for solving civil engineering problems; applications of statistical methods, matrix operations, linear equations, and numerical integration and differentiation to civil engineering systems.

3082 Structural Technology—II (3) Prereq: CE 2081. Not open to civil engineering majors. Design of steel and timber structural components and connections.

3083 Reinforced Concrete Design (3) Prereq: CE 3082. Not open to civil engineering majors.

3100 Water Distribution and Wastewater Collection (2) Prereq: CE 2200 and 3200. Principles and practices used in analysis and design of water supply systems and storm and wastewater collection systems.

3110 Water and Wastewater Treatment (3) Prereq: CE 2200. 2 hrs. lecture; 3 hrs. lab. Water quality criteria; unit operations and processes of water treatment; chemical and biological characteristics of wastewater; stream pollution.

3200 Hydraulics (3) Prereq: CE 2200. Fundamentals of fluid mechanics applied to problems in the field of water; steady and unsteady flow in closed conduits, flow in open channels, measurement of flowing water, and turbo machinery.

3300 Geotechnical Engineering—II (3) Prereq: CE 2200, 3400, and credit or registration in CE 3350. Properties and behavior of soils as engineering materials; origin of soils, structure, strength, and deformation of soil masses; elementary theoretical treatment of consolidation, settlement, earth pressure, and bearing capacity.

3350 Geotechnical Engineering Laboratory—II (1) Prereq: CE 2200, 3300. 3 hrs. lab. Fundamental properties of soils; testing methods to determine these properties; includes gradation, specific gravity, Atterberg limits, unconfined compression, triaxial shear, direct shear, vane shear, and one-dimensional consolidation.

3400 Mechanics of Materials (3) Prereq: CE 2430 or equivalent. Credit will not be given for both this course and CE 3405. Stress and strain, torsion, bending, deflections of beams, columns, statically indeterminate problems, combined stress.

3405 Mechanics of Materials (4) Prereq: E 2450 or equivalent. Credit will not be given for both this course and CE 3400. Stress and strain, torsion, bending, deflections of beams, columns, statically indeterminate problems, combined stress.

3410 Mechanics of Materials Laboratory (1) Prereq: credit (preferably) or registration in CE 3400 or 3405. 2 hrs. lecture/demonstration/lab. Mechanical properties and strengths of engineering materials and structural and machine elements.

3415 Structural Analysis—I (3) Prereq: CE 3400. Analysis of statically determinate structures including beams, frames, trusses, and arches for the effects of dead, live, moving, and wind loads.

3420 Structural Analysis—II (3) Prereq: CE 3400. Analysis of statically indeterminate structures by methods of consistent deflections, elastic energy, virtual work, slope of deflections, and moment distribution.

3440 Senior Design Project (3) Prereq: senior standing and consent of instructor. Comprehensive design of a component, system, or process; project chosen in consultation with department chairman.

3600 Principles of Highway and Traffic Engineering (3) Prereq: CE 1510 or equivalent. Basic traffic characteristics, highway capacity analysis, geometric design of highways, traffic operations, pavement design; other modes of transportation, especially bus transit systems.

3700 Engineering Materials Laboratory (1) Prereq: credit or registration in CE 3082 or 3400 or equivalent. 3 hrs. lab. Design and properties of concrete and bituminous mixes.

4120 Solid Waste/Hazardous Waste Management (3) Prereq: credit or registration in CE 3110. Solid waste and hazardous waste management practices including collection, identification, and classification of waste, handling and disposal techniques, and facilities parameters.

4130 Water Quality Analysis (3) 2 hrs. lecture; 3 hrs. lab. Application and interpretation of standard sanitary chemical and microbiological methods to water quality problems in the areas of water supply, wastewater treatment, and pollution of natural waters.

4140 Design of Wastewater Management Facilities (3) Prereq: CE 3100 and 3110. 2 hrs. lecture; 3 hrs. lab. Design of wastewater management facilities; process selection and evaluation using computer-assisted procedures, preparation of design drawings, reports, and cost estimates.

4200 Hydrology (3) Prereq: CE 2200 or MATH 1552. Water movement from arrival on land surface until it reaches the sea overland; concept of frequency, maximum probable run-off of rainfall, mass curves, and other statistical methods of hydrologic engineering.

4250 Ground Water (3) Prereq: CE 2200 or MATH 1552. Occurrence of ground water; properties and classification of water-bearing formulations; origin, discharge, and methods of evaluating direction and rate of ground water movement; Darcy's Law, Theis Equation, analysis of aquifer tests, and "safe yield"; legal doctrines, side effects of aquifer development, and the economics of ground water.

4300 Geotechnical Engineering—II (Shallow Foundations) (3) Prereq: CE 3300 and 3350. Fundamentals of geotechnics applied to design and analysis of shallow foundations, excavations, retaining structures, and slopes; selected topics on soil improvement and vibration; emphasis on computer utilization.

4310 Geotechnical Engineering—III (3) Prereq: CE 3300, 3350, and 4300. Fundamentals of geotechnics applied to design and analysis of deep soil-structure systems; single piles and pile groups under axial load; caissons and piers; effects of lateral loads; computer utilization.

4320 Coastal Engineering (3) Prereq: CE 3300 or equivalent. Engineering problems of the coastal zone; coastal processes, wave action, currents, sediment movement; environmental forces due to waves, currents, and winds; offshore soil geotechnical properties, vertical and lateral pile capacity; design principles for submarine pipelines and offshore platforms; engineering case studies.

4400 Principles of Steel Design (3) Prereq: CE 3415. Analysis and design of elements of steel structures, elastic and plastic design, critical comparison of specifications with theory.
4410 Principles of Reinforced Concrete (3) Prereq: CE 3400 and 3415. Working stress and ultimate strength theories as applied to concrete beams (reinforced and prestressed), columns, slabs, and footings; experimental data and current design specifications.

4420 Principles of Prestressed Concrete (3) Prereq: CE 4410. Analysis and design of prestressed concrete structural elements; full and partial prestressing; serviceability and strength requirements; code criteria for bridges, buildings, and other structures.

4425 Principles of Wood Mechanics and Timber Design (3) Prereq: CE 3415 or equivalent. Basic principles of mechanics, elasticity, rheology, and failure as applied to wood; design methods and specifications governing the design of sawn lumber, plywood, and glulam timber structural and structural components.

4430 Structural Engineering (3) Prereq: CE 4400 and credit or registration in CE 3420 and 4410. Fundamental principles applied to planning, analysis, and design of structures in steel, concrete, and wood; introduction to structural analysis with the aid of computers.

4440 Advanced Mechanics of Materials (3) Prereq: CE 3400 or 3405. Mechanics of materials; emphasis on needs of students interested in structural and machine design.

4450 Finite Element Methods (3) Prereq: CE 3400 or 3405; and either MATH 2065 or 2090 or 4037. Basic theory of finite element methods with applications to a wide class of physical problems; matrix representation of stress, strain, and material relations; principle of virtual work, discrete finite element models of continuous systems, construction of basic finite element algorithms, and solutions of physical problems by using existing finite element computer programs.

4460 Introduction to Continuum Mechanics (3) Prereq: CE 3400 or 3405 or equivalent. Concepts of stress and deformation; governing field laws, general conservation equations and special cases, i.e., conservation of mass, balance of momentum, and conservation of energy; theory of constitutive equations; applications in elementary elasticity, plasticity, and fluid dynamics.

4500 Geodetic and Photogrammetric Surveying (3) Prereq: CE 1510 or equivalent. 2 hrs. lecture: 3 hrs. lab. Geodetic surveying for control surveys; photogrammetry and photointerpretation; calculation and field procedures used in ground control surveys and photogrammetry.

4550 Boundary Surveying (3) Prereq: CE 1510 or equivalent. 2 hrs. lecture: 3 hrs. lab. Designed to prepare engineers to complete Land Surveyor Registration requirements in Louisiana. Procedures and laws governing surveying of boundaries; emphasis on U.S. Land Survey System and Louisiana surveying laws and grids.

4560 Engineering Applications of Remote Sensing (3) Prereq: consent of instructor. 2 hrs. lecture: 3 hrs. lab. Photographic and digital image processes related to interpretation, principles, methods, and techniques; engineering applications in materials, land use, energy, hydrology, transportation, geology, geomorphology, and water resources.

4600 Advanced Highway and Traffic Engineering Design (3) Prereq: CE 3600. 2 hrs. lecture: 3 hrs. lab. Traffic engineering studies of intersection, arterial street, and freeway operations; designs for both rural and urban highways, intersections, and interchanges; preparation of detailed solutions for various design problems; computer applications to design problems.

4610 Introduction to Transportation Planning (3) Prereq: CE 3600. Elementary concepts in the transportation planning process; prediction of future transportation demands, mathematical modeling, and computer applications.

4620 Transportation Engineering (3) Prereq: CE 3600. History, economics, and traffic characteristics of transportation systems; planning, design, construction, maintenance, and operation of air, highway, pipeline, rail, and water transportation facilities—vehicles, guideways, and terminals.

4760 Civil Engineering Design (3) 2 hrs. lecture; 3 hrs. lab. Design of civil engineering facilities; feasibility studies for subdivisions, airports, shopping centers, interchanges; other pertinent topics.

4770 Professionalism and Ethical Practice of Civil Engineering (1) Prereq: senior standing in civil engineering. The role of professionalism in engineering education and practice; the civil engineer's responsibility in preserving the environment and protecting the safety, health, and welfare of the public.

4780 Special Topics in Civil Engineering (3) Prereq: senior standing and departmental approval. May be taken twice for credit. More than one section may be taken concurrently for credit if topics differ. Topics in specialized areas of interest.

7100 Operations and Processes in Sanitary Engineering—1 (3) Prereq: CE 3100 and 3110; or equivalent undergraduate preparation. Theory and design of water and wastewater treatment processes.

7110 Operations and Processes in Sanitary Engineering—II (3) Prereq: CE 3100 and 3110; or equivalent undergraduate preparation. Theory and design of water and wastewater treatment processes.

7115 Water Quality Management (3) Current environmental engineering topics, with emphasis on water quality; governmental agencies, regulations, and technological limits affecting water and wastewater treatment, solid wastes, hazardous wastes, and air pollution.

7120 Sanitary Engineering Operations and Processes Lab (3) Prereq: CE 4130, 7100, and credit or registration in CE 7110. 1 hr. lecture; 6 hrs. lab. Laboratory and pilot plant studies of water and wastewater treatment processes.

7180 Water Quality Simulations (3) Prereq: CE 4130. Water quality modeling from a perspective of practicality and reliability; emphasis on model calibration and verification procedures and methodologies for quantifying uncertainties associated with model predictions.

7200 Free Surface Flow (3) Prereq: CE 2200. Natural and artificial open channels; steady and unsteady flow, water surface profiles, channel transitions, hydraulic jump, secondary flow, and application of energy and momentum principles.

7255 Advanced Hydraulics (3) Prereq: CE 2200. Transportation of sediment, mixing current, and other phenomena.

7260 Advanced Hydrology (3) Prereq: CE 4200 or 4250 or equivalent. Hydrologic cycle, including interrelationships between classical and statistical methods of hydrology and new problems caused by waste-resource development; factual and conceptual hydrological evaluation of present practices in public and local development of water resources.

7270 Hydrologic Systems (3) Prereq: CE 4200. Techniques of systems analysis and synthesis; application to hydrologic processes including runoff, streamflow routing, infiltration, evapotranspiration, and watershed yield; development of watershed models using these techniques and their application to engineering design.
2263. FORTRAN IV programming and its application to numerical problems encountered in science and engineering; elements of FORTRAN IV programming, solution of simultaneous linear algebraic equations, solution of nonlinear algebraic equations (root-solving), numerical differentiation and integration, and numerical solution of ordinary differential equations.

2263 Numerical Methods (3) Prereq: MATH 2085 or 2090, and knowledge of a high-level programming language. Credit will not be given for both this course and CSC 2262. Computer-oriented methods applied to solution of numerical problems in science and engineering; students obtain numerical answers via the computer to problems formulated by considering a physical system common to many areas of science and engineering.

2270 COBOL Programming and Business Data Processing Systems (3) Prereq: credit in a course in computing. Intended primarily for students in computer science and related disciplines. COBOL programming; its use in business data processing systems.

2280 Computer Organization (3) Prereq: CSC 2252. Basic digital circuits; Boolean algebra and combinatorial logic, data representation and transfer, and digital arithmetic; digital storage and accessing, control functions, input-output facilities, system organization, and reliability; description and simulation techniques; features needed for multiprogramming, multiprocessing, and real-time systems; other advanced topics and alternate organizations.

3102 Data Structures (3) Prereq: CSC 2252. Basic concepts of data; linear lists, strings, arrays, and orthogonal lists; representation of trees and graphs; storage systems and structures, and storage allocation and collection; multitinked structures; symbol tables and searching techniques; sorting (ordering) techniques; formal specification of data structures, data structures in programming languages, and generalized data management systems.

3106 Survey of Systems Software (3) Prereq: CSC 2105. Not for credit for computer science majors. General concepts of operating system services and systems programming; overview of computer hardware organization and machine language programming, input/output control and management, high-level language interfaces to operating systems, and system software development.

3456 The Social Impact of Computer Technology (3) Prereq: ENGL 1002 or equivalent. No previous background in computing assumed. Positive and negative effects of modern computing technology on society.

3999 Independent Undergraduate Research (1-3) Prereq: specific consent of department chairman. May be repeated for credit for a maximum of 4 sem. hrs. Individual readings, conferences, and program development in computer science.

4100 Introduction to Operating Systems and File Management (3) Prereq: CSC 2252. Advanced assembler programming, including macros and access methods; job control language; supervisor functions; loader and link-editor functions; file and memory management; multiprogramming and time-sharing systems.

4101 Programming Languages (3) Prereq: CSC 3102. Credit will not be given for both this course and CSC 7001. Formal definition of programming languages including specification of syntax and semantics; simple statements including precedence, infix, prefix, and postfix notation; global properties of algorithmic languages including scope of declarations, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks; list processing, string manipulation, data description, and simulation languages; run-time representation of program and data structures.

4103 Operating Systems (3) Prereq: CSC 3102. Types of programs required to maintain and/or enhance the software usage of information processing systems.

4304 Systems Programming (3) Prereq: CSC 4103. Batch process systems programs, their components, operating characteristics, user services and limitations; implementation techniques for parallel processing of input-output and interrupt handling; overall structure of multiprogramming systems on multiprocessor hardware configurations; addressing techniques, core management, file system design and management, system accounting, and other user-related services; traffic control, interprocess communication, design of system modules, and interfaces; system updating, documentation, and operation.

4310 Communications in Computing (3) Prereq: MATH 1552. Also offered as EE 4710. Theoretical and practical factors in computer interaction considered via various modes of communication; communication codes, error effects, interfaces, networks, equipment, and typical current and advanced applications.

4321 Minicomputers (3) Prereq: CSC 1240 or equivalent. 2 hrs. lecture; 3 hrs. lab. Characteristics of small computing systems used primarily for laboratory automation, data communications, data acquisition and control; emphasis on hardware, software, and interfacing of minicomputers; survey of applications.

4330 Programming Methodology (3) Prereq: CSC 3102. Students participate as part of a team in a large-scale programming project. Unified treatment of design, development, and maintenance of large-scale programming projects; includes the problem-solving process, planning and management of projects, verification and validation, structured programming, security, and privacy.

4351 Compiler Construction (3) Prereq: CSC 3102 or equivalent. Credit will not be given for both this course and CSC 7001. Program language structures, translation, loading, execution, and storage allocation; compilation of simple expressions and statements; organization of compiler including compile-time and run-time symbol tables, lexical scan, syntax scan, object code generation, error diagnostics, object code-optimization techniques, and overall design; use of compiler writing languages and bootstrapping.

4354 Computer Graphics (3) See EGR 4243.

4355 Applied Interactive-Graphic Computer-Aided Design (3) See EGR 4255.

4360 Sequential Machines (3) Prereq: CSC 2259. Elementary number systems and codes, switching algebra, combinational circuit minimization, sequential machines, finite automata, equivalence of states and machines, reduced machines, and other topics.

4362 Advanced Numerical Methods and FORTRAN (3) Prereq: CSC 2263 or equivalent. Problem solving by digital computer; use of numerical methods in the solution of differential equations; testing and automation of methods on the digital computer; problems programmed in FORTRAN.

4368 Computational Techniques in Linear Programming (3) Prereq: CSC 1240 or 1241; MATH 2085 or 2090; and IE 4510, QBA 4020, or equivalent. Techniques for solving linear programs on the digital computer; the simplex method, inversion techniques, pricing and pivot selections, separable programming, generalized upper bounding, integer programming, and decomposition techniques.
4402 Introduction to Database Management Systems (3) Prereq: CSC 3102. Knowledge of COBOL is desirable. The three basic models (network, hierarchical, and relational) of database management systems; application of these concepts to specific commercially-available database management systems.

4444 Artificial Intelligence and Pattern Recognition (3) Prereq: CSC 3102 and IE 3302; or equivalents. Fundamentals of artificial intelligence including the areas of problem solving, game playing, and theorem proving; pattern recognition topics include Bayes decision theory, parameter estimation, supervised learning, nonparametric techniques, clustering, and scene analysis.

4602 Fundamental Computer Science for Teachers (3) Prereq: CSC 1601 or equivalent. MATH 1021, knowledge of a computer programming language, and credit in an education methods course numbered 3000 or above. Advanced programming techniques; emphasis on structured programming, software and hardware organization, data structures, graphics, and other topics to prepare students to teach computer science in secondary schools.

4890 Introduction to Theory of Computing (3) Prereq: CSC 2259 or equivalent. The notion of an algorithm; primitive recursive and partial recursive functions; Turing machines and other models of computation; Markov algorithms; introduction to complexity of algorithms; Church’s thesis, Godel numbering, and unsolvability results; halting problems; Post correspondence problem; recursive and recursively enumerable sets; concepts from formal language theory.

4999 Selected Topics in Computer Science (3) Prereq: consent of department. May be taken 3 times for credit.

7001 Computing Principles—I (3) Prereq: CSC 3102 or equivalent. Credit will not be given for both this course and CSC 4191 or 4351. Comparative approach to programming language concepts, semantics, data types, control structures, functional languages, compilers, and compiler construction.

7002 Computing Principles—II (3) Prereq: CSC 7001 or equivalent. Fundamentals of operating systems, including evaluation methods; functional organization and architecture of computers, including arithmetic/logic and control units, microprogramming, input/output facilities, real-time systems microprocessors, multiprocessors, distributed processing, and digital logic; comparative study, including unix, CP/M, OS/MVS, and VM/370.

7030 Computer-Based Information Systems Analysis (3) Prereq: CSC 3102. Analysis and logical design of computer and information systems; the systems approach and use of information for management decision making; information systems analysis techniques; analysis of computer systems and of interaction between computer components through use of models.

7080 Computer Architecture (3) Prereq: CSC 7002 or equivalent. Background in electronics not required. Functional architecture of modern digital computer systems; detailed description of instruction set implementation with monoprocessor and multiprocessor structures; design and analysis of instruction sets and control structures.

7090 Systems Science Design Project (1-9) Prereq: consent of department chairman. Individual design, development, and documentation of a computer program package applying systems techniques to a problem in the student’s specialization field.

7103 Survey of Operating Systems (3) Prereq: CSC 4103 or 7002 or equivalent. Contemporary operating systems implementations; design and maintenance of experimental and commercial operating systems; comparative analysis of operating systems’ features and capabilities; operating system selection to meet application requirements.

7135 Software Systems Development (3) Prereq: CSC 3102 or equivalent. Student teams participate in a large-scale program design and implementation project. Concepts of software production, including program design philosophies, man-machine interfaces, programmer management ideas and models, and methods by which programs are demonstrated to be correct, reliable, and secure; emphasis on the study and design of software methodologies.

7200 Theory of Computing—I (3) Prereq: CSC 7002 or equivalent. Formal aspects of computer science; practical applications of abstract machines and computational procedures; automata, formal languages, algorithm design and analysis.

7201 Theory of Computing—II (3) Prereq: CSC 4890 or 7200 or MATH 7200. Decidable and undecidable computing problems; complexity, intractability, and feasibility of computing problems; gap, compression, and speedup theorems; reducibility of problems; provable properties of complexity of algorithms.

7300 Algorithm Design and Analysis (3) Characteristics of an algorithm; problems of algorithm existence; the design, implementation, and complexity of algorithms; algorithm case studies.

7402 Data Base Management Systems (3) Prereq: CSC 3102 or equivalent. Fundamentals of data base organization; applications in the design and use of management information systems; network, hierarchical, and relational data base models; existing data base management systems; data manipulation and representation; physical organization and data independence; problems of data base security, privacy, and integrity.

7405 Library Technical Operations and Automation (3) See LIBS 7506.

7406 Information Science (3) See LIBS 7605.

7407 Abstracting and Indexing (3) See LIBS 7606.

7410 Online Library Systems and Services (3) See LIBS 7607.

7500 System Modeling and Computer Simulation (3) Prereq: CSC 2263 or equivalent. Construction and use of mathematical and computer models; parameter estimation; compartmental models; simulation techniques; applications of simulations; examples and case studies from physical, social, and life sciences, engineering, business, and information sciences.

7560 Computational Methods (3) Prereq: 6 hrs. of math beyond MATH 1552. Computer techniques for root isolation and determination, numerical approximation techniques, numerical integration and differentiation, solution of ordinary and partial differential equations, solution of linear systems of equations, matrix diagonalization, and integral transforms; error analysis, implementation and efficiency measures for algorithms used to solve these problems.

7700 Special Topics in Computer Science (3) May be taken 4 times for credit. Specialized areas of current interest in computer science.

7998 Seminar in Computer Science (1) Prereq: consent of department chairman. May be taken 6 times for credit.

7999 Selected Readings in Computer Science (1-3) Prereq: consent of department chairman. May be repeated for credit for a maximum of 6 sem. hrs.
CONSTRUCTION (CONS)

1011 Materials and Methods of Residential and Light Commercial Construction (3) See INED 1011.

1511 Introduction to Construction (1) The construction industry; classification of and participants in the construction industry; traditional and nontraditional approaches; educational requirements for construction management.

1583 Construction Graphics and Nomenclature (3) 6 hrs. lab. Graphic communication concepts and techniques relating to construction processes and nomenclature.

2024 Welding Technology (3) See INED 2024.

2040 Technical Drawing, Reading, Sketching, and Takeoff (3) See INED 2040.

2519 Microcomputer Applications in Construction (2) Prereq: CONS 2040 and CSC 1248. Utilization of software for estimating, planning and scheduling, and financial analysis.

3083 Structures for Construction (3) Prereq: CE 3082. Wood design, formwork, and structures for construction.

3091 Systems for Construction Management (3) Prereq: CSC 1248. Systems approach to solving complex construction problems; latest mathematical and nonmathematical methods; models developed for construction application.

3110 Soils for Construction (4) Prereq: CE 3082. 3 hrs. lecture; 3 hrs. lab. Engineering properties of soils and their behavior in heavy earth structures; field testing of soils and decision making at construction level; soil exploration, testing, treatment, and stabilization; use of organic soils and shells in construction; drainage and settlement problems.

3171 Mechanical Equipment of Buildings (3) Prereq: PHYS 2002. Type, design, installation, and performance of mechanical equipment used in buildings, including plumbing and air conditioning.

3561 Quantity Surveying, Estimating, and Bidding—I (4) Prereq: CONS 3573. 2 hrs. lecture; 6 hrs. lab. Principles, theories, and systems of estimating and forecasting construction costs; quantity surveys, work classification; pricing analysis; preparation of total bid package for prospective clients.

3562 Quantity Surveying, Estimating, and Bidding—II (4) Prereq: CONS 3561 and 3574. 2 hrs. lecture; 6 hrs. lab. Continuation of CONS 3561.

3573 Materials, Methods, and Equipment—I (3) Prereq: CONS 2040. Job planning, work methods, materials, and equipment required in building and heavy construction.

3574 Materials, Methods, and Equipment—II (Heavy and Industrial Construction) (3) Prereq: CONS 3573. Continuation of CONS 3573, with emphasis on both heavy and industrial equipment.

3579 Electrical Installations (3) Prereq: PHYS 2002. Wiring systems for residential, commercial, and industrial buildings; illumination.

3590 Selected Topics in Construction (3) Not open to construction majors. Selected topics in quantity surveying, cost estimating and methods, and equipment used in construction.

3591 Seminar in Building Construction (3) Prereq: senior standing. Research and reports on special projects.

3592 Special Projects in Construction (3) Prereq: senior standing. May be repeated for a maximum of 6 sem. hrs. if topic differs. Design solutions for construction structures coordinated with construction and erection techniques.

3593 Construction Administration (3) Prereq: credit or registration in CONS 3561. Principles and theory of ownership, organization, contracts, insurance, bonding, and labor relations pertaining to the construction industry.

3594 Construction Management (3) Prereq: CONS 3593. Theory and objectives of construction management; principles of project funding and cash flow; depreciation and productivity; theory and application of decision and risk analysis for construction management.

CRIMINAL JUSTICE (CJ)

1107 Introduction to Criminal Justice (3) The criminal justice system, including police, courts, and corrections; emphasis on the dynamic interrelationships between the various elements in the system as well as special problem areas.

2131 Police Process (3) F Organization, functions, and administrative concerns of police agencies in modern society.

2132 Judicial Process (3) S State and federal judicial systems; structure, function, and organization of American courts.

2133 Correctional Process (3) S Historical and philosophical background of professional corrections; modern development and relationship with other facets of criminal justice.

2399 Introduction to Criminal Justice Research Methods (3) F Logic of inquiry; ethics and politics in research; sampling procedures; various research designs related to the study of crimes, criminals, and the criminal justice process.

3002 Internship (3) Prereq: 92 sem. hrs. in the CJ curriculum and prior consent of instructor. 10 hrs. per week. Students assigned to a field study program with a criminal justice agency: law enforcement, corrections, juvenile justice, the court system, or other agency professionally involved with the criminal justice system.

3100 Criminal and Related Law (3) F Also offered as POLI 3100. Structure, definitions, elements, and interpretations of the most frequently used sections of the criminal codes.

3101 Rules of Evidence and Procedure (3) S Principles and applications of criminal law of evidence and procedure.

3133 Criminal Investigation (3) S Legal aspects, operational procedures, and technical specialization involved in crime investigation.

3170 Proseminar in Law Enforcement (3) S Prereq: CJ 2131. Law enforcement procedures, operations, and agencies.

3399 Advanced Topics in Criminal Justice Research (3) S Prereq: CJ 2399. Research practices and procedures; quantification and analysis of data, policy implications of research, evaluation of research, and special problems of criminal justice research.
3400 Criminal Justice Management: Theory, Practice, Problems (3) F Current theory, practice, and problems in the management of police, court, and correctional agencies and institutions; process of supervisory management and role of supervisors in police and correctional organizations.

3401 Criminal Behavior and Personality (3) S Theories of the relationship between personality and criminal behavior; criminal behavior as an adaptation to a particular set of circumstances.

3999 Independent Study (3) Prereq: written consent of department head. May be taken twice for credit. Students work under the direction of a faculty member and either complete a specified set of readings or engage in research.

4000 Criminal Justice Theory (3) F Analytical study of critical issues in criminal justice.

410 Juvenile Justice System (3) F The evolution, philosophy, and processes of the juvenile justice system; the rights of juveniles, dispositional alternatives, and future trends directed at solving some of the system's current problems.

4140 Contemporary Correctional Institutions (3) S Evolving role of custodial institutions in the American criminal justice system; the effects of changing public policy, court intervention, manpower and management problems, and new developments in custody and treatment technologies on the organization, policy, process, and operation of American custodial institutions.

4800 Selected Topics in Criminal Justice (3) May be taken twice for credit when topics vary. Advanced topic, current issue, or recent development in criminal justice.

7200 Survey of Criminal Justice (3) Law enforcement, the judiciary, and corrections as components of the criminal justice system.

7201 Criminal Justice Administration (3) Administrative structures and functions of criminal justice organizations; the interrelationships of police, corrections, courts, and juvenile organizational systems and the administrative concerns of each.

CROP PHYSIOLOGY AND WEED SCIENCE (CPWS)

3060 Introductory Plant Physiology (4) F,S Prereq: BOTY 1001, 1002; and either CHEM 2060 or 2261. 3 hrs. lecture; 3 hrs. lab. Also offered as BOTY 3060. Life processes of plants.

3960 Undergraduate Research in Crop Physiology and Weed Science (1-3) V Prereq: CPWS 3060 or equivalent and consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. Research experiences for students contemplating graduate study in crop physiology or weed science.

4070 Principles of Weed Control (4) F Prereq: CPWS 3060 or equivalent. 3 hrs. lecture; 3 hrs. lab. Principles and practices of weed control in agricultural crops; weed ecology, mechanisms of herbical action and selectivity; characteristics and uses of important herbicides.

7061 Plant Growth and Development (3) F Prereq: CPWS 3060 and BCH 4083; or equivalents. Also offered as BOTY 7061. Effects of naturally occurring growth substances and environmental conditions on plant growth.

7063 Plant Metabolism (3) S Prereq: CPWS 3060 and BCH 4083; or equivalents. Also offered as BOTY 7063. Major metabolic systems of plants and their control.

7202 Legal Aspects of Criminal Justice (3) Prereq: CJ 3100 or equivalent. Judicial decision-making in constitutional issues of criminal procedure; extra-legal factors influencing the Supreme Court and the judicial process.

7204 Criminal Justice Research Methodology (3) Research methods in criminal justice; logic of research, research design, sampling, data collection techniques, and analysis.

7205 Criminal Justice Planning, Evaluation, and Policy (3) Prereq: CJ 7204 or equivalent. Criminal justice planning in agencies and institutions; its interface with program evaluation and policy analysis research; use of information systems; related research methodology and research literature.

7301 Issues in Juvenile Justice (3) Contemporary issues and problems confronting the juvenile justice system; special problems associated with the causation and prevention of delinquency.

7602 Comparative Criminal Justice Systems (3) Contemporary criminal justice systems in Western European, Communist-block, and Third World nations; includes survey of international crime, world terrorism, and related worldwide criminal justice issues.

7604 Recent Developments in Law Enforcement (3) Operational techniques, administrative concepts, problems, and current issues.

7700 Individual Reading and Research in Criminal Justice (3) May be taken twice for credit; however, no more than 6 sem. hrs. may be earned in this course and CJ 4999 combined.

7800 Selected Topics in Criminal Justice (3) May be taken twice for credit when topics vary. Advanced topic, current issue, or recent development.

7999 Criminal Justice Project (3) Substantive project for non-thesis students who have completed all core courses. Preparation of a scholarly paper focused on a specific criminal justice project or a particular criminal justice agency; must be approved by departmental committee.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.
of herbicides with plants; emphasis on the specific mode of action, entry, movement, metabolism, and selectivity mechanisms of each chemical family of herbicides.

7072 Soil-Pesticide Interactions (3) F-E Prereq: AGRO 2051 and CPWS 4070. Chemical, physical, and biological properties of soils as they affect performance and dissipation of pesticides; fate of pesticides in the environment.

CURRICULUM AND INSTRUCTION (EDCI)

1000 Introduction to the Study of Education (3) For education majors only. Credit will not be given for both this course and EDAF 2000. Field experience in multicultural settings in secondary schools. Historical foundations, organization, and administration of American public education.

2025 Foundations and Principles of Teaching in the Elementary School (3) 2 hrs. lecture; 2 hrs. field experience in multicultural settings in elementary schools. Open only to students who are actually enrolled in programs leading to teacher certification.


2045 Principles and Practices in K-12 Programs (4) Prereq: EDCI 1000 and enrollment in a program leading to teacher certification in grades K-12. 3 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Managerial aspects of instruction; application of learning principles to the classroom setting.

2700 Characteristics of Exceptional Children (3) F,S,Su 3 hrs. lecture/field experience. Individual differences of various types of exceptional children; characteristics, educational programs, and resources for treatment.

2701 Exceptional Children: Mild/Moderate and Severe/Profound Impairments (3) Prereq: EDCI 2700. Etiology, behavioral aspects, and treatment of the educationally handicapped child; includes mild/moderate and severe/profound impairments.

3112 Reading Instruction in the Elementary School (6) Prereq: EDCI 2025; concurrent registration in EDCI 3113 for elementary grades majors. 3 hrs. lecture; 6 hrs. field experience in multicultural settings. Current instructional materials and methods in teaching reading at the elementary school level; demonstration of understandings and skills in a laboratory situation in the public schools.

3113 Materials and Methods in Teaching Communicative Skills in the Elementary School (2) Prereq: EDCI 2025; concurrent registration in EDCI 3112 for elementary grades majors. Current instructional materials and methods in teaching language arts communicative skills at the elementary school level; demonstration of understandings and skills in a laboratory situation in the public school.

3125 Materials and Methods in Elementary School Science (3) Prereq: EDCI 2025 or equivalent, and concurrent enrollment in EDCI 3126 and 3127. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Materials, methods, and current trends in teaching elementary school science; strategies for developing science concepts, processes, and attitudes; experiences in practice teaching and related skills in a public school setting.

3126 Materials and Methods in Elementary School Mathematics (3) Prereq: EDCI 2025 or equivalent, 6 sem. hrs. of credit in mathematics courses, and concurrent enrollment in EDCI 3125 and 3127. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Materials, methods, and current trends in teaching mathematics at the elementary school level; demonstration of understandings and skills in a laboratory situation in the public school.

3127 Materials and Methods in Elementary School Social Studies (3) Prereq: EDCI 2025 or equivalent, and concurrent enrollment in EDCI 3125 and 3126. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Basic rationales, techniques, strategies, and materials for teaching social studies in the elementary/middle school.

3135 Teaching Reading in the Junior and Senior High School (3) Approaches for teaching reading; general review of reading skills.

3136 Reading in the Content Areas (3) Prereq: EDCI 3135 or equivalent. Content area reading problems and solutions; the reading process, approaches, skills, and materials.

3137 Diagnostic-Prescriptive Instruction in Reading (3) Prereq: EDCI 3112. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Additional training in reading instruction beyond that offered in the basic reading course, EDCI 3112.

3142 Materials and Methods in Secondary School English (3) F Only Prereq: EDCI 2040 and credit for or registration in 21 of the 24 sem. hrs. of English courses required for a teaching minor in secondary school English. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings.

3143 Materials and Methods in Secondary School French (3) F Only Prereq: EDCI 2040 and credit for or registration in 23 of the 26 sem. hrs. of French courses required for a teaching minor in secondary school French. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings.

3144 Materials and Methods in Secondary School Social Studies (3) F,S Prereq: EDCI 2040 and credit for or registration in 21 sem. hrs. of the social studies courses required for a teaching minor in secondary school social studies. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Rationales, techniques, strategies, and materials for teaching secondary school social studies.

3145 Materials and Methods in Secondary School Latin (3) Prereq: EDCI 2040 and credit for or registration in the Latin courses required for a teaching minor in secondary school Latin. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings.

3146 Materials and Methods in Secondary School Mathematics (3) F Only Prereq: EDCI 2040 and credit for or registration in 17 of the 20 sem. hrs. of mathematics courses required for a teaching minor in secondary school mathematics. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings. Rationales, techniques, strategies, and materials for teaching secondary school mathematics.

3147 Materials and Methods in Secondary School Science (3) S Only Prereq: EDCI 2040; 8 sem. hrs. of biology (BIOL 1001, 1002, 1003, 1004 or BOTY 1001, 1002 or ZOOL 1001, 1002); 8 sem. hrs. of chemistry (CHEM 1201, 1202, 1212); 8 sem. hrs. of physics (PHYS 2001, 2002, 2008, 2009 or 2028)
3148 Materials and Methods in Secondary School Speech (3) Prereq: EDCI 2040 and credit for or registration in the speech courses required for a teaching minor in secondary school speech. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings.

3149 Materials and Methods in Secondary School Spanish (3) Prereq: EDCI 2040 and credit for or registration in 23 of the 26 sem. hrs. of Spanish courses required for a teaching minor in secondary school Spanish. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings.

3160 Materials and Methods in Art in Elementary and Secondary Schools (3) Prereq: EDCI 2045 and credit for or registration in 25 of the 31 sem. hrs. of art courses required for a teaching minor in art. 2 hrs. lecture; 2 hrs. lab/field experience in multicultural settings.


3181 Materials and Methods in Communicative Disorders in the Elementary and Secondary Schools (3) Prereq: EDCI 2025, completion of all speech courses required in curriculum, and concurrent enrollment in EDCI 3641. Speech, language, and hearing services in the public schools; organization and implementation.

3621 Student Teaching in the Secondary School (8) Prereq: see "Requirements for Student Teaching." 2 hrs. lecture; 15 hrs. lab. Pass-fail grading.

3625 Student Teaching in the Elementary Grades (12) Prereq: see "Requirements for Student Teaching." 2 hrs. lecture; 30 hrs. lab. Pass-fail grading.


3635 Student Teaching in the Secondary Grades (12) Prereq: see "Requirements for Student Teaching." 2 hrs. lecture; 30 hrs. lab. Pass-fail grading.

3640 Student Teaching in the Elementary and Secondary Schools (8) Prereq: see "Requirements for Student Teaching." 2 hrs. lecture; 15 hrs. lab. For art, health science, music, physical education, and speech, language, and hearing specialist majors. Pass-fail grading.

3641 Student Teaching in Communicative Disorders in the Elementary and Secondary Schools (12) Prereq: see "Requirements for Student Teaching"; concurrent enrollment in EDCI 3181. 1 hr. lecture; 30 hrs. lab. Pass-fail grading.

3660 Materials and Methods in School Library Practice (3) Prereq: EDAF 3550, 3551, 3552, and 3553. 6 hrs. lab. See "Application for Student Teaching." Materials, methods, and practices in use of the school library by elementary and secondary school children.

3701 Assessment of Exceptional Children (3) Prereq: EDCI 2700 and concurrent enrollment in EDCI 3708. Assessment of the handicapped; technical aspects of administering, scoring, and interpreting formal tests; designing and using informal techniques for the handicapped.

3708 Practicum in Assessment (3) Prereq: concurrent enrollment in EDCI 3701. 1 hr. seminar; 6 hrs. lab. Educational assessment of exceptional children; student administers a battery of tests.

3720 Methods for Designing and Assessing Materials for the Mildly/Moderately Handicapped Student (3) Prereq: EDCI 2700 and 2701. 3 hrs. lecture/field experience. Formal and informal techniques for effective utilization of materials; evaluation and selection of published materials; why and how to design teacher-made materials.

3721 Methods of Teaching Students with Learning and Behavior Problems (3) Prereq: EDCI 2700 and 2701. 3 hrs. lecture/field experience. Strategies for teaching the mildly handicapped; developing and implementing the Individual Education Program; communicating with parents and professionals.

3722 Methods of Teaching Academic Subjects to the Mildly/Moderately Handicapped (3) Prereq: EDCI 2700 and 2701. 3 hrs. lecture/field experience. Application of theories, methods, and materials.

3759 Student Teaching in Special Education (Mental Retardation) (8) Prereq: EDCI 3731 and 3752; see "Requirements for Student Teaching." 1 hr. lecture; 14 hrs. lab. Pass-fail grading. Laboratory teaching experience to accompany the curriculum in elementary grades and education of the mentally retarded.

3760 Curriculum for the Severely/Profoundly Impaired (3) Prereq: EDCI 2700 and 2701. Educational implications and adaptations of procedures, methods, and materials for teaching severely/profoundly impaired individuals.

3761 Instructional Strategies for the Severely/Profoundly Impaired (3) Prereq: concurrent enrollment in EDCI 3760. Assessment of current functioning levels, specific teaching strategies, and methods of evaluating both teaching procedures and student progress.

3762 Health and Safety Procedures for the Severely/Profoundly Impaired (3) Prereq: EDCI 2701. 2 hrs. lecture; 2 hrs. lab. Health-related and safety concerns specific to the severely/profoundly impaired; instructional strategies suited to sheltered and public school settings.

4020 Foundations of Kindergarten Education (3) Prereq: consent of instructor. Philosophical and theoretical foundations of early education; contemporary models and approaches to early education.


4040 Principles of Secondary Education (3) Prereq: consent of instructor. Critical analysis of criticisms of secondary education; consideration of schools and institutions with essential functions in a complex political, social, and economic matrix; current theories, methods, and research having relevance for educational practice.

4055 Principles and Practices in Kindergarten Education (3) Prereq: HEC 2055 or PSYC 2076. Same as HEC 4055. Classroom organization and instructional management using preacademic objectives for kindergarten as an entry point into elementary school.

4057 Methods of Teaching Nursery School and Kindergarten (3) Prereq: HEC 2055 or equivalent. 2 hrs. lecture; 2 hrs. lab. Same as HEC 4057. Essentials needed for successful involvement with children from varying socioeconomic and
411 Communication Skills and Language Development for the Young Child (3) Prereq: EDCI 3112 or equivalent. Communication skills of the child ages 0 to 6; analysis of the language-concept skills of the young child; techniques for teaching these skills and diagnosing difficulties which may become potential communication problems.

4606 Materials and Methods for Teaching Computer Science (3) Prereq: 3 sem. hrs. in computer science or equivalent. 3 hrs. lecture plus field experience. Materials and methods for planning instruction in computer science.

4701 Problems of Exceptional Children (3) F,S,Su Exceptionality and special education; changes required by recent federal and state legislation; information related to the integration of educational services and services offered by other community, state, and national agencies.

4703 Reading and Analysis of Research in Human Development (3) Student is responsible for registering with a faculty member and selecting the area of reading and research analysis.

4704 Contingency Management with Exceptional Children (3) Prereq: EDCI 2700 or 2701 or equivalent. Mastery-level skills for behavior management of children in public school programs; theoretical and historical foundations; practical application of techniques.

4705 Learning and Behavior Principles Applied to Exceptional Children (3) Prereq: EDCI 4704. 2 hrs. lecture; 2 hrs. lab. Application of advanced principles and practical solutions to problems of mild/moderate and severe/profound exceptionality.


4749 Student Teaching in Special Education: Mild/Moderate Impairments (12) Prereq: EDCI 4728. 1 hr. seminar; 30 hrs. lab. Pass-fail grading. Laboratory teaching experience to accompany the curriculum in generic training.

4760 Methods for Paraprofessionals Working with the Severely/Profoundly Impaired (3) Prereq: EDCI 2700 and 2701. Procedures for utilizing and training paraprofessionals to work with the severely/profoundly impaired.

4761 Medical Aspects of the Severely/Profoundly Impaired (3) Prereq: EDCI 3760 and 3761. Medical problems and implications for the severely/profoundly impaired; roles of medical and related personnel.

4762 Counseling Exceptional Children and Their Parents (3) Special skills and information related to process and product of counseling exceptional children and their parents; types of exceptionality, types of counseling, the impact of exceptionality on individuals and families, and special counseling (such as occupational).
methods and materials in all areas of reading; demonstration and student production, as well as application of materials and methods for effective reading instruction.

7131 Developing Learning Skills Through Content Reading (3) Prereq: EDCI 7105 or 7135 or equivalent. Interrelationships between learning skills and content areas; approaches, the reading process, materials, and research related directly to reading in various content areas.

7135 Techniques for Teaching Reading in the Middle and Secondary School (3) Specific reading skills appropriate for the upper levels; various approaches for teaching reading; techniques for improving the school reading program.

7140 Studies in the Teaching of Social Studies in Secondary Schools (3) Analysis of theory and research with practical application to areas of study needed to teach social studies in the secondary school.

7141 Studies in the Teaching of Mathematics in Secondary Schools (3) Current practices and issues in techniques and materials for teaching mathematics in secondary schools; the relationship between learning theories and acquisition of mathematical skills and concepts.

7143 The Teaching of Literature in Secondary Schools (3)

7147 Studies in the Teaching of Secondary School Science (3) Prereq: EDCI 3147 or equivalent; and science teaching experience. Instructional materials, evaluation practices, and science teaching skills suitable for grades 7-12.

7170, 7171 Advanced Vocal Pedagogy (2, 2) Also offered as MUS 7170, 7171. 7170 compares the various approaches to teaching singing; 7171 presents problems in vocal pedagogy and their solutions; individual research and actual teaching situations.

7172 Stringed-Instrument Pedagogy (2) Also offered as MUS 7172.

7173 Woodwind-Instrument Pedagogy (2) Also offered as MUS 7173.

7174 Brass-Instrument Pedagogy (2) Also offered as MUS 7174.

7175 Percussion-Instrument Pedagogy (2) Also offered as MUS 7175.

7200 Characteristics of the Severely and Profoundly Impaired (3) V Prereq: EDCI 4701. Etiology and behavioral aspects of the severely and profoundly impaired.

7201 Educational Aspects of the Severely and Profoundly Impaired (3) V Prereq: EDCI 7200. Treatment and education of the severely and profoundly impaired.

7202 Teaching Children and Youth with Physical Handicaps/Multiple Disabilities (3) V Prereq: EDCI 4701. Methods and materials applicable to teaching children and youth with physically handicapping or multiple conditions resulting from neurological or orthopedic impairments.

7205 Critical Analysis of Current Research in Reading (3) Prereq: 12 hours of graduate reading courses. Evaluation of current research, delineation of areas of needed research, and application of research findings in the instructional program.

7208 Practicum in Special Education: Severely and Profoundly Impaired (6) V Prereq: EDCI 7201. 1 hr. seminar; 12 hrs. lab. Observation and participation in demonstration classes for severely and profoundly impaired individuals; integration of curriculum, methods, and materials.

7247 Teaching in the Science Laboratory (3) Prereq: EDCI 3147 or equivalent. 2 hrs. lecture; 2 hrs. lab. Interpreting research in laboratory science instruction; use of results to generate creative laboratory activities.

7308 Topics in Science Education (3) Prereq: EDCI 3147 or 7108. May be taken twice for credit when topics vary. Current issues, topics, or trends.

7309 Topics in Mathematics Education (3) Prereq: EDCI 7109 or 7141 or consent of instructor. May be taken twice for credit when topics vary. Current issues, topics, or trends.

7310 Topics in Social Education (3) Prereq: EDCI 7110 or 7140. May be taken twice for credit when topics vary. Current issues, topics, or trends.

7311 Topics in Language Arts Education (3) Prereq: EDCI 7111 or 7142. May be taken twice for credit when topics vary. Selected topic in a specific subject matter concentration or level of instruction or a methodological problem in teaching English language arts.

7312 Diagnostic and Prescriptive Teaching in Mathematics (3) Prereq: EDCI 7109 or consent of instructor. Diagnostic and prescriptive techniques for evaluating mathematical strengths and weaknesses of elementary and middle school students and for providing appropriate prescriptive instruction; includes theory, research, and practice.

7313 Teaching Literature in the Elementary School (3) Prereq: EDAF 3551 or equivalent. Role of literature in elementary education; relevant teaching issues, strategies for classroom use, and integration of literature into the elementary curriculum.

7314 Teaching Written Composition in the Elementary School (3) Prereq: EDCI 3113 or equivalent. Current trends in practices and curricula in the teaching of written composition in the elementary school; its relationship to language arts instruction.

7425 Designing, Implementing, Evaluating, and Supervising the Reading Program (3) Prereq: 12 hours of graduate reading courses. Techniques and procedures used in setting up and supervising a reading program at the school, parish, and state levels; theoretical foundations in planning and supervising a reading program; practical application of the theory.

7426 Linguistic Applications in Reading Instruction (3) Prereq: ENGL 4010, EDCI 7131, 7682, 7683, and either EDCI 7105 or 7135. Theoretical foundations for understanding the application of linguistics in reading instruction.

7610 Advanced Seminar and Practicum in Elementary Education (6) 2 hrs. conf.; 8 hrs. lab. For elementary education majors. Two-hour weekly conference with the major professor or other appropriate individuals. The student, major professor, and a committee will structure experiences around the student's needs and interests.

7682 Diagnostic Techniques and Practicum in Reading (3) Prereq: EDCI 7105 or equivalent. 2 hrs. lecture; 2 hrs. lab. Mastery level skills for diagnostic techniques of evaluating reading strengths and weaknesses of elementary and secondary school students; includes theoretical models as well as a practicum which allows for application of techniques.

7683 Prescriptive Techniques and Practicum in Reading (3) Prereq: EDCI 7105 and 7682, or equivalents. 2 hrs. lecture; 2 hrs. lab. Procedures for providing prescriptive instruction in reading; includes theory and practice.

7684 Advanced Internship in Reading (6) Prereq: advanced standing in the specialist or doctoral program in education. 1 hr. lecture; 10 hrs. lab. Field experiences in various job-related settings that the reading specialist may encounter after completing degree requirements. Includes practical teaching experiences at the local school and university levels.
administrative experience at the parish level, and consultant experience at the state level.

7685 Applied Research in Reading (3) Prereq: enrollment in advanced graduate program and EDAF 4249 or equivalent. Individual research project to apply research skills and knowledge of reading information.

7701 Current Issues in Special Education (3) V Prereq: EDCI 4701 or equivalent, and 9 additional hours in special education. May be taken 3 times for credit. Student is responsible for registering with faculty member and selecting the issues to be studied.

7711 Evaluation of Exceptional Children (3) F,S,Su
7713 Individual Study in Special Education (3) V

7715 Diagnostic-Prescriptive Teaching in Special Education (3) V Prereq: EDCI 4701 and 7711; or equivalents. 3 hrs. lecture and lab work. Assessment and individualized programming for educationally handicapped; methods of assessing individual functioning levels, writing individual educational plans; methods and materials to support the programming.

7718 Practicum in Individual Assessment (3) V Prereq: EDAF 7333 or EDCI 7711 or equivalent. Supervised experiences in specific educational assessment techniques; practical, in-depth approach to educational assessment.

7720 Education of Emotionally Disturbed Children (3) F,S,Su Prereq: consent of instructor. Defining emotional disturbance, determining an incidence rate, and identifying a variety of causal factors; the history of service delivery systems; impact of the problem on the public school system.

7721 Principles and Practices in Teaching Emotionally Disturbed Children (3) F,S,Su Prereq: consent of instructor. Methods of teaching and techniques for management of emotionally disturbed children in educational programs; basic theoretical information used to establish a rationale for varying methods and techniques; practical applications of theoretical models.

7722 Theories of Behavior in Classroom Management (3) F,S,Su Prereq: consent of instructor. Theories of maladaptive behavior patterns in school age children.

7728 Practicum in Special Education: Emotional Disturbance and Social Maladjustment (6) V Prereq: EDCI 7720 or equivalent; completion of or concurrent enrollment in EDCI 7721 or equivalent. Concentrated field experience for students specializing in this area. As part of a master's degree program, all-day, all-term attendance at the practicum site is required. At the specialist's level, 280 clock hours of practicum activities is considered a minimum requirement.

7730 Education of the Hearing Impaired (3) V Prereq: EDCI 4701 or equivalent. Problems of hearing impairment; its effects on educational, social, emotional, psychological, and vocational adjustment.

7731 Special Methods for Teaching the Hearing Impaired (3) V Prereq: EDCI 7730, 7732, and 7734. Development and adaptation of curriculum materials; instructional media, technology, and procedures to fit educational needs of hearing-impaired children.

7732 Language Development for the Hearing Impaired—I (3) V Prereq: EDCI 7730 or equivalent. Communication processes; development of oral and written expressive and receptive language.

7733 Language Development for the Hearing Impaired—II (3) V Prereq: EDCI 7732 or equivalent. Continuation of EDCI 7732: techniques and materials for development and improvement of reading and written language skills for the hearing impaired.

7734 Speech Development for the Hearing Impaired—I (3) V Prereq: EDCI 4701 and 7730; or equivalents. Development, improvement, and correction of speech for the hearing impaired.

7735 Speech Development for the Hearing Impaired—II (3) V Prereq: EDCI 7734 or equivalent. Diagnosis and planning for remediation or correction of individual cases and group situations.

7738 Practicum in Special Education: Deaf and Hard of Hearing (6) V 1 hr. lecture; 10 hrs. lab.

7740 Introduction to Children with Learning Disabilities (3) F,S,Su Prereq: credit or registration in EDCI 4701. Learning disabilities; historical development, prevalent theories, characteristics, teaching strategies, organizational patterns.

7742 Methods of Instruction for Children with Learning Disabilities (3) F,S,Su Prereq: EDCI 4701 and 7740. Various approaches (e.g., perceptual-motor, multisensory, language development) to teaching children with learning disabilities; corresponding materials.

7748 Practicum in Special Education: Learning Disabilities (6) V Prereq: EDCI 4701, 7740, and 7742. 1 hr. lecture; 10 hrs. lab.

7750 Education of the Mentally Retarded Child (3) F,S,Su Prereq: EDCI 4701 or equivalent. Psychological orientation to mental retardation; characteristics of the mentally retarded child; current research in mental retardation.

7751 Curriculum and Methods of Teaching the Mentally Retarded (3) F,S,Su Prereq: completion of or concurrent enrollment in EDCI 7750. Curriculum development for the mentally retarded; research in current methodology and teaching approaches.

7758 Practicum in Special Education: Mental Retardation (6) V 1 hr. lecture; 10 hrs. lab.

7760 Nature and Needs of the Gifted and Talented (3) V Historical perspective, social, emotional, and educational characteristics; administrative consideration; major sociological and psychological studies; special populations of gifted and talented.

7761 Curricular Theories and Methods for Teaching the Gifted and Talented (3) V Prereq: EDCI 7760 or equivalent. Curricular theories, materials, and teaching strategies for planning appropriate learning experiences for the gifted and talented; emphasis on the development and evaluation of educational plans for individuals and groups.

7762 Creative Behavior (3) V Nature and analysis of creative behavior; appraisal and implementation of specific processes designed to encourage creative productivity.

7765 Severe Disabilities in Reading (3) Prereq: EDCI 7682 and 7683 or equivalents or 9 hours in special education. 2 hrs. lecture; 2 hrs. lab. Severe reading disabilities as manifested in school-age children; theoretical models as well as practical application of techniques.

7768 Practicum in Education for the Gifted (6) V Prereq: EDCI 7760, 7761, and 7762. Minimum 240 hrs. per semester, including 1 hr. weekly seminar. Planning, implementing, and evaluating teaching strategies, materials, and counseling techniques in a school program.

7770 Characteristics of the Young Handicapped Child (3) V Prereq: EDCI 4701. Characteristics of young handicapped children; educational implications; programming models.

1049 Dairy Production Operations and Animal Evaluation (2) F Prereq: credit or registration in DARY 1048. 1 hr. lecture; 2 hrs. lab. Basic production practices with dairy cattle; animal evaluation and identification, milking operations, animal care, and fitting and showing.

2075 Milk and Dairy Foods (3) F Product processing techniques and related principles involved in market preparation of milk and dairy foods; emphasis on consumer and processor viewpoints relative to product composition, processing, marketing, sanitation, and related environmental aspects.


7772 Education of Young Handicapped Children (3) V Prereq: EDCI 7770. Methods and materials for teaching young handicapped children.

7778 Practicum in Special Education: Young Handicapped Children (6) V Prereq: EDCI 7772. 1 hr. seminar; 12 hrs. lab. Application of methods and materials used to teach young handicapped children.

7780 Seminar in Special Education (3) V Recommended for advanced graduate students. Selected topics in special education.

7790 Organization and Administration of Special Education (3) Su Practical and theoretical aspects of the administrative structure of special education programs; emphasis on current practices in public school programs.

7791 Educational System Analysis (3) V Prereq: completion of 3 sem. hrs. in educational administration or equivalent. Same as EDAF 7791. Basic techniques for designing and analyzing instructional systems; emphasis on specification of instructional objectives, design and selection of instructional alternatives, and evaluation of instructional systems.

7798 Practicum in Special Education: Administration of Special Education (6) V 1 hr. lecture; 10 hrs. lab.


7811 Seminar in Current Trends in Education Literature (3) Open only to students who have completed qualifying examination for the doctoral degree. Entry seminar for doctoral students in elementary and secondary education. Survey of literature in areas of elementary and secondary education.

7821, 7822 Problems in Curriculum and Instruction (2-4, 2-4) For advanced graduate students who are qualified to undertake individual problems.

7824 Elementary School Curriculum (3) Content, organization, and evaluation of the elementary school curriculum.

7825 Secondary School Curriculum (3) Content, organization, and evaluation of the secondary school curriculum.

7830 Advanced Seminar in Junior High/Middle School Instruction (3) For advanced students in elementary and secondary education with special interest in the instructional program for early adolescents.

7844 Creativity in Early Childhood Education (3) Role of creativity in designing the educational environment for young children; philosophy, teaching techniques, and instructional planning; role of parents, teachers, and today's multicultural society in the development of creativity.

7845 Teaching Concepts in Early Childhood (3) Theoretical basis and instructional methods and materials which support the teaching of math, science, and social studies concepts in the early childhood curriculum.

7846 Diagnostic Teaching in Early Education (3) Prereq: EDCI 4021 or equivalent. Using age-level competency skills as the basis for developing diagnostic strategies for young children which can provide information to be used as the basis for instructional planning.

7880 Seminar in Reading (1) May be repeated for credit for a maximum of 9 sem. hrs. when topics vary; a minimum of 4 sem. hrs. is required for each doctoral student in reading. Pass-fail grading. Special topics in current theory and methodology not covered in other reading courses.

7901 Curriculum Theory (3) Prereq: master's degree and either EDCI 7824 or 7825. Curriculum theory, the means for strengthening and considering curriculum, and the links between past and current conceptualizations of curriculum.

7902 Analysis of Research on Teaching (3) Prereq: master's degree and EDAF 7006 or equivalent. Theory of design and application of research related to systematized instruction.

7903 Curriculum Planning (3) Prereq: master's degree and EDCI 7901. Principles of curriculum needs assessment, design, implementation, and evaluation.

7920, 7921 Analysis of Research in Curriculum and Instruction (3) Prereq: EDAF 7241, master's degree, and consent of instructor. A maximum of 12 sem. hrs. may be earned in this series; only 3 sem. hrs. may be earned in any one area. Historical and theoretical factors influencing research in and critical analysis of selected research in one of the following areas: curriculum, mathematics, science, language arts, social, or early childhood education.

7930, 7931 Seminar: Curriculum and Instruction (3) Prereq: master's degree and consent of instructor. A maximum of 12 sem. hrs. may be earned in this series when topics vary; only 6 sem. hrs. may be earned in any one area. Current and historical trends and issues in one of the following areas: curriculum, mathematics, science, language arts, social, or early childhood education.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

DAIRY SCIENCE (DARY)

2085 Milk Quality Control Laboratory (2) S 4 hrs. lab. Public Health Service lab and inspection procedures for quality control on dairy farms and in milk plants.

2093 Advanced Dairy Products Judging (1) S 2 hrs. lab. A college team is selected from this group. Advanced techniques in judging and evaluating dairy products; emphasis on competitive judging.

3001 Public Health Administration (2) S Prereq: MBIO 2051 or equivalent. Organization and administration of national, state, and local public health agencies.

3040 Techniques of Judging and Evaluating Dairy Cattle (1) S Prereq: DARY 1048. 2 hrs. lab. The combined use of descriptive type and performance indexes in dairy cattle evaluation.
3049 Advanced Topics in Dairy Science (3) F,S,Su Prereq: senior standing and consent of department head. Topics from production or manufacturing areas.

4010 Applied Animal Nutrition (4) S Prereq: ANSC 4009 or equivalent. 3 hrs. lecture; 2 hrs. lab. Applied nutrition; feed requirements of swine, poultry, horses, beef cattle, dairy cattle, and sheep; utilization and classification of feedstuffs; feed processing and formulation of diets and diet supplements.

4021 Fermented Dairy Foods (3) F Prereq: MBIO 2051. 2 hrs. lecture; 2 hrs. lab. Principles and processes involved in the manufacture of various types of cheese and other cultured dairy foods.

4022 Frozen Dairy Foods (3) S Prereq: MBIO 2051. 2 hrs. lecture; 2 hrs. lab. Principles and processes involved in the manufacture of ice cream, other frozen desserts, and concentrated milk products.

4040 Quality Assurance in the Food Industry (4) S Prereq: MBIO 2051. 3 hrs. lecture; 2 hrs. lab. Also offered as ANSC 4040, FDSC 4040, and PLSC 4040. Laboratory functions, manufacturing processes, and microbiological, chemical, and statistical techniques used to provide complete quality assurance for the modern dairy food plant.

4043 Dairy Cattle Endocrinology (3) S Relation of endocrine system to reproduction, growth, and function of domestic animals and physiology of milk secretion.

4044 Reproduction and Artificial Breeding of Dairy Cattle (3) F 2 hrs. lecture; 2 hrs. lab. Reproductive physiology of dairy cattle; principles and techniques of artificial breeding.

4051 Dairy Seminar (1) F,S May be taken twice for credit. Required for all seniors in the Department of Dairy Science. Reports on current scientific investigations.

4054 Dairy Farm Management (3) S 2 hrs. lecture; 2 hrs. lab. Principles of managing dairy cattle; recommended farm practices for economical milk production.

4071 Tropical Livestock Husbandry (3) F Also offered as ANSC 4071. Breeding, feeding, and management of livestock in the tropics; human, environmental, and economic factors influencing livestock production in tropical areas; role of livestock in the total agricultural development.

4081 Dairy Microbiology (3) F Prereq: MBIO 2051. 1 hr. lecture; 4 hrs. lab. Application of specific bacteriological procedures used in quality control and processing of dairy products.

4118 Applied Animal Breeding and Genetics (3) F Prereq: ANSC 4018 or equivalent. Mating systems and methods of breeding for genetic improvement in farm livestock.

7001 Advanced Dairy Physiology (3) S Prereq: DARY 4043, VETS 4041, and consent of instructor. Organ systems of metabolism; emphasis on dairy cattle.

7002 Minerals in Nutrition (2) S Prereq: ANSC 4009 or equivalent. History, function, evaluation of nutritional status, requirements for various species, assay methods, and interrelationships.

7003 Advanced Dairy Nutrition (3) F Prereq: consent of instructor. Nutrition principles and recent research.

7004 Population Genetics in Animal and Plant Breeding (4) S Prereq: DARY 4118 and EXST 7004; or equivalents. 3 hrs. lecture; 2 hrs. lab. Genetic concepts concerning characteristics of populations.

7018 Rumen Physiology and Metabolism (3) F-O Comparison of ruminants to other herbivora and nonruminant animals; factors associated with obtaining and utilizing feeds; fermentation products; symbiotic relationship between microflora and the host animal; host animal metabolism.

7019 Laboratory Techniques in Feed Evaluation (2) F Prereq: consent of instructor. 6 hrs. lab. Laboratory techniques in nutritive evaluation of feedstuffs for livestock.

7091 Advanced Dairy Seminar (1) F,S May be taken 4 times for credit.

7094 Seminar in Nutrition (1) S Same as ANSC 7094. FDSC 7094, HECT 7094, PLSC 7094. May be taken twice for credit.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Research Procedure in Dairy Science (1-6) Prereq: consent of department. May be repeated for credit for a maximum of 9 sem. hrs. Research in dairy breeding and genetics, management, nutrition, and physiology; dairy manufacturing.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

**ECONOMICS (ECON)**

1010 Development of the Economic System in the United States (3) Credit will not be given for both this course and ECON 4010. Open only to Junior Division students. Major forces of the American economic system from colonial times to the present; forces leading the U.S. into internationalism.

1050 The Economics of Social Issues (3) Open only to Junior Division students; cannot be substituted for ECON 2010, 2020, or 2030. Economic aspects of contemporary social issues; methods and approaches for dealing with such issues.

2010 Economic Principles and Problems (3) Credit will not be given for both this course and ECON 2030. Nature of economics, economic concepts and problems; economic systems and the role of government; accounting, analytical, and policy aspects of national income and product; the money and banking system.

2020 Economic Principles and Problems (Continued) (3) Prereq: ECON 2010. Credit will not be given for both this course and ECON 2030. Continuation of basic economics; theories of production, determination of prices in regulated and unregulated industries, functional distribution, international economics, and problems of economic development.

2030 Economic Principles (3) An honors course. ECON 2031, is also available. Credit will not be given for both this course and ECON 2010 and 2020. Economic understanding of both micro- and macroeconomic principles; economic problems associated with monetary policy, fiscal policy, public finance, government and business, labor, international trade, economic growth, and comparative economic systems.

2031 HONORS: Economic Principles (3) Same as ECON 2030, with special honors emphasis for qualified students.

2035 Money, Banking, and Macroeconomic Activity (3) Prereq: ECON 2010 and 2020; or 2030. The role of commercial banks, other financial institutions, and the central bank in affecting the performance of the economy; relationships of money and fiscal policy to prices, production, and employment; internal and external effects of U.S. fiscal and monetary policy.
3310 Economics of Consumption (3) Prereq: ECON 2010 and 2020; or 2030. Applied course in consumer economics; budgeting; saving; use of consumer credit; buying insurance, housing, and securities; retirement planning.

3715 Business Finance (3) See FIN 3715.

3900 Selected Topics in Economics (3) Prereq: ECON 2010 and 2020; or 2030. May be taken twice for credit when topics vary. Topics of current interest.

399 Independent Study: Economic Problems (1-3) May be repeated for credit for a maximum of 6 sem. hrs. For undergraduate students with a grade-point average of 3.00 or above. Independent economic research and study under the direction of a faculty member.

410 The United States—Its Economic Growth (3) Credit will not be given for both this course and ECON 1010. The American economy; background of modern problems dealing with money and banking, taxation, labor, international trade, and American position in world affairs.

4015 Marxian Economics (3) Prereq: ECON 2010 and 2020; or 2030. Analysis of Marx's economic theory and critique of capitalism; survey of contribution of radical economic theory since Marx.


4030 Economic Development in Latin America (3) Prereq: ECON 2010 and 2020; or 2030. Problems and policies of poor countries; emphasis on Latin America.


4050 Economic Development of Europe (3) Major elements in the economic development of resources, transportation, marketing, finance, labor, and economic policy.

4075 American Economic History to 1860 (3) See HIST 4075.

4076 American Economic History, 1860 to the Present (3) See HIST 4076.

4110 Public Finance (3) Prereq: ECON 2010 and 2020; or 2030. Economic theory applied to the private market; application of economic theory to the public sector; public goods, efficiency, voting, externalities, principles of taxation, benefit-cost analysis, and policy analyses of current issues.

4120 Federal, State, and Local Taxation (3) Prereq: ECON 2010 and 2020; or 2030. Administration, fiscal importance, and economic effects of federal, state, and local taxes; emphasis on recent trends in taxation at each level of government and on significance of these trends for individuals and the nation.

4130 Urban and Regional Economics (3) Prereq: ECON 2010 and 2020; or 2030. Use of economic analysis to understand the location and growth of urban and regional areas; emphasis on public policy issues in urban and regional development; topics may include land-use patterns, measurement and change in regional economic activity, and urban problems such as transportation, housing, and poverty.

4210 Labor Economics (3) Prereq: ECON 2010 and 2020; or 2030. Nature and causes of economic problems of American wage earners; attempts of wage earners and society, through organization and legislation, to alleviate and solve these.

4220 Wage and Employment Analysis (3) Prereq: ECON 2010 and 2020; or 2030. The labor market; labor supply and demand, human capital, racial and sex discrimination, effects of minimum wage laws, causes of various wage and employment differentials.

4320 The Economics of Population and Environment (3) Prereq: ECON 2010 and 2020; or 2030. Process and interactions of population growth, economic growth, depletion, and pollution in developed and underdeveloped countries; basic principles of demography and resource management; cost-benefit analysis and literature on externalities; problems of reconciling economy of man and ecology of nature.

4325 Applied Resource Economics (3) Prereq: ECON 2010 and 2020; or 2030. Economic analysis of environmental and resource problems; cost-benefit and other empirical techniques applied to an examination of these problems.

4400 Industrial Organization and Public Policy (3) Prereq: ECON 2010 and 2020; or 2030. Application of price theory tools to public policy questions associated with industrial structure, conduct, and performance; includes monopoly, mergers, innovation, and economics of advertising.

4410 Transportation (3) Prereq: ECON 2010 and 2020; or 2030. Development of transportation systems in the U.S.; economic significance of transportation in an industrialized society; principles and problems of transport economics.

4420 Public Utilities (3) Prereq: ECON 2010 and 2020; or 2030. Economic principles and problems associated with these regulated enterprises; development and philosophy of regulation, control of aggregate earnings, rate theory, and analysis of rate making and regulatory problems and policy.

4440 The Economics of Government Regulations (3) Prereq: ECON 2010 and 2020; or 2030. The economic bases, policies, and consequences of government regulation of economic activity.

4460 Economics of Business Logistics and Traffic Management (3) Prereq: ECON 2010 and 2020; or 2030. Logical conceptual arrangement of distribution systems applicable to movement and handling of goods from point of production to point of ultimate use; transportation and its relation to plant location, transportation rates and rate structures, selection of appropriate distribution system, transportation tariffs and tariff interpretation; inventory and warehousing economics.

4520 International Economics (3) Prereq: ECON 2010 and 2020; or 2030. Theory and policy of international trade and finance.

4540 Business Cycles and Forecasting (3) Prereq: ECON 2035 or 3500. Nature and causes of business cycles; practical application of methods used to forecast business trends.

4550 International Finance (3) Prereq: ECON 2035 or equivalent. International trade theory and practice; foreign exchange rates, instruments, and markets; alternative international currency systems and proposals for reform; the economics of currency and financial instrument futures markets.

4560 Central Banking and Monetary Policy (3) Prereq: ECON 2035 or 3500. History, economic functions, operating techniques, and policies of central banks; the role of monetary policy in promoting economic stability and growth; the Federal Reserve System and current problems of monetary policy and control.
4610 Introduction to Mathematical Economics (3) Prereq: ECON 2010 and 2020, or 2030; and college algebra; or equivalents. Not normally open to students who have had differential calculus. Mathematical techniques used by economists; their application to economic analysis.

4630 Introduction to Econometrics (3) Prereq: ECON 2010 and 2020, or 2030; MATH 1431 or equivalent; and QBA 2000 or equivalent. Not open to students with credit in ECON 7630. For students interested in a basic knowledge of econometrics. Techniques of econometrics; estimating the basic linear model and hypothesis testing; empirical illustrations by reference to contemporary economic questions.

4710 Aggregate Economic Analysis (3) Prereq: ECON 2035 or equivalent. Factors determining aggregate level of national income, employment, and prices; static Keynesian, monetarist, and supply-side models developed and compared.

4720 Intermediate Microeconomic Theory (3) Prereq: ECON 2010 and 2020; or 2030. Price determination, resource allocation, and pricing in a market economy.

4730 The Evolution of Economic Thought (3) Cultural and historical factors influencing different types of economic thought from the ancient world to the present.

5600 Microeconomic Theory for Policy Analysis (3) Open only to students in the M.P.A. program or by consent of instructor. Concepts and analytical tools of microeconomics; their relevance for decision and policymaking in the public and nonprofit sectors; basic theories of demand, production, cost, market structures, and distribution; analysis of economic problems and policies, efficiency criteria, social impacts, and limitations of the market system.

5700 Macroeconomic Analysis and Issues (3) Open only to students in the M.B.A. program. Forces determining the magnitude of such variables as aggregate volume of an economy's output, volume of resource employment, size of national income, and general price level; emphasis on contemporary macroeconomic problems.

6500 Workshop on Economic Education (3) Su only For teachers with little or no previous training in economics. Basic economic principles and their application to the nation's current economic problems.

6550 Special Topics in Economic Education (1-3) May be repeated for credit for a maximum of 6 sem. hrs. For teachers who wish to investigate more advanced economic concepts and issues. Specific economic topics.

7070 Theory of Economic Growth (3) Theories of economic growth and their development.

7130 Public Finance Theory (3) Theoretical foundations of welfare economics for evaluating efficiency and equity of taxation and public spending policies; theories of incidence and optimality of taxation.

7135 Advanced Topics in Public Finance (3) May be taken twice for credit when topics vary. Special issues in taxation, public expenditures, and political economy.

7240 Seminar in Labor Economics (3) Development of American and European industrial systems; accompanying changes in the labor process.

7250 Wage and Employment Analysis (3) Neoclassical wage and employment theory and its application to the labor market; labor force participation rates, discrimination; labor markets, human capital, the inflation-unemployment trade-off.

7320 Seminar in Environmental and Resource Economics (3) Neoclassical and bioeconomic tradition of resource utilization; emphasis on biophysical underpinnings of economics drawing from thermodynamics, ecology, geology, and demography; ethical issues of stewardship in resource management; topical policy issues in energy, materials, food, and air and water pollution.

7325 Applied Resource Economics (3) Application of property rights, externalities, and benefit-cost analysis to resource management; measurement problems; intertemporal allocation, technical changes and resources substitution, and utilization of environmental resources.

7470 Economics of Regulated Enterprise (3) Economic analysis of problems and policies of regulated enterprises, with emphasis on philosophy of regulation, rate theories, earnings control, coordination, and national policy.

7480 Seminar in Industrial Organization (3) Organization of industry in the American economy; empirical and analytical techniques used to investigate structure and performance in the manufacturing sector of the economy.

7570 Seminar in International Trade and Finance (3) Selected topics.

7580 Economic Development in Latin America (3) Latin American economic development examined from neoclassical, neomarxist, and neomalthusian perspectives, similarities and differences in analyses and policy recommendation of representative authors in each of the paradigms.

7590 Seminar in Monetary and Fiscal Policy (3) Problems of determining, implementing, and evaluating monetary and fiscal policy; effect of monetary and fiscal policy on the economy, monetary targets and indicators, role of interest rates in understanding monetary policy, sectoral impacts of monetary policy; role of fiscal policy in the economy; theoretical and empirical studies emphasized.

7595 Seminar in Monetary Theory (3) Contemporary monetary theory; theories of supply and demand for money; integration of monetary and value theory; monetary equilibrium.

7610 Mathematics for Economists (3) Mathematical principles with frequent application to economics; functions, derivatives, differentials, integrals, Taylor's series, quadratic forms, constrained and unconstrained optimizations, properties of linear and nonlinear equation systems, and matrix algebra, determinants, and roots; applications, but primarily emphasis on mathematical principles for studying economics.

7630 Econometric Methods (3) Prereq: calculus and linear algebra, or concurrent enrollment in ECON 7610. For students interested in developing research skills in econometrics. Empirical research methods in economics; review of statistical inference; regression techniques applied to a general linear model; problems involved in regression analysis; extensions of the general linear model.

7631 Econometric Theory (3) Prereq: ECON 7630 and either ECON 7610 or differential calculus and linear algebra. Emphasis on the pure theory of econometrics; properties of estimators, small sample properties of ordinary least squares, hypothesis testing and restricted least squares, asymptotic distribution theory, generalized least squares, and simultaneous equations.

7632 Applied Econometrics (3) Prereq: ECON 4710, 7630, and 7720. Techniques and problems in formulating and empirically estimating theoretical economic relationships; consumption, demand functions, investment, inventories, production, macroeconomic models, and forecasting; emphasis on the interplay between economic theory and econometric techniques.

7710 Macroeconomics—1 (3) Prereq: ECON 7610 or equivalent. Static models of income, employment, and prices; mod-
els include classical, neo-Keynesian, and monetarist; models focus on demand and supply sectors.

7715 Macroeconomics—II (3) Prereq: ECON 7710. Dynamic models of the economy; includes growth models, business cycle dynamics, and wage-price dynamics.

7720 Price Analysis (3) Prereq: ECON 7610 or equivalent. Theories of utility, demand, cost, production, factor pricing, and welfare.

7725 Advanced Microeconomic Theory (3) Prereq: ECON 7610 and 7720; or consent of instructor. Advanced price theory topics; capital theory, general equilibrium, distribution theory, market structures.

7740 History of Economic Thought—The Classical Period (3) Development of economics as an autonomous science; Greek, Judeo-Christian, and enlightenment approaches to economic phenomena; special attention to Adam Smith.

---

**ELECTRICAL ENGINEERING (EE)**

2120 Circuits—I (3) Prereq: credit or registration in MATH 2090 and PHYS 2102; or consent of department. Time-domain analysis of electrical networks.


2230 Electronics—I (3) Prereq: EE 2120. Internal physical behavior and characterization of semiconductor devices and circuits.

2231 Electronics Laboratory—I (2) Prereq: concurrent registration in EE 2230. 1 hr. lecture; 2 hrs. lab.

2720 Digital Logic—I (2) Prereq: MATH 1550. Basic concepts of the Boolean algebra and their applications in switching networks; switching functions; switching expressions and their manipulations; minimization methods, logic gates, and analysis and synthesis of combinational logic networks; design examples such as half and fulladders, multiplexers, demultiplexers, encoders, and decoders; different families of basic memory elements.

2950 Comprehensive Electrical Engineering (3) Prereq: PHYS 2102 or equivalent. For non-electrical engineering majors. Elementary circuits, devices, and systems in electrical engineering.

3060 Special Projects (2) Prereq: consent of department. Pass-fail grading. Individual work with instructor on special project selected by instructor and student to satisfy mutual interests.

3120 Linear Systems Analysis (3) Prereq: EE 2120. Methods of analysis for time-invariant linear systems.

3140 Probability for Electrical and Computer Engineering (3) Prereq: EE 3120. Basic concepts of probability theory with application to electrical and computer engineering; probability axioms; continuous, discrete, and conditional probability density and distribution functions; expectations and characteristic functions; introduction to statistical inference and stochastic processes.

3220 Electronics—II (3) Prereq: EE 2130, 2230, and 2231. Analysis and design of electronic circuits; emphasis on semiconductor devices.

3221 Electronics Laboratory—II (2) Prereq: concurrent registration in EE 3220. 1 hr. lecture; 2 hrs. lab.

3320 Electric and Magnetic Fields (3) Prereq: MATH 2057. Basic electromagnetic theory including formulation of Maxwell's equations; vector notation.


3420 Electromagnetic Energy Conversion (3) Prereq: EE 2130. Fundamentals and basic analysis of power transformers and rotating electric machinery.

3430 Power Systems Analysis (3) Prereq: EE 3420. Power systems during fault conditions; per-unit values and method of symmetrical components.

3431 Electrical Engineering Laboratory (2) Prereq: concurrent registration in EE 3430. 1 hr. lecture; 2 hrs. lab.

3720 Digital Logic—II (2) Prereq: EE 2230 and a grade of "C" or better in EE 2720. Mealy and Moore models for finite state machines; analysis and synthesis of synchronous and asynchronous sequential machines; practical design considerations such as various logic families, races and cycles, and hazards.

3721 Digital Logic Design Laboratory (2) Prereq: EE 2231 and concurrent registration in EE 3720. 1 hr. lecture; 2 hrs. lab. Familiarization with conventional logic gates and flip-flops; design and testing of various combinational and sequential digital systems.

3750 Microprocessor Systems (2) Prereq: CSC 1250 and EE 3720. Theory and design of microprocessors; semiconductor technologies, architectures, assembly language, software development, input/output design, applications, and interfacing.

3751 Microprocessor Laboratory (2) Prereq: credit or registration in EE 3750. 1 hr. lecture; 2 hrs. lab.

3770 Software Systems and Computer Organization (3) Prereq: CSC 1251 and EE 2720. Fundamentals of computer organization and software; organization, instructions, assembly language, Pascal programming, I/O and data structures.

3950 Electronics (2) Prereq: EE 2950. For non-electrical engineering majors. Basic electronics and instrumentation.

3951 Electrical and Electronics Laboratory (2) Prereq: credit or registration in EE 3950. 1 hr. lecture; 2 hrs. lab. For non-electrical engineering majors. Basic electrical and electronics laboratory.

4000 Special Topics in Electrical Engineering (3) May be
taken twice for credit when topics vary. Students in curricula other than electrical engineering should consult the instructor. Selected topics of current interest.

4120 Network Analysis (3) Prereq: EE 3120 and MATH 2057. Linear networks, with introduction to filters and network synthesis.

4130 Graph Theory (3) Prereq: EE 3120 or equivalent. Graph and subgraph properties, graph operations, enumeration techniques, and applications to analysis and synthesis of electric networks; Kirchoff's third and fourth laws.

4150 Digital Signal Processing (3) Prereq: EE 3120 or equivalent. Fundamentals of processing signals by digital techniques; application to practical problems; z-transforms, discrete Fourier transform, digital filter design techniques, and fast Fourier transform.


4240 Linear Circuit Design (3) Prereq: EE 3220 and 3221. 2 hrs. lecture; 2 hrs. lab. Fabrication and use of discrete and monolithic integrated circuits; use of building blocks necessary for design of analog systems.

4250 Digital Integrated Circuits (3) Prereq: EE 3220. Operation of logic gates in a variety of digital integrated circuit families, both bipolar and MOS; semiconductor memories and their operations.

4260 Semiconductor Measurements and Characterization (3) Prereq: consent of department. 2 hrs. lecture; 2 hrs. lab. Basic properties of semiconductor materials and their influence on device characteristics; bulk measurements such as resistivity, mobility, and lifetime; diffusion profiles and oxide layers; thin film characterization techniques; I-V and C-V measurements; emphasis on silicon.

4320 Microwave Engineering (4) Prereq: EE 3330. 3 hrs. lecture; 3 hrs. lab. Waveguides, cavities, signal sources, and other microwave devices.

4330 Antenna Theory and Design (4) Prereq: EE 3330. 3 hrs. lecture; 3 hrs. lab. Antennas and antenna arrays; measurement of impedances and far-zone radiation patterns.

4420 Advanced Electromechanical Energy Conversion (3) Prereq: EE 3420 or equivalent. Generalized electric machinery theory: dynamic, transient, and steady-state behavior of balanced/unbalanced excited converters.

4430 Power System Design (3) Prereq: EE 3430 or equivalent. 2 hrs. lecture; 3 hrs. lab. Design criteria for power systems including load flow, economic operation, and stability.

4450 Transmission and Distribution Systems (3) Prereq: EE 3430 or equivalent. Special problems in power transmission and distribution systems; emphasis on applications.

4510 Introduction to Control Systems (3) Prereq: EE 3120. State variable modeling of linear systems; relation to transfer functions; stability and transient analysis; realization and use of simulation packages.

4580 Topics in Control System Design (3) Prereq: credit or registration in EE 4510. Compensation of single loop and multiloop systems; state estimation; stability; application to industrial controllers; design using computer simulation packages.

4620 Communications (3) Prereq: EE 2231 and 3120. Transmission of signals through linear networks; time-bandwidth relationships; conventional modulation and demodulation techniques; sampling and reconstruction of sampled waveforms; pulse modulation systems; noise and its effect on data transmission systems.

4640 Introduction to Random Process in Engineering (3) Prereq: EE 3120 or equivalent. Basic concepts of probability theory with engineering applications, descriptions of random process ensembles, auto-correlation functions, spectral analysis, shot effect and Gaussian noise, RMS estimation, and linear mean-square estimation.

4700 Special Topics in Computer Engineering (3) May be taken twice for credit when topics vary. Students not in the computer engineering option should consult the instructor. Selected topics of current interest.

4710 Communications in Computing (3) See CSC 4310.

4730 Structure and Design of Digital Computers (3) Prereq: EE 3750, 3751, and credit or registration in EE 3770. Introduction to the design of digital computers through study of the important hardware concepts of digital systems including logical functions of hardware components, machine organization, register-transfer level of digital systems, control strategies, and memory and peripheral devices.

4750 Digital Systems (3) Prereq: EE 3750, 3751, and credit or registration in EE 3770. 2 hrs. lecture; 3 hrs. lab. Theory and design of digital systems.

4770 Real Time Computing Systems (3) Prereq: EE 3750, 3751, and credit or registration in EE 3770. Principles of real time computing systems; systems components, architectures, 1/O structure, interrupts, interfacing, A/D converters, and multitasking.

4790 Structure of Computers and Computations—1 (3) Prereq: CSC 2105 and EE 4730. Basics of hardware and software complexity analyses; structures of both computers and computations.

7000 Advanced Topics in Electrical Engineering (3) May be taken 3 times for credit when topics vary.

7091, 7092 Electrical Engineering Research (3, 3) Prereq: completion of 12 sem. hrs. in the graduate program. Pass-fail grading. Individual study.

7110 Network Analysis and Synthesis (3) Prereq: EE 3120 or equivalent. Fundamentals of network analysis and synthesis, network graph theory, state variable representation of networks, computer-aided analysis and design.

7120 Linear Active Network Analysis and Synthesis (3) Prereq: EE 3120 or equivalent. Special techniques of active network analysis and design, multiport networks, pathologic elements, inductorless filter theory.


7150 Theory and Application of Digital Signal Processing (3) Elementary and advanced topics in digital filter design, spectrum analysis, digital hardware implementations, and applications.

7210 Semiconductor Device Modeling (3) Emphasis on systematic modeling of active and passive solid-state devices; modeling theory to relate device physics to circuit performance; selected circuit applications.

7220 Semiconductor Devices—I: Bipolar (3) Prereq: EE 4230 or equivalent. Semiconductor materials properties,
equilibrium and nonequilibrium processes, physical principles of p-n junctions, and quasi-neutral material; modeling of diodes and bipolar transistors.  

7222 Semiconductor Devices—II: Field Effect (3) Prereq: EE 4210 or equivalent. Theory of surface effects; metal-insulator-semiconductor structures; modeling of MOS capacitors and IGFETs.  

7230 Physics of Devices Electronics (3) Semiconductor physics and necessary assumptions for tractable device analysis; elements of statistical physics, transport phenomena in solids, band theory of solids, and semiconductor junctions.  

7240 Integrated Circuit Engineering (3) Theory and techniques of fabrication processes and design for monolithic integrated circuits; relation to circuit performance; thin- and thick-film circuits.  

7242 VLSI Systems (3) Prereq: consent of instructor. Foundations for design and implementation of very large scale integrated systems; structured design methodology using MOS technology.  

7250 Semiconductor Power Devices (3) Operation and characteristics of silicon power devices with emphasis on physical mechanisms involved; fabrication of power devices; selected applications.  

7260 Semiconductor Materials (3) Theory and application of crystal growth from melt and chemical vapor deposition; preparation and purification of elemental and compound semiconductors; structural properties and their effect on electrical and physical parameters; amorphous semiconductors.  

7270 Magnetic Materials and Devices (3) Prereq: EE 3320 or equivalent. Theory of magnetism, domain structures, and magnetic memory; current developments and applications of magnetic devices.  

7310 Electromagnetic Theory and Techniques (3) Electromagnetic theory applied to radio propagation, waveguides, and microwave systems.  

7350 Boundary Value Problems in Engineering (3) Prereq: consent of instructor. Separation of variables method for solving certain classical partial differential equations, including properties of special functions and their applications to engineering problems.  

7410 Analysis of Faulted Power Systems (3) Detailed development of positive, negative, and zero sequence parameters of power system components and their application in a variety of power system fault conditions.  

7420 Power System Dynamics (3) Modern approach to power system transient and dynamic stability studies; synchronous machine simulation, linear models of synchronous machines, excitation systems, and multimachine system stability.  

7430 Power System Planning (3) The overall process of power system planning including load forecasting, generation system reliability analysis, generation system cost analysis, power flow analysis, and transmission reliability analysis.  

7440 Power Transmission by Direct Current (3) Analysis of HVDC transmission systems; converter circuits, bridge converters, modeling and control of DC transmission, misoperation of converters, protection, harmonics, and filters.  

7450 Power System Protection (3) Identification of conditions requiring protection; special problems associated with protection of various system components; protection devices, their selection and application.  

7510 Advanced Control Systems (3) Prereq: EE 4510 or equivalent. State variable and function analytical methods for study of discrete and continuous time systems; canonical forms, controllability, observability, and system identification; design of state variable feedback controls and state observers; optimal regulator problems.  

7520 Optimal Control Theory (3) Prereq: EE 7510 or equivalent. Dynamic optimization applied to control systems; minimum principle, Hamilton-Jacobi-Bellman theory, dynamic programming, gradient algorithms, and functional analytic methods.  

7540 Optimization of Dynamic Systems (3) Prereq: EE 7510 and either EE 4640 or its equivalent. Kalman filters, the optimal estimation problem, optimal control problem, and separation principle of optimal stochastic control theory; Kalman filters, diffusion models, nonlinear filtering, optimal control discrete-time and continuous-time stochastic systems.  

7560 Topics in Modern System Science (3) Prereq: EE 7510 or equivalent. Topics from the research literature, operator theory applied to engineering problems; resolution spaces, causality theory, polyonomic systems; application to optimal control and sensitivity problems.  

7570 Nonlinear System Analysis (3) Prereq: EE 7510. A systems approach to study of nonlinear systems; includes limit cycles, analytical approximation methods, singular perturbations, describing functions, Liapunov's stability, Lyre's problem, Popov criteria, and input-output stability.  

7580 Computer Process Control (3) Prereq: EE 4580. Theory and equipment for the implementation of computer-based control systems; includes supervisory, DDC, and hierarchical configurations, process and operator interface, real-time operations, industrial computer control systems; implementation of advanced control algorithms, time series analysis, and on-line process optimization.  

7610 Communication Engineering (3) Random waveforms, optimal receivers, efficient signaling for message sequences, coded systems, channel models, waveform communications.  

7620 Data Communication (3) Prereq: EE 4620 or equivalent. Digital coding of information, transmission requirements, modulation schemes, synchronization, equalization, adaptive receivers, data compression.  

7630 Detection and Estimation Theory (3) Prereq: EE 4640 or equivalent. Hypothesis testing, detection of known and unknown signals, estimation of signal parameters, signal resolution.  

7640 Information Theory, Coding, and Cryptography (3) Measures of information, channel capacity, Shannon and Huffman coding, rate-distortion theory, linear codes, cyclic codes, BCH and Goppa codes, convolutional codes, problems of data security, probabilistic ciphers, computational complexity ciphers.  

7650 Computer Communications (3) Prereq: EE 7620 or equivalent. System design, optimal file allocation, scheduling, queueing and delays in time-shared systems, interfacing, asynchronous TDM, the ARPA network, the Aloha system.  

7700 Advanced Topics in Computer Engineering (3) May be taken 3 times for credit when topics vary.  

7710 Advanced Digital Logic (3) Prereq: EE 3720 or equivalent. Mathematical foundations of Boolean algebra; vector switching functions, Boolean differential calculus, and fault detection.  

7720 Digital System Architecture (3) Prereq: EE 3720 or equivalent. Computer architecture including modern pipeline and parallel systems; specialized processing systems.
including display, array, and image processing systems; issues in software design including portability.

**7730 Image Analysis—I (3) Prereq: EE 3120 or equivalent.** Basic fundamentals and techniques of digital image processing; hardware and software, applications, 2D transforms, preprocessing, texture analysis, and edge detection; emphasis on application of theory to practical problems.

**7740 Image Analysis—II (3) Prereq: EE 4640 and 7730.** Continuation of EE 7730; formal mathematical treatment of image segmentation, shape analysis, texture analysis, and scene analysis.

**7750 Machine Recognition of Patterns (3) Prereq: EE 4640 or equivalent, and knowledge of programming language.** Decision functions; Bayesian decision theory; cluster analysis; design of deterministic, stochastic, and fuzzy classifiers; unsupervised learning; feature selection; and other topics.

**7760 Reliable Design of Digital Systems (3) Prereq: EE 3720 or equivalent.** Test generation for combinational and sequential circuits, self-checking circuits, fault tolerant design, design for testability, and topics in LSI testing.

**7780 Software Design Principles (3) Prereq: EE 3770 or equivalent.** Engineering approach to computer software development; structured and modular programming concepts; software design and management; program testing and correctness proofs; diagnostic tools; software measures; other topics from software engineering.

**7790 Structure of Computers and Computations—II (3) Prereq: EE 4790.** Mathematical treatment of space and time complexity of computations; formal models of computers and computations.

**8000 Thesis Research (1-12 per sem.) "S"/"U" grading.**

**9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.**

### ENGINEERING (ENGR)

**1049 Engineering, Man, and Energy (3) Basic engineering; significant technological developments related to discovery, transmission, conversion, and utilization of various types of energy.**

**2060 Introduction to the Use of Computers (2) Prereq: eligibility to take MATH 1550 or equivalent. Credit will be given for only one of the following: CSC 1240, 1241, 2260, 2262, or ENGR 2060. Basic principles of digital programming in FORTRAN; application of subroutines; application of electronic computers to typical engineering problems.**

### ENGINEERING GRAPHICS (EGR)

**1001 Engineering Graphics (2) 6 hrs. lab. Fundamentals of graphical analysis used by engineers and scientists in conception, visualization, and communication of creative design concepts; effective use of conventional drafting practices, simplified drafting, and the USA Standards Institute standards employing freehand sketches of pictorials and reading-of-view drawings; three-dimensional forms and other necessary relationships used in solution of engineering and scientific problems and creative design.**

**1004 Graphical Communications (3) 9 hrs. lab. Freehand lettering and sketching, definition, abbreviations, and symbols; primary and secondary auxiliary views with application to solving engineering problems; graphical presentation of engineering data, vector quantities and vector diagrams, empirical equations; graphical mathematics, functional scales, and nomography.**

**2154 Engineering Graphics (2) Prereq: EGR 1001. Spatial relationships; application of primary and successive auxiliary views to solution of engineering and scientific problems employing uses of points, lines, and planes; creative design concepts applied to problems emphasizing the various engineering disciplines.**

**2162 Machine Drawing (2) Prereq: EGR 1001. 6 hrs. lab. Positional tolerances, limits and dimensioning standards, conventional practices, fastenings, pictorial and orthographic design sketching; empirical design; creative design, visual aids, analysis and synthesis, machine concepts.**

**2185 Automated Graphics for Designers (3) Prereq: CSC 1240 or equivalent, and eligibility for MATH 1550. 2 hrs. lecture; 3 hrs. lab. Also offered as ARCH 2173. Use of automated graphical techniques in design and design communication.**

**3105 Piping Drafting (2) Prereq: EGR 1001. 6 hrs. lab. Development and layout of piping systems applicable to petrochemical industry; plans, elevations and sections of piping arrangements; single-line and double-line drawings and pictorials; industrial standards and symbols including safety requirements recommended by the American National Standards Institute.**

**3151 Geometric Systems (3) Prereq: EGR 2154 and consent of department. 1 hr. lecture; 4 hrs. lab. Application of Mongeian geometry to engineering problems treating points, lines and planes, and surfaces; intersecting surfaces and their development; single-curved surfaces, warped surfaces, double-curved surfaces, and surfaces of revolution.**

**4152 Design Graphics (3) Prereq: EGR 2154 and consent of department. 1 hr. lecture; 4 hrs. lab. Inventive design developing new products and improving existing equipment; study of analysis, synthesis, and aesthetic qualities of design through sketches, prototypes, and models.**

**4153 Production Illustration (3) Prereq: EGR 2154 and consent of department. 2 hrs. lecture; 2 hrs. lab. Commercial and technical illustrating—pencil rendering, ink delineations, airbrush, and other methods; exploded views and methods of shading; patent drawings; design of monograms and colophons; survey of reproduction methods.**

**4243 Computer Graphics (3) Prereq: CSC 1240 or ENGR 2060 or equivalent; and MATH 2085 or equivalent; or consent of instructor. Also offered as CSC 4354 and ME 4243. Analytical treatment of graphics using the digital computer;**
input, transformation, and display of graphical data, graphical languages, interactive techniques, and selected topics; emphasis on current developments.

4255 Applied Interactive-Graphic Computer-Aided Design (3) Prereq: EGR 1001 and 2154, or equivalents. Also offered as CSC 4355 and ME 4253. Interactive graphic techniques used to solve engineering design and data retrieval problems.

ENGL (ENGL)

Students who are not exempt will be required to pass one, two, three, or four freshman composition courses. Placement level depends on ACT scores, the diagnostic theme, and any prior college credit. The required courses must be taken progressively, but students demonstrating exceptional progress in completing 0004 or 0006 (or 0001) may be permitted to skip 1004 or 1001 respectively.

The completion of English 1002 or its equivalent (English 1003 for honors students, English 1005 for international students, or approved transfer credit) is required of all students and is prerequisite to all other English courses.

0001 English Composition (3) For students whose diagnostic tests indicate the need for intensive work in basic writing skills. Not for degree credit. For continuing education students only, unless by special permission.

0003 English Composition (5) For students whose diagnostic tests indicate the need for intensive work in basic English skills. Pass-no credit grading. Not for degree credit. Writing the sentence, paragraph, and essay, accompanied by exercises and readings.

0004 English Composition (5) For international students whose diagnostic tests indicate the need for intensive work in basic writing skills. Pass-no credit grading. Not for degree credit. Required during the first semester of residence for all international students (graduates, undergraduates, and transfer students) who are not excused on the basis of the placement examination required of every new international student.

0006 English Composition (5) Prereq: ENGL 0003 or placement by department. For students whose diagnostic tests indicate the need for enhancement of basic English skills. Pass-no credit grading. Not for degree credit. Writing the paragraph and essay, accompanied by exercises and readings.

1001 English Composition (3) Prereq: ENGL 0001 or 0006 or placement by department. Introduction to writing in simpler forms of expressive and informative discourse.

1002 English Composition (3) Prereq: ENGL 1001 or placement by department. An honors course, ENGL 1003, is also available. Introduction to writing persuasive, evaluative, and other forms of argumentative discourse.

1003 HONORS: English Composition (3) Same as ENGL 1002, with special honors emphasis for qualified students.

1004 English Composition (3) Prereq: ENGL 0004 or placement by department. For international students. Same as ENGL 1001, with emphasis on usage and idiom problems specific to international students. Required during the first semester of residence for all international students (graduates, undergraduates, and transfer students) who demonstrate on the placement examination need for work in English, but not at the intensive level of ENGL 0004. Graduate students graded pass-no credit.

1005 English Composition (3) Prereq: ENGL 1004 or placement by department. For international students. Same as ENGL 1002, with continued work on the problems specific to international students. Graduate students graded pass-no credit.

2001 Advanced English Composition (3) Theory and practice of exposition, description, and narration.

2002 Introduction to Technical and Professional Writing (3) Degree credit will not be given for both this course and ENGL 3002. Preparing technical and professional documents such as reports, articles, and letters.

2005 Introduction to Writing Short Stories (3) Prereq: consent of instructor. Writing short stories for workshop criticism; practice in techniques of using point of view, dialogue, setting, and characterization.

2007 Introduction to Writing Poetry (3) Prereq: consent of instructor. Writing poems for workshop criticism; practice in both open and closed forms; emphasis on contemporary techniques and prosody.

2008 Introduction to Writing Drama (3) Prereq: consent of instructor. Writing plays for workshop criticism; practice in techniques of exposition, characterization, and dramatization.

2010 Descriptive English Grammar (3) Analysis of the sentence from the perspective of transformational grammar; survey of various approaches to the study of language.

2012 English Usage (3) Problem areas of grammar, pronunciation, and vocabulary; language change and contemporary variation, the role of dictionaries, and the relationship of aesthetic prejudices and social attitudes to matters of usage.

2020 A Survey of English Literature from the Beginning to 1798 (3) An honors course, ENGL 2021, is also available.

2021 HONORS: A Survey of English Literature from the Beginnings to 1798 (3) Same as ENGL 2020, with special honors emphasis for qualified students.

2022 A Survey of English Literature from 1798 to the Present (3) An honors course, ENGL 2023, is also available.

2023 HONORS: A Survey of English Literature from 1798 to the Present (3) Same as ENGL 2022, with special honors emphasis for qualified students.

2025 Introduction to Fiction (3) An honors course, ENGL 2026, is also available. Study and appreciation of the short story and the novel.

2026 HONORS: Introduction to Fiction (3) Same as ENGL 2025, with special honors emphasis for qualified students.

2027 Introduction to Drama and Poetry (3) An honors course, ENGL 2028, is also available. Study and appreciation of these types of literature.

2028 HONORS: Introduction to Drama and Poetry (3) Same as ENGL 2027, with special honors emphasis for qualified students.

2070 Major American Writers (3) Important authors from Irving to Hemingway.
2076 Contemporary American Fiction (3) American writers of fiction since 1950.

2085 Science Fiction Studies (3) Science fiction literature, particularly that of the 20th century.

2086 Fantasy Literature (3) Variety of literary types employing conventions of the fantastic; uses of older literatures in modern fantasy novels; themes such as quest for identity, ideal of the hero, and nature of good and evil.

2120 Special Topics in Literature and Language (3) May be repeated for credit.

2148 Shakespeare (3) The more popular plays.

2174 20th-Century African-American Literature (3) Major figures of 20th-century black American literature, including writers of fiction, poetry, drama, and essays; influence of genre on the articulation of common political and social themes.

2423 Introduction to Folklore (3) Also offered as ANTH 2423. Folklore genres of the world; the sources of folklore: literary, psychological, sociological, anthropological, and historical approaches to folk material; relationships between folklore and written literature.

2920, 2921, 2922 Independent Work (1, 1, 1) Prereq: sophomore standing and an average of not less than 2.00 in all previous English courses. Reading, conferences, and reports under departmental faculty direction.

2925, 2927, 2929 HONORS: Independent Work for Honors Students (1, 1, 1) Prereq: sophomore standing, completion of ENGL 2021 and 2023 or 2026 and 2028 with a grade of "B" or better, and a gpa of at least 3.00 in all work taken. May not be taken by students who have already completed ENGL 2920, 2921, 2922. Reading, conferences, and reports under departmental faculty direction.

3000 HONORS: Honors Thesis (3) Conclusion of the English honors program; for details, consult the department.

3002 Technical and Professional Writing for Industry, Government, and Business (3) Degree credit will not be given for both this course and ENGL 2002. Training in skills required of practicing scientists, engineers, and technical managers.

3012 Social Dialects in American English (3) Prereq: ENGL 2010 or SPCH 2050 or equivalent. Sociolinguistic variation; variation according to social status, style, age, sex, and ethnicity; socially diagnostic phonological and grammatical features; the relationship between social dialects and education.

3014 The Sound System of English (3) Prereq: ENGL 2010 or SPCH 2050 or equivalent. The phonological properties of English, including phonetic and phonemic inventories, feature analysis, and rules; regional and social dialect variation, first and second language learning, communication disorders, and spelling.

3015 Composition Tutoring (3) Prereq: consent of instructor. 1 hr. lecture; 6 hrs. lab. Composition theory as applicable to undergraduate tutoring.

3033 Satire (3) Reading and analysis of satiric literature, chiefly English and American; some attention to old and middle comedy, to Latin satire, and to theories of satire; includes such diverse writers as Aristophanes, Juvenal, Swift, Pope, Twain, Vonnegut, and Waugh.

3124 The Literature of the English Bible (3) Literary themes and forms in the King James version; particular reference to the literary influence of the Bible on later literature.

3210 Studies of Major Writers (3) May be taken twice for credit. Writers selected for study will vary. Intensive study of two or three important writers, not limited to a single literary period.

3220 Major Themes in Literature (3) May be taken twice for credit. Topics vary. Close examination of a particular theme (e.g., revolution, quest, or spiritual crisis) in the works of several authors and perhaps crossing historical and cultural boundaries.

3232 Literature and Psychology (3) Fundamental insights of psychology and psychiatry as related to such works as Oedipus Rex, Hamlet, Heart of Darkness, and Light in August; special attention to psychological patterns implicit in the texts, to the psychology of authors as it may influence their work, and to the psychology of readers as it may influence their interpretations.

3236 Literature and Religion (3) Comparative analysis of world views in representative works of Western literature; theory and practice of the religious interpretation of literary texts.

3401 The Study of Folklore (3) See ANTH 3401.

3820, 3821, 3822, 3823, 3824, 3825 HONORS: Honors Seminar (3 each) Normally open only to juniors and seniors with consent of instructor and on completion of either ENGL 2021 and 2023 or 2026 and 2028. Subject matter and instructor vary; additional details available from department.

4000 Major Project for Creative Writing Majors (3) Prereq: consent of instructor.

4001 Writing Essays and Reviews (3) Prereq: consent of instructor on the basis of submitted work. Essays and reviews as literary forms, with guided practice in writing both.

4002 Scientific and Professional Writing for Peers (3) Considerable one-on-one instruction. Students must have well-defined projects. Training in the principles and practice of effective research writing in academic and professional settings; emphasis on translating research results into publishable articles and effective grant proposals.

4005 Short Story Writing (3) Prereq: consent of instructor. Guided practice in short story writing; techniques involved.

4006 Writing the Novel (3) Prereq: consent of instructor. Guided practice in writing the novel; techniques involved.

4007 Writing Poetry (3) Prereq: consent of instructor. Guided practice in writing poetry; techniques involved.

4008 Writing Drama (3) Prereq: consent of instructor. Guided practice in writing plays; techniques involved.

4010 Introduction to Linguistics (3) Historical, geographical, and structural linguistics.

4011 History of the English Language (3) Development of the language from Old English times to the modern English period.

4012 The Contemporary English Language (3) Structure of the English language and its application in the classroom.

4013 Semantics and Rhetoric (3) Word meanings and classification of modes of discourse.

4014 Generative Phonology (3) Prereq: ENGL 4010 or SPCH 4150 or equivalent. Basic principles of phonological analysis within the transformation-generative paradigm; emphasis on analytical procedures and problem solving.

4015 Linguistic Semantics (3) Prereq: ENGL 4010 or 4010 or 4012 or equivalent. Theories of lexical and sentential meaning within the paradigm of transformational-generative grammar.
Linguistics and Literature: An Introduction to Literary Style (3) Systematic analysis of the language of literature from a linguistic point of view; the concept of style as choice and the reader's orientation.

Literary Criticism (3) Some of the more important literary critics down to approximately 1900; application of critical principles and techniques to selected literary works.

Medieval Literature in Translation (3) Masterpieces of medieval literature; the characteristics and development of such major genres as epic and romance; changing attitudes toward such issues as the nature of the hero and heroism, love and loyalty, and the conflicting forces of destiny and will.

The Age of Elizabeth—Poetry and Prose of the Early Renaissance (3) Sidney, Shakespeare, Spenser, Thomas More, and others; selected genres and topics, such as psychology of love and quest for utopia.

Donne, Jonson, and Their Contemporaries (3) Metaphysical poetry, early neoclassical poetry, and the prose of the age; the effects of political, religious, and scientific tension on the literature; the baroque element in 17th-century poetry and prose; the theme of the search for transcendence.

Backgrounds of the English Renaissance (3) Origins and ideals of the Renaissance; masterpieces in translation of such writers as Boccaccio, Cervantes, Machiavelli, and Erasmus.

The Beginnings of the English Drama (3) Development of English drama from the medieval cycle plays to Shakespeare; emphasis on the plays of Christopher Marlowe.

Drama of the Age of Shakespeare (3) Shakespeare's contemporaries and successors to 1642; the major plays of Ben Jonson and the dramatists of the Jacobean "Lost Generation": Webster, Middleton, Ford, and others.

The Age of Exuberance—I (3) Studies in Dryden and Swift and their friends and opponents, including such Restoration and early 18th-century writers as Rochester, Wycherley, Congreve, Addison, and Steele.

The Age of Exuberance—II (3) The line of wit from Pope to Burke, including studies in such 18th-century writers as Gay, Arbuthnot, Johnson, Boswell, and Sheridan.

The English Novel (3) Development and characteristics of the English novel from its beginnings through Scott.

Prose and Poetry of the Early Romantic Period (3) Writers of the pre-romantic period; Wordsworth, Coleridge, and their circle; Scott.

Later Romantic Writers (3) Emphasis on Byron, Shelley, and Keats, with some attention to such prose writers as DeQuincey and Hazlitt.

Tennyson, Browning, and Their Contemporaries (3) Writings of Tennyson, Browning, and four of their contemporaries—Macaulay, Carlyle, Newman, and Mill; the nature of change and how it should be regarded, the impact of evolution and scientific theories on views of human potential and limitations, and the conflict between private wishes and social responsibilities.

Arnold, Ruskin, and Their Contemporaries (3) Writings of Arnold, the Pre-Raphaelites, and some of their contemporaries; impact of the theory of evolution, upheaval in national and private life, and development of anti-Victorian decadence.

The English Novel (3) The English novel from Scott to the present.

American Literature (3) Literature of the U.S. from colonial beginnings to the Civil War.

American Literature (3) Literature of the U.S. from the Civil War to the present.

The American Novel to 1900 (3) Development of the American novel from its beginnings to 1900; emphasis on Hawthorne, Melville, Twain, and the early James.

The American Novel since 1900 (3) Development of the American novel from the turn of the century to the present; emphasis on Hemingway, Fitzgerald, and Faulkner.

Modern Criticism (3) Reading and analysis of important documents of 20th-century criticism; application of critical principles and techniques to selected literary works.

20th-Century Novel (3) The English and American novel, with some attention to the novel on the Continent.

The Short Story (3) Emergence and development of the short story form in relation to changing theories of technique and structure; readings may include representative tales by the early American masters (Irving, Poe, and Hawthorne) as well as works by later exponents such as de Maupassant, Chekhov, O. Henry, Crane, Lawrence, Joyce, and Faulkner.

Modern Poetry (3) Dickinson, Hardy, Hopkins, Yeats, Pound, Eliot, Stevens, Ransom, Robinson, Frost, Hart Crane, Auden, Robert Lowell, and Dylan Thomas; some attention to other English and American poets from 1870 to the present.

20th-Century Drama (3) Modern English and American drama.

Forms of Prose Fiction (3) Fictional techniques as seen in conventional and experimental short stories, novellas, and novels; elements of plot, characterization, theme, setting, and tone; formal analysis of literary texts related to specific problems of writing.

Prosody and Poetic Forms (3) Representative forms of poetry from the early sagas to contemporary free verse; their relation to principles of versification; some concurrent practice in writing poetry in specific forms.

Chaucer (3) The Canterbury Tales.

Milton (3) A study of the poems with emphasis on Paradise Lost, Paradise Regained, and Samson Agonistes; examination of various prose works.

Shakespeare (3) The earlier plays and their background; some attention to Shakespeare's life and times.

Shakespeare (3) The later plays; particular emphasis on the author's development.

The Literature of the South (3) Southern writings from the beginnings to the present; considerable attention to the historical and cultural backgrounds.

Afro-American Literature (3) Literature of the black experience in the U.S.

Poetry After World War II (3) English and American poetry since World War II.

Literature and Film (3) Comparative aesthetics of literature and film; literary influences on the form and structure of film; the grammar of film; the theory and practice of film criticism.

American Folklore (3) Also offered as ANTH 4475. Folklore of the U.S., including that of regional, racial, ethnic, and occupational groups; relation of folklore to other aspects of American vernacular culture and to American literature.

Folklore and Literature (3) The interrelationships between folklore and literature—the use of the folklore by
writers; the similarities and differences between "oral literature" and "written literature."

7006 Fiction Writing (3-6) May be repeated for credit for a maximum of 12 sem. hrs. Intensive composition and critical evaluation of fiction; various fictional techniques and forms.

7007 Poetry Writing (3-6) May be repeated for credit for a maximum of 12 sem. hrs. Intensive composition and critical evaluation of poetry; poetic forms and various problems of poetry writing.

7008 Drama Writing (3-6) May be repeated for credit for a maximum of 12 sem. hrs. Intensive composition and critical evaluation of drama; various techniques of dramatic composition and dialogue.

7910, 7911 Language (3, 3) Each course may be taken twice for credit when topics vary.

7912 Old English (3)

7913 Middle English (3)

7914 Syntax—Extended Standard Theory (3) Prereq: ENGL 4012 or equivalent. Post-aspects developments in transformational-generative syntax; introduction to government and binding.

7915 Analysis and Evaluation of Expository Writing (3) Introduction to the study of writing as process and product; attention to problems of composition instruction.

7916 Composition Theory and Practice (3) Modern rhetorical theory as it relates to the teaching of written composition.

7920, 7921, 7922 English Seminar (1-3 each) Each course may be taken twice for credit when topics vary.

7923 Practical Criticism (3) Literary analysis for teachers of literature; modern methods of interpretation and evaluation of poetry, drama, and fiction.

7924 Bibliography and Methods of Research (3)

7925 History and Theories of Composition (3) Historical development of the western rhetorical tradition as it affects written discourse; the philosophical and practical aspects of theories of discourse as they shape our understanding of writing and the composition process.

7934 Studies in Middle English (3) May be taken twice for credit when topics vary.

7937 Beowulf (3)

7940 Studies in Non-dramatic 16th-Century Literature (3) May be taken twice for credit when topics vary.

7941 Studies in the Non-dramatic Literature of the 17th Century (3) May be taken twice for credit when topics vary.

7943 Studies in Shakespeare (3) May be taken twice for credit when topics vary.

7948 Studies in Pre-Shakespearean Drama (3) May be taken twice for credit when topics vary.

7949 Studies in Jacobean Drama (3) May be taken twice for credit when topics vary.

7950 Studies in the Non-dramatic Literature of the Neoclassical Period (3) May be taken twice for credit when topics vary.

7960 Studies in the Romantic Period (3) May be taken twice for credit when topics vary.

7962 Studies in the Victorian Period (3) May be taken twice for credit when topics vary.

7970 Studies in American Literature: Colonial and Early National Periods (3) May be taken twice for credit when topics vary.

7971 Studies in American Literature: Later National Period (3) May be taken twice for credit when topics vary.

7973 Studies in American Literary Masters (3) May be taken twice for credit when topics vary.

7974 Special Studies in American Literature (3) May be taken twice for credit when topics vary.

7984 Seminar in Modern Criticism (3) May be taken twice for credit when topics vary.

7985 Seminar in Modern Fiction (3) May be taken twice for credit when topics vary.

7987 Seminar in Modern Poetry (3) May be taken twice for credit when topics vary.

7988 Seminar in Modern Drama (3) May be taken twice for credit when topics vary.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Independent Study (1-3) May be repeated for credit for a maximum of 3 sem. hrs. in a master's program and 9 sem. hrs. in a doctoral program. Directed individual readings guided by the graduate faculty.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

ENTOMOLOGY (ENTM)

2001 Introductory Entomology (3) F Prereq: ZOOL 1001, 1002; or BOTY 1001, 1002; or BIOL 1001, 1002, 1003, 1004. 2 hrs. lecture; 2 hrs. lab. Insect recognition and classification, anatomy, life cycles, abundance, and control; effects of insecticides on humans; insects in agricultural and urban environments.

3001 Forest Entomology (3) S Prereq: ZOOL 1001, 1002; or BOTY 1001, 1002; or BIOL 1001, 1002, 1003, 1004. 2 hrs. lecture; 2 hrs. lab.

4001 Household and Structural Pests (3) F Prereq: ENTM 2001. 2 hrs. lecture; 2 hrs. lab. Recognition, biology, and management of pests found in structures.

4002 Veterinary Entomology (3) S Prereq: ENTM 2001. 2 hrs. lecture; 2 hrs. lab.

4003 Medical Entomology (4) F Prereq: ENTM 2001 or equivalent. 2 hrs. lecture; 4 hrs. lab. Relation of insects and other arthropods to human disease.

4005 Insect Taxonomy (4) F Prereq: ENTM 2001. 2 hrs. lecture; 6 hrs. lab.


4010 Biological Control (3) S-O Prereq: ENTM 2001 or equivalent. 2 hrs. lecture; 3 hrs. lab. Practice and theory of biological control of insect pests and weeds.

4011 Biology and Management of the Honey Bee (3) S Prereq: ZOOL 1001, 1002; or BOTY 1001, 1002; or BIOL 1001, 1002, 1003, 1004 or consent of instructor. 2 hrs. lecture; 2 hrs. lab. Behavior, genetics, pollination, pathology, and practical management of honey bees for agricultural and scientific purposes.

4012 Fundamentals of Horticultural Entomology (3) S Prereq: ENTM 2001. 2 hrs. lecture; 2 hrs. lab. Principles of insect control; recognition of major pest species of insects and mites and their injury to horticultural plants; economic and
Environmental Studies 331

1000 Environment and Technology, A Perspective on Environmental Problems (3) Environmental quality problems involving water, air, and land; representative ecological stresses analyzed to develop awareness of their fundamental nature and interrelationships; society's response to alleviate such problems.

2144 Environmental Issues in Economics and Water Resources (3) Economic principles and control mechanisms governing man's interaction with the biosphere in the process of satisfying human wants; engineering principles and technologies which transform parts of the environment into want-satisfying commodities and ultimately into unwanted waste; use cycles of water from its source through processing, reprocessing, use, reclamation, and disposal, within the limits of biophysical processes on which all economics and engineering depend.

3110 Environmental Management Laboratory (3) 1 hr. lecture; 4 hrs. lab. Pass-fail grading. Students assume roles of politicians, planners, industrialists, developers, pollution control officers, news reporters, and pressure groups. In a simulated environment, students interact, make decisions required of their particular role, and observe results with the aid of computer simulation of an urban area.

4000 Environmental Engineering—1 (3) Interactions between man and the physical world.

4010 Applied Ecology (2) F Prereq: minimum of 10 sem. hrs. of biological and/or physical science. The biosphere, air, land, and aquatic environments; development of alternative techniques for correcting environmental pollution; environmental risk assessment analysis and management.

7007 Seminar in Entomology (1) F,S May be repeated for credit. 2 sem. hrs. of credit required for each graduate degree in entomology.

7008 Special Topics in Entomology (1-3) F,S,Prereq: consent of department head. May be repeated for credit for a maximum of 6 sem. hrs. when topics vary. Lectures and/or labs on advanced topics in entomology not covered in other entomology courses.

7009 Insect Phylogeny and Evolution (4) F Prereq: ENTM 2001 or equivalent, or consent of instructor. 2 hrs. lecture; 4 hrs. lab.

7010 Insect Pathology (3) S-E Prereq: introductory entomology and microbiology. 2 hrs. lecture; 3 hrs. lab. Noninfectious and infectious diseases of insects; etiology, infectious processes, pathogenesis, host responses, and practical applications.

7011 Insect Behavior (3) F-O Prereq: introductory entomology. Analysis of diverse types of behavior exhibited by insects and other land arthropods.

7012 Insecticide Biochemistry and Toxicology (4) S-E Prereq: ENTM 4017 or equivalent. 2 hrs. lecture; 6 hrs. lab. Selected topics in insecticide chemistry, biochemistry, physiology, and toxicology.

7979 Tropical Biology: An Ecological Approach (1-8) See LAS 7979.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Research Problems (1-4 per sem.) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

ENVIRONMENTAL STUDIES (ENVS)

1001 Environmental Chemistry (2) See CHEM 4150.

1411 Radioecology (3) F See NS 4141.

4149 Design of Environmental Management Systems (3) Integrated environmental systems planning at local, regional, national, and international levels; setting policies and objectives, identifying system requirements and available resources, defining constraints, establishing evaluation criteria, preparing and evaluating alternative concepts and plans for subsystems; optimization and implementation using qualitative tradeoffs, mathematical models, and computer simulations; analysis includes technical, ecological, economic, legal, and political aspects of local, national, and foreign programs; class project deals with specific, large-scale environmental problem.

4500 Health Effects of Environmental Pollutants (3) F,S Prereq: minimum of 6 sem. hrs. of chemistry and 6 sem. hrs. of either biology or zoology. Effects of environmental pollutants on human health and quality of life.

4261 Energy and the Environment (3) Important methods of stationary power generation; pollution related to fuel production, transportation, and use; energy use in transportation and pollution problems related to transportation; energy resources, regulatory aspects, and control technology related to stationary and moving sources of air pollution.

7010 Mathematical Modeling in Energy and Environmental Management (3) S Prereq: M R5C 4410 or equivalent. Advanced studies in the development of models of energy and environmental systems.
7040 Environmental Planning and Management (3) Prereq: ENVS 4149. Environmental systems planning and management at local, state, and federal government levels using problem identification, design of alternative solutions, evaluation of alternatives, political action decision processes, and implementation and monitoring; technical aspects of planning emphasized.

7100 Environmental Toxicology (3) S Prereq: VPT 4001. Principles of environmental toxicology including technical, ecological, and economic considerations relating to air, water, and soil contamination; the classification and detection of environmental toxicants, their biological effects and impact on current and future trends in agribusiness and the chemical, transport, and power industries.

7110 Toxicology of Aquatic Environments (3) Prereq: ENVS 7100. Basic principles of aquatic pollution and toxicology of industrially-derived materials related to environmental risk assessment in coastal areas; physical, chemical, and biological factors affecting the environmental effect and fate of toxins in marine and freshwater coastal areas.

7900 Special Problems in Environmental Science (1-4) May be repeated for credit for a maximum of 4 sem. hrs. Individual study of a specific environmental problem.

7950 Special Topics in Environmental Sciences (1-6) F, S, Su Research and methodological review of current topics.

7995 Environmental Seminar (1) F, S, Su Reports and discussions of student/faculty activities in environmental sciences.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

**EPIDEMIOLOGY AND COMMUNITY HEALTH (ECH)**

7301, 7302 Principles and Methods of Epidemiology and Disease Control—1, II (4, 4) 7301 offered F; 7302 offered S Prereq: consent of instructor. ECH 7301 is prerequisite for ECH 7302. 3 hrs. lecture; 3 hrs. lab. Ecologic and epidemiologic concepts used in studying diseases in populations; introduction to epidemiologic methods, with laboratory exercises emphasizing problem solving; epidemiologic principles applied to disease control; planning, administration, and evaluation of disease-control programs.

7303 Applied Veterinary Preventive Medicine (5) Su-O Prereq: ECH 7301, 7302, and consent of instructor. 3 hrs. lecture; 6 hrs. lab. Principles of epidemiology and disease control applied to planning, administration, and evaluation of veterinary preventive medicine practice.

7304 Clinical Epidemiology in Companion Animal Practice (3) F-O Prereq: consent of instructor. Epidemiologic principles and disease control methods applied to companion animal practice; problem-oriented case studies on relation of patient and client to community.

7306 Veterinary Medicine and Community Health (3) S-E Prereq: consent of instructor. Legal basis for veterinary preventive medical practice; economic, aesthetic, cultural, and human health factors associated with maintenance of animals; use of community resources to improve animal health.

7307 Project Management (2) F-E Prereq: EXST 7005 or equivalent. 1 hr. lecture; 2 hrs. lab. Application of economic analysis to farm and national livestock disease problems, analysis of existing and past programs, and forecasting of projected animal health schemes.

7308 Veterinary Economies (2) S-O Prereq: AGEC 4015 or 4088 or equivalent. 2 hrs. lecture; 1 hr. lab. Application of economic analysis to farm and national livestock disease problems, analysis of existing and past programs, and forecasting of projected animal health schemes.

7309 Control and Prevention of Poultry Diseases in Tropical Countries (5) Su-O Prereq: consent of instructor. 3 hrs. lecture; 4 hrs. lab. Principles of environmental control, applied nutrition, and management in the occurrence of disease in commercial poultry under tropical conditions; systematic review of significant conditions with specific reference to the epidemiology, diagnosis, and prevention of poultry diseases.

**EXPERIMENTAL STATISTICS (EXST)**

2000 Introduction to Microcomputers: Applications in Agriculture and Related Areas (3) F, S, Su Prereq: MATH 1021 or equivalent. 2 hrs. lecture; 2 hrs. lab. Computer terminology; application of microcomputers to machinery use, chemical applications, nutrition, financial accounting, crop and livestock production, land rental, year-end reporting, financial reporting, letter writing; telecommunications with agriculture-related networks and main-frame computers; evaluation of computer systems and commercial software used in agriculture-related fields.

2055 Introductory Statistical Theory (3) Su Prereq: MATH 1552 or equivalent. Elementary treatment of concepts in statistical theory; includes probability, one- and two-dimensional random variables, expected values, and distributions.

2095 Introduction to Scientific Sampling (3) F, S Prereq: MATH 1021 or equivalent. 2 hrs. lecture; 2 hrs. lab. Concept of sampling; requirements for a valid sample, simple random sampling, stratified sampling, systematic sampling, cluster sampling, and other selected sampling techniques.

2201 Introduction to Statistical Analysis (4) F, S 3 hrs. lecture; 2 hrs. lab. Completion of MATH 1015 or 1021 strongly recommended before taking this course. Same as SOC 2201. Variables used in sociological research, level of measurement, distributions, measures of association and correlation, simple linear regression, probability, sampling distributions, interval estimation and tests of hypotheses, and simple analysis of variance.

4001 Statistical Methods (4) F, S Prereq: MATH 1021 or equivalent. 3 hrs. lecture; 2 hrs. lab. Credit will be given for only one of the following: EDAD 4006, EXST 4001, 4006, 4011. Statistical notations, statistical inference, simple analysis of variance and variance components, and linear correlation and regression.

4006 Applied Statistics in Education (3) Credit will be given for only one of the following: EDAD 4006, EXST 4001, 4006, 4011. Same as EDAD 4006. Basic statistical methods; emphasis on statistical application and interpretation of educational phenomena.

4011 Statistical Analysis (3) F Prereq: MATH 1015 or equivalent. 2 hrs. lecture; 2 hrs. lab. Credit will be given for only one of the following: EDAD 4006, EXST 4001, 4006, 4011. Primarily for students in landscape architecture. Introduction to measures of central tendency and variation, hypothe-
sis stressing an understanding of underlying principles; response surfaces, variable selection techniques, and nonlinear regression.

7035 Applied Least-Squares (3) Prereq: EXST 7013 or 7014 or 7015 or 7016 or equivalent. Applications of least squares methods; includes usual constraints, no constraints, and means model constraints to unbalanced cross classified and nested data; emphasis on analysis of variance and covariance for fixed effects models.

7037 Multivariate Statistics (3) F Prereq: EXST 7013 or 7014 or 7015 or 7016 or equivalent; and knowledge of matrix algebra. Comparison of multivariate techniques and analyses; emphasis on discriminant analysis, factor analysis and principal component analysis, canonical correlation, cluster analysis, and multivariate analysis of variance.

7051 Applied Bayesian Inference (3) V Prereq: EXST 4055, and either EXST 7003 or 7004 or 7005 or 7006; or equivalent. Basic decision theory applications, useful sampling distributions and convenient priors. Bayesian statistical inference, and Bayesian analysis of multiple decision problems.

7061 Statistical Theory (3) S Prereq: EXST 4055 or equivalent. Estimation, hypothesis testing, multivariate concepts, contingency tables, analysis of variance, and statistical inference.

EXTENSION EDUCATION (EXED)

3010 Internship in Cooperative Extension Service (6) Su only Open to selected students completing their junior year who are considering a career with the cooperative extension service. Consists of a 7-week period of study, observation, and practicum in a parish Louisiana Cooperative Extension Service office plus a 2-week period of classes in the Department of Extension and International Education. Registration with special permission only.

4010 Cooperative Extension Work (3) F Cooperative extension work: its history, objectives, organization, relationships, and teaching processes.

4011 Communications in Extension Education (3) F Synthesis and application of concepts and principles of communication in the extension educational program.

4025 Principles of Adult Education (3) S Nature, scope, and importance of adult education; social and psychological factors affecting adult motivation and learning; methods and techniques for providing adult learning experiences.

4026 Informal Education Programs for Youth (3) S Organization, leadership, and evaluation of informal youth education programs.

7030 Program Development (3) F Sy, thesis and application of relevant concepts relating educational planning, planned change, and social change to development of effective extension education programs.

7031 Principles and Practices of Extension Education (3) S Prereq: EXED 7030 or equivalent. Synthesis and application of learning and teaching concepts in the execution of an extension educational program.

7032 Leadership and Organization (3) S Application of relevant concepts and principles from leadership theory, group dynamics, social organization, and organizational administration to problems of leading and organizing extension education programs.

7062 Advanced Topics in Statistical Theory (3) S Prereq: EXST 7061. May be repeated for credit when topics vary. Specialized topics of current interest; emphasis on the theoretical development of statistical methodology.

7083 Practicum in Statistical Consulting—1 (2) F, S, Su Prereq: EXST 7013 or 7014 or 7015 or 7016. 4 hrs. ind. Pass-fail grading. May be repeated for credit. Supervised application of statistical techniques to research problems.

7084 Practicum in Statistical Consulting—II (2) F, S, S Prereq: minimum of 20 sem. hrs. of graduate statistics courses. 4 hrs. ind. Pass-fail grading. Supervised experience in an agency, institution, or private organization in the application of statistical techniques to research problems.


7086 Advanced Seminar in Statistics (1) F, S, S Prereq: consent of instructor. May be repeated for credit when topics vary. Special topics not covered in other advanced experimental statistics courses.

7087 Advanced Topics in Statistics (1-3) Prereq: consent of instructor. May be repeated for credit when topics vary. Lectures on advanced topics in statistics not covered in other experimental statistics courses.

7036 Evaluation and Research Methods (3) F, S Prereq: a basic graduate-level statistics course. Concepts and principles of evaluation and research applied to problems in extension education.

7039 Comparative Extension Education (3) S Prereq: EXED 7031 or equivalent. Comparative analysis of various systems of extension education on a world-wide basis; factors affecting programs and organization within the various systems.

7040 Advanced Extension Education (3) S Prereq: advanced graduate standing and consent of instructor. Integration of relevant concepts, principles, and research findings in program development, leadership and organization, learning and teaching, and evaluation of problems and practices.

7041 Seminar in Extension Education (1) F May be taken twice for credit. Pass-fail grading. Student-faculty exchange of ideas on research and issues.

7050 Advanced Research Design (3) S Prereq: EXED 7036 or equivalent. Research design; emphasis on research concepts and procedures and their application to extension education.

7900 Independent Study in Extension Education (3) May be taken twice for credit. Independent study under the guidance of the graduate faculty.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Research Problems (1-6) Prereq: EXED 7036 and a basic graduate-level statistics course. May be repeated for credit for a maximum of 6 sem. hrs. Research problems in programming, teaching, leadership, organization, or evaluation of extension programs.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.
FINANCE (FIN)

In the Department of Finance, the second digit of the course number denotes the subject area of the course, as follows: 2—business law; 3—real estate; 4—risk and insurance; 6—finance (capital markets and financial institutions); 7—finance (financial management); 8—finance (investment analysis/portfolio theory); 9—general courses.

Prerequisite for any finance course may be waived in exceptional cases with consent of the instructor and approval of the department chairman.

See "Economics" for courses in international trade and money and banking.

3200 Introduction to Law (3) Not open to students in the College of Business Administration. Credit will not be given for both this course and FIN 3201 and 3202. Fundamentals of the American legal system; basic principles of the law of contracts, commercial paper, agency, partnerships, corporations, torts, and crimes; case materials used to demonstrate legal analysis and reasoning.

3201 Business Law (3) Credit will not be given for both this course and FIN 3200. Development of the Anglo-American common law, the American constitutional system, and the Louisiana civil law system; the law of contracts and agency; social and ethical facets of the legal environment; case materials used to demonstrate problem analysis and solution.

3202 Commercial Transactions (3) Prereq: FIN 3201. Credit will not be given for both this course and FIN 3200 or 3203. Legal concepts underlying transfer and sale of goods and commercial paper (checks, promissory notes, certificates of deposit, etc.); use and operation of instruments for creating credit (mortgages, pledges, liens, etc.); application of the Louisiana Commercial Code and the Uniform Commercial Code.

3203 Commercial Transactions for Accountants (3) Prereq: FIN 3201. Credit will not be given for both this course and FIN 3202. Specifically for accounting majors. Legal concepts underlying sale of goods; commercial paper; security interests, partnerships, corporations, and bankruptcy; application of the Uniform Commercial Code and preparation for the CPA examination.

3205 Mineral Rights (3) Prereq: FIN 3355. The law of mineral rights; emphasis on Louisiana oil and gas law; leases, royalty interests, title search, unitization, and pooling; the mineral law of other states and of hard materials.

3351 Principles of Real Estate (3) Prereq: FIN 3201. Principles of purchasing, owning, and operating real estate relative to interest in realty, liens, contracts, deeds, titles, leases, brokerage, management.

3352 Real Estate Valuation and Investment (3) Prereq: FIN 3351 or equivalent. Principles and methods of valuation applied to single-family and income-producing real property; techniques for making investment decisions in alternative types of real property; cash flow analysis considering income tax effects, financial leverage, risk-return trade-offs, and alternative methods of disposition.

3353 Real Estate Finance (3) Prereq: FIN 3351 or equivalent. Real estate financing decisions for residential and income-producing properties; risk-return analysis for varying conditions of financial leverage; decision making related to pricing, alternative financing methods, refinancing, mortgage portfolio management; financing methods; government involvement in mortgage market and housing finance.

3354 Topics in Real Estate (3) Prereq: FIN 3352 or 3353 or consent of instructor. Topics vary.

3355 Real Property Law (3) Prereq: FIN 3201. Rights and obligations which attach to various types of ownership of immovable property both in Louisiana and Anglo-American jurisdictions.

3440 Risk and Insurance (3) Nature of nonspeculative risks and possible alternative methods of treating them; specific application of these methods to personal and business risks arising from life, health, property, and liability contingencies; influence of public policy on risk treatment.

3441 Life and Health Insurance (3) Analysis of insurance protecting against economic loss caused by termination of earning capacity through premature death, disability, or old age; derivation of premiums, reserves, benefits; legal aspects; operational features; use of contracts and provisions; disability income protection.

3442 Property and Liability Insurance (3) Nature of property and liability risks; insurance coverages available to meet these risks; basic insurance principles that apply in various property and liability insurance contracts; functional aspects of insurance company operations.

3632 Bank Administration (3) Prereq: ACCT 2021 or 2101. For students interested in commercial banking careers or in role of banks within the American enterprise system. Economic role of banks; structure of banking; lending and investment techniques; bank organization and regulation; student involvement in cases and in management of a simulated bank.

3636 Financial Markets and Institutions (3) Prereq: ECON 2020 or 2030. Theoretical and institutional basis for analyzing developments in money and capital markets; use of flow-of-funds accounts as a basic tool of financial analysis; the process of financial intermediation and allocation of financial resources; examination of major factors in interest rate determination; U.S. government securities market, mortgage market, federal funds market, corporate bond market, municipal securities market.

3715 Business Finance (3) Prereq: ECON 2020 or 2030; QBA 2000; and concurrent registration in ACCT 2021 or 2101. Also offered as ECON 3715. The finance function within the business enterprise; tools and techniques of financial management, concepts of capital structure and dividend policy, working capital management, capital budgeting, institutional environment of the firm.

3717 Advanced Business Finance (3) Prereq: FIN 3715. Case studies of critical aspects of financial decision making introduced in FIN 3715; topics may include mergers and acquisitions, leasing, venture capital, and strategies for survival and growth of small firms.


4440 Group Insurance and Pensions (3) Uses of life and health insurance in various areas involving mortality and morbidity contingencies; types of health risk bearers and contracts offered; employee benefit plans with emphasis on
the private pension function, including contractual arrangements, benefit formulas, approaches to financing, problems, and issues.

4828 Security Analysis and Portfolio Management (3) Prereq: FIN 3826 or equivalent. Quantitative approaches to security selection and portfolio diversification in an efficient market; portfolio theory and management; portfolio building and selection; portfolio performance evaluations.

4830 Analysis of Corporate Financial Statements (3) Prereq: FIN 3715 or equivalent. Interpretation and evaluation of financial statements; emphasis on their use in credit analysis and in evaluation of security risks and returns; implications of recent research in accounting and finance; predictive ability of financial statement data.

4850 Speculative Financial Markets (3) Prereq: FIN 3636 and 3826; or equivalents. Financial and money markets, financial futures markets, and options markets; valuation models for the instruments in these markets; strategies for hedging and speculation in these markets; applications for individual investors, institutional investors, corporate treasurers, and financial institutions.

5200 Legal Environment of Business (2) Legal influences on the business environment; examination of various sources of law and their effect on business decisions; constitutional problems in employment, taxation, discrimination; administrative and anti-trust law; social and ethical facets of the legal environment.

7300 Seminar in Real Estate (3) Common questions concerning real estate finance and valuation; risk-return trade-offs under varying conditions of financial leverage; working papers examining forecasting techniques, tax shelters, real estate syndication, and real estate administration in the public sector.

7310 Real Estate Financial Decisions (3) Prereq: FIN 7717 or equivalent. Decisions facing participants in the real estate market, including equity investors, lenders, and government; types of decisions including refinancing; selecting between alternative financing methods, sale-leaseback, sell versus continue to operate, optimal depreciation methods, alternative methods of disposition, alternative land use controls, and pricing alternative financing instruments.

7320 Advanced Topics in Real Estate (3) Prereq: FIN 7300 or 7310 or consent of instructor. May be taken twice for credit if topics vary.

7400 Risk Management and Insurance (3) Risk management from the business manager's viewpoint; risk management as possible alternative to insurance; risk identification and measurement; risk retention, self-insurance, and risk transfer; loss funding and risk financing; access to insurance markets (including bid specifications and company selection); loss prevention; claims administration; risk management audits and insurance surveys.

7550 Theory of Finance (3) Prereq: ECON 7610 or equivalent. Theory of choice under certainty and uncertainty, time-state preference models of risk allocation, firm investment decisions, stockholder unanimity, mean-variance pricing models, arbitrage pricing models, and option pricing models.

7632 Seminar in Commercial Banking (3) Commercial banking theory and history, quantitative techniques applied to bank asset and liability management, banking structure, markets and competition, capital adequacy and profitability.

7633 Financial Markets (3) Markets for financial obligations of private and public sectors of the economy; flow-of-funds in the financial system; role of financial intermediation in savings and investment process; emphasis on nonbank financial intermediaries.

7650 Seminar in Financial Markets and Intermediaries (3) Prereq: FIN 7550. Markets and intermediaries as alternative institutional mechanisms for structuring financial transactions; analysis of transaction services provided by these institutions; benefits and costs of these transaction services as determinants of the structure and extent of the financial sector; empirical issues of particular importance in finance.

7710 Financial Management for Governments (3) Prereq: ACCT 4421 and QBA 7024. Dynamic role of finance in government, stabilization effects, impacts on financial markets; role of financial management; analytic aspects of government accounts, essential concepts of financial management; sources of government funds; allocation of funds; debt management and management of financial assets.

7717 Financial Management (3) Prereq: ACCT 5001. Limitations of financial theories of capital budgeting, markets, and structure; analytical abilities developed by use of cases which emphasize usefulness and limitations of financial data; development of cash flow projections and other estimates needed for planning; cases in management of current assets and evaluation of capital assets.

7718 Multinational Financial Management (3) Prereq: FIN 7717. Problems in cross border investment, investment analysis, capital planning, foreign currency exposure, and cash management; concepts of political risk assessment; techniques in transactional trade; alternate financial sources; issues in international financial controls.

7719 Advanced Financial Management (3) Prereq: FIN 7717. Current state of the theory of business finance and critical evaluation of the theory's usefulness to financial managers; capital expenditure, capital structure, and dividend decisions; legitimacy of alternative decision criteria; implications of uncertainty and imperfect capital markets on firm financial decisions.

7720 Topics in Business Finance (3) Prereq: FIN 7717. Detailed treatment of topics not covered in depth in FIN 7717 or 7719; prospectus usually available before registration.

7750 Seminar/Workshop in Finance (3) Prereq: FIN 7719 and 7826. Primarily for doctoral students in business administration and economics. Theory of individual decision under conditions of uncertainty; portfolio theory; capital market models; investment and financing decisions of the firm; recent papers and on-going research.


7850 Seminar/Workshop in Investments (3) Prereq: FIN 7826. Continuation of FIN 7826; appraisal of recent theoretical models of capital asset pricing, current state of empirical evidence on these models, and economics of securities transactions in efficient markets; assessment of traditional financial statement analysis, recent theories on the evaluation of financial information, and evidence on the usefulness of accounting numbers to investors; time series behavior of corporate earnings, prediction of bankruptcy and bond ratings, relationship between market and accounting measures of risk.
7900 Individual Study in Finance (3) May be taken 3 times for credit. For students who wish in-depth study of a selected finance problem. Proposal outlining nature and objectives of a research project must be approved by department faculty prior to registration; written report of semester's activities and findings required for credit.

7950 Seminar in Research (1) Required of all doctoral students in business administration concentrating in finance during each semester of full-time residence; however, only 3 sem. hrs. may be applied to the degree. Advanced research in finance; current research of doctoral candidates, faculty, and invited guests.

8000 Thesis Research (1-12 per sem.) “S”/“U” grading.

8900 Predissertation Research (1-9) May be repeated for credit.

9000 Dissertation Research (1-12 per sem.) “S”/“U” grading.

FISHERIES (FISH)

4020 Taxonomy and Ecology of Aquatic Plants (3) See BOTY 4020.

4021 Limnology (3) F 2 hrs. lecture; 3 hrs. lab. Biological, chemical, and physical principles in fresh water.

4022 Principles of Aquaculture (3) S Prereq: 8 sem. hrs. of introductory chemistry and 8 sem. hrs. of either introductory zoology or biology; or equivalent. 2 hrs. lecture; 3 hrs. lab with occasional extended field trips. Transportation fee. Basic principles underlying aquaculture of fish, crustaceans, and mollusks.

4039 Biology of Fishes (3) S Prereq: FISH 4145 or equivalent. Morphological, physiological, and behavioral adaptations of fishes to their environments; relationships between fish biology and fisheries management.

4040 Fisheries Management (4) F 3 hrs. lecture; 3 hrs. lab. Characteristics of fisheries; dynamics of exploited stocks; socioeconomic aspects of fisheries; fisheries management and research techniques; principles of managing wild fisheries stocks.

4061 Selected or Assigned Fisheries Problem (1-4) F,S,Su May be repeated for credit for a maximum of 6 sem. hrs.

4145 Ichthyology (4) See ZOOL 4145.

7001 Research Methodology (3) F See FOR 7001.

7002 Fisheries Literature and Communication (2) F 1 hr. lecture; 3 hrs. lab. Organization and communication of technical fisheries information.

7020 Ecology of Fishes (3) S Prereq: ZOOL 4153 or equivalent. Ecology of fish populations; interactions of fishes and their environment; behavioral adaptations of fishes.

7022 Water Pollution Biology (3) S Prereq: FISH 4021 or equivalent. 2 hrs. lecture; 4 hrs. lab. Transportation fee. Biological and ecological characteristics of polluted waters; effects of pollution on fish and other aquatic organisms.

7023 Fisheries Hydrography (3) F-E 3 hrs. lecture and occasional extended field trips. Transportation fee. Basic ecological aspects of the marine environment and their relevance to oceanic fisheries.

7024 Shellfisheries Biology (3) F Prereq: ZOOL 4154 or equivalent. 2 hrs. lecture; 3 hrs. lab. and extended field trips. Transportation fee. Biology and ecology of mollusks and crustaceans; species of commercial importance.

7025 Advanced Aquaculture (3) Su Prereq: FISH 4022 or equivalent. 4 hrs. lecture; 6 hrs. lab. with occasional extended field trips. Transportation fee. Aquaculture of fish, crustaceans, and mollusks.

7029 Advanced Topics in Fisheries (1-4) V May be repeated for credit for a maximum of 6 sem. hrs. when topics vary.

7070 Seminar (1) F,S,Su See WILD 7070.

7424 Diseases of Aquatic Animals (3) Prereq: consent of instructor. Basic microbiology and/or parasitology strongly recommended. 2 hrs. lecture; 2 hrs. lab. Same as VMP 7424. Identification, pathogenesis, and control of viral, bacterial, and parasitic agents causing diseases in aquatic animals.

8000 Thesis Research (1-12 per sem.) “S”/“U” grading.

8900 Research Problems in Fisheries (1-3) F,S,Su May be repeated for credit for a maximum of 6 sem. hrs. Pass-fail grading.

9000 Dissertation Research (1-12 per sem.) “S”/“U” grading.

FOOD SCIENCE (FDSC)

1049 Science of Foods (2) F Basic concepts and scientific principles as related to selection, preparation, processing, preservation, distribution, and use of foods.

3900 Food Science Research (1-3) Prereq: consent of department head. May be repeated for credit for a maximum of 6 sem. hrs. Pass-fail grading. Student outlines and executes project and prepares a written report; problems related to processing, quality control, safety, and nutritional evaluation of foodstuffs.

4000 General Food Science (3) F Not for graduate credit for food science majors. Scientific and technological principles related to the physical, chemical, nutritional, and organoleptic properties of foods; emphasis on ingredients and safety.

4005 Food Engineering Systems (3) S Prereq: FDSC 4000 or equivalent. 2 hrs. lecture; 3 hrs. lab. Application of engineering principles to various unit operations in food processing.

4040 Quality Assurance in the Food Industry (4) S See DARY 4040.

4050 Food Composition and Analysis (4) F Prereq: FDSC 4000. MBIO 2051. and either CHEM 2060 or 2262; or equivalents. 2 hrs. lecture; 6 hrs. lab. Principles of official and acceptable chemical, microbiological, and physical methods used in food analysis; application of these methods to examination of raw and processed foods.

4060 Food Chemistry (3) S Prereq: BCH 4087, CHEM 2262, and FDSC 4000; or equivalents. Chemistry of food components; reactions occurring during processing and storage.

4070 Food and Drug Laws, Standards, and Regulations (2) V Prereq: consent of instructor. Federal, state, and city food and drug laws, and how they regulate manufacture, distribution, and use of foods and regulated products.

4075 Food Preservation (3) F Prereq: CHEM 2262 or equivalent. MBIO 2051, and at least 3 sem. hrs. in any food science
course; or consent of instructor. 2 hrs. lecture; 3 hrs. lab. Microbiology and biochemistry of food spoilage, engineering techniques of food preservation, and food plant sanitation; representative methods of food preservation.

4086 Marine Food Resources and Technology (3) F-O Prereq: consent of instructor. Also offered as MRSC 4086. Development and utilization of food from the sea; impact of world fisheries, fisheries technology, and seaweed and algal extractives on food science and malnutrition problems; marine productivity in terms of food chain and microbial transformation processes, pollution, and by-product recovery.

4162 Microbiology of the Dairy and Food Industries (4) S See MBIO 4162.

7000 Perspectives in Nutrition (1) F History of development of nutrition as a science; current trends in nutritional research; literature research in nutritional sciences.

7005 Food Enzymes (3) S-O Prereq: FDSC 4060 and MBIO 2051; or equivalents. 2 hrs. lecture; 3 hrs. lab. Enzymatic reactions; utilization and problems occurring in foods during collection, processing, storage, and distribution to consumers; applications of enzymes in food processing.

7010 Food Toxicology (4) F-O Prereq: MBIO 2051 and 3115, introductory food science, and consent of instructor. 3 hrs. lecture; 3 hrs. lab. Principles and processes of food safety and toxicology; types of food-borne infections and poisonings; natural food toxicants; toxicants of marine microbial origin; etiology of food-borne diseases; microbiological examination of foods, evaluation of food additives, and criteria of food protection.

7016 Nutrient Availability in Processed Foods (3) F Prereq: ANSC 4009. Chemical and physical factors and interrelationships which influence nutrient retention and availability in processed foods.

7018 Synthetic Foods and Dietary Substitutes (3) S Prereq: BCH 4087 or FDSC 4050 or equivalent. Current and future concepts of synthetic and unconventional foods; material sources, manufacture, nutritional evaluation, and acceptance.

7030 Advanced Food Research (1-6) Prereq: consent of department head. May be repeated for credit for a maximum of 9 sem. hrs. Individual problems in pertinent areas.

7040 Flavor and Colors of Foods (3) S-E Prereq: CHEM 2262, FDSC 4000, and 4060; or equivalents. 2 hrs. lecture; 3 hrs. lab. Current methods of chemical, physical, and instrumental analysis in food colors and flavors; natural and synthetic flavorings and colorings used in the food industry.

7071 Seminar in Food Science (1) F May be taken 3 times for credit. Selected topics in food science and technology.

7094 Seminar in Nutrition (1) S Same as ANSC 7004. DARY 7094, HEC 7094, PLSC 7094. May be taken twice for credit.

8000 Thesis Research (1-12 per sem.) “S”/“U” grading.

9000 Dissertation Research (1-12 per sem.) “S”/“U” grading.

FORESTRY (FOR)

1001 Conservation of Forest Resources (2) F,S Resources of forest and range land, including wood, wildlife, recreation, forage, and water; techniques of multiple-use management of forest lands.

2001 Dendrology (2) F 1 hr. lecture; 3 hrs. lab. Transportation fee. Principal trees of the U.S.; their identification, classification, nomenclature, and distribution.

2002 Dendrology (2) S Prereq: FOR 2001 or equivalent. 1 hr. lecture; 2 hrs. lab. Continuation of FOR 2001.

2011 Forest Mensuration—I (1-2) F,S 1 hr. lecture; 3 hrs. lab. Transportation fee. Use of various forestry tools and instruments; techniques for measuring standing trees and wood products; estimating stand volume.

2043 Wood Technology and Identification (3) F 2 hrs. lecture; 3 hrs. lab. Structure and identification of wood; basic physical properties, defects, and uses of wood.

2061 Forest Ecology (3) F Prereq: BOTY 1001, 1002 or BIOL 1001, 1002, 1003, 1004; and credit or registration in FOR 2001 and AGRO 2051. 3 hrs. lecture; occasional extended field trips. Transportation fee. Basic ecological relationships of trees, forest communities, and forest ecosystems including principles of establishment, competition, succession, and productivity fundamental to the multipurpose use of forest lands.

3002 Silviculture (4) S Prereq: FOR 2011 and 2061; or equivalents. 3 hrs. lecture; 3 hrs. lab. Transportation fee. Reproduction cutting systems, direct seeding, field planting, controlled burning, intermediate cultural treatments, and application of genetics to forest tree improvement.

3003 Forest Mensuration—II (4) S Prereq: CSC 1240, EXST 2095, FOR 2011, and MATH 1022 and 1431. 3 hrs. lecture; 3 hrs. lab. Transportation fee. Principles in measuring forest resources; measuring trees and stands for volume, quality, and growth; measuring land area, wood products, and other forest resources; sampling and inventory techniques; statistical inference; techniques for growth and yield prediction.

3034 Summer Field Studies in Dendrology (1) Prereq: FOR 2001. One week of field practice. Transportation fee. Extensive review of species studied in FOR 2001; 60 to 70 more species of trees, shrubs, and woody vines indigenous to the southeastern U.S. studied; herbarium collection required.

3035 Summer Field Studies in Forest Biology (1) Prereq: FOR 3002 and 3003. One week of field practice. Transportation fee. Field analysis of forest communities; on-site examination of the influence of forestry practices on wildlife and water quality.

3036 Summer Field Studies in Mensuration (2) Prereq: FOR 3003. Two weeks of field practice. Transportation fee. Exercises in designing and conducting timber and multipurpose cruises; boundary locations and other types of land surveying associated with forest resource management.

3037 Summer Field Studies in Silviculture (2) Prereq: FOR 3002. Two weeks of field practice. Transportation fee. Field application of silviculture; tree vigor, selecting trees for thinning, timber stand improvement, regeneration methods, and soil-site relationships; field trips to view on-site silvicultural practices.

3038 Summer Field Studies in Timber Harvesting (1) Prereq: FOR 3002 and 3003. One week of field practice. Transportation fee. On-site studies of harvesting systems used in southern forestry; participation in timber harvesting; exercises in time and production.

3039 Summer Field Studies in Wood Utilization (1) Prereq:
FORE 3002 and 3003. One week of field practice. Transportation fee. On-site studies of wood manufacturing facilities; exercises in raw material relationships.

3051 Farm Forestry (2) F 1 hr. lecture; 3 hrs. lab. Not for degree credit for forestry majors. Transportation fee. Protection and management of farm woodlands.

4021 Recreation in the Forest Environment (3) F Prereq: senior standing. 2 hrs. lecture; 3 hrs. lab. Transportation fee. Resource-oriented recreation in the forest; demand and supply; recreational planning and development of forest lands and waters; basic recreation management policies and principles.

4030 Seminar in Tropical Forestry (1) V Prereq: FOR 4038; or FOR 1001 and 4039.

4032 Forest Fire Protection and Use (3) S Prereq: FOR 3037. 2 hrs. lecture; 3 hrs. lab. Transportation fee. Forest fire control and use; emphasis on southern forests.

4033 Management of Hardwoods (3) S Prereq: FOR 3002, 2 hrs. lecture; 3 hrs. lab. Transportation fee. Measurement, reproduction, and management of hardwoods.

4034 Timber Harvesting (3) S Prereq: FOR 3038 and 3039. 2 hrs. lecture; 3 hrs. lab. Transportation fee. Planning and administration of timber harvest; equipment choice, methods of planning, and operational techniques involved in movement of timber products; balancing of harvesting systems.

4035 Forest Game and Range Management (3) F Prereq: senior standing. 2 hrs. lecture; 2 hrs. lab; extended field trips. Transportation fee. Also offered as WILD 4035. Management and ecology of regional forest game mammals and birds; recreational leasing of forest land; livestock management in the forest; current forest wildlife damage control.

4036 Forest Management (4) F Prereq: CSC 1240 and FOR 3036 and 3037. 3 hrs. lecture; 3 hrs. lab. Principles of forest management; stand-level management planning, including growth and yield modeling and management decisions, decision variables, and decision criteria for managing future and current even- and uneven-aged forest stands; forest-level management planning, including traditional forest regulation concepts, harvest scheduling, and multiple-use management.

4037 Forest Resources Administration (2) V Prereq: FOR 3038 and 3039. 1 hr. lecture; 3 hrs. lab. Transportation fee. Administrative functions of the forest or park manager; alternative forms of administering organization, forest income taxes, contracts, leases, records, and landholding problems.

4038 Forest Economics (3) F Prereq: FOR 3037 and either ECON 2030 or AGEC 2075; or equivalents. Economic theory applied to forest resources and their utilization; application of marginal analysis to forest production; capital budgeting; supply of forest products; application of economic theory to multiple-use forest management.

4039 Forest Policy (3) F, S Prereq: FOR 3037, 3038, and 3039; or equivalents. 3 hrs. lecture/proseminar-type discussion. History of forestry and forest legislation; development and evaluation of forest policies; current issues in forest policy.

4040 Urban Forestry (3) V 2 hrs. lecture; 3 hrs. lab. Transportation fee. Conceptual role of trees in the urban environment; optimum use of existing forested areas; species selection and tree establishment in suitable planting spaces; street tree ordinances; tree appraisal and evaluation; street tree planning and tree inventory systems; projects used to acquaint students with actual urban forest programs.

4041 Wood Procurement (3) F Prereq: FOR 3038 and 3039. 2 hrs. lecture; 3 hrs. lab. Transportation fee. Systematic approach to purchasing timber through understanding timber taxation, long and short-term contracts, and the use of public records; timber owner and buyer relations in land and timber acquisition; mill studies and marketing of wood raw materials.

4044 Mechanical and Physical Properties of Wood (3) V Prereq: FOR 2043 or equivalent. 2 hrs. lecture; 3 hrs. lab. Standard laboratory testing procedures, basic strength determination, working stresses, and timber design.

4045 Design and Control of Wood-Using Processes (3) V Prereq: FOR 2043. Relationship of basic physical properties of wood to utilization processes involving machining, gluing, and finishing.

4046 Chemical Properties of Wood (4) V Prereq: FOR 2043; and either CHEM 2060 or 2202. 3 hrs. lecture; 3 hrs. lab. Chemistry of wood, cellulose, lignin, and extraneous materials in wood and bark; chemical utilization and modification of wood.

4047 Seasoning and Preservation (4) V Prereq: FOR 2043 or equivalent. 3 hrs. lecture; 3 hrs. lab. Principles of lumber drying and wood preservation; economics of the treating industry.

4048 Forest Products (2) S Prereq: FOR 2043. Manufacture and use of forest products.

4061 Selected or Assigned Forestry Problem (1-4) F, S, Su May be repeated for credit for a maximum of 6 sem. hrs.

4064 Forest Tree Improvement (3) F Prereq: FOR 3002. Genetic basis of variation in natural populations of forest trees and principles of utilizing this variation to obtain genetically improved trees for reforestation; techniques of genetic selection, breeding, progeny testing, tree introduction, and provenance testing.

7001 Research Methodology (3) F Also offered as FISH 7001 and WILD 7001. Planning, conducting, and reporting of research in the renewable natural resources.

7002 Advanced Silviculture (3) F E Silvics and silvicultural practices related to the commercially important Southern tree species, especially the pines; silvics and silviculture of several major commercial species outside the southern U.S.

7003 Advanced Forest Soils (3) S-F, S, Prereq: AGRO 2051 or equivalent. 2 hrs. lecture; 3 hrs. lab. Transportation fee.

7004 Forest Ecophysiology (4) F-O Prereq: CPWS 3060 and FOR 2061; or equivalents. 3 hrs. lecture; 3 hrs. lab. Whole-plant physiological responses which affect survival, growth, and reproduction of forest trees and other woody plants; evaluation of the effects of various forest site factors on the physiological processes affecting survival, growth, and yield of trees; interpretation and investigation of the response of trees to environmental stresses.

7036 Advanced Topics in Forest Biometrics and Forest Management (3) S Prereq: EXST 7014 and FOR 4036; or equivalents. Theory and practices involved in predicting growth and yield of forest stands; applications of linear and goal programming, biometrics, and capital budgeting to timber and multiple-use management.

7041 Advanced Wood Science (4) V Prereq: FOR 2043. 3 hrs. lecture; 3 hrs. lab. Topics in wood science, including review of selected literature; anatomical, physical, and chemical properties of wood, with emphasis on wood products.

7071 Graduate Seminar in Forestry (1) F, S May be taken 3 times for credit. Pass-fail grading.

8000 Thesis Research (1-12 per sem.) "S" or "U" grading.
1001 Elementary French (5) F,S,Su Credit will not be given for both this course and FREN 2050. Oral, audio-visual approach to French grammar; emphasis on conversation, supplemented by oral-aural drill in the language laboratory.

1020 French for Reading Knowledge (5) S,Su A specialized course intended to satisfy departmental reading requirement for graduate students, but carrying no graduate credit. Undergraduates may enroll on pass-fail basis only. Does not count toward satisfying foreign language requirement for undergraduates, although hours may count toward baccalaureate. Credit will not be given for both this course and introductory French courses.

2001 French for Travelers—I (3) F,S Credit not applicable toward a major in French. Does not count toward satisfying foreign language requirement for undergraduates. Basic communication patterns; practical everyday vocabulary, with exercises in comprehension and conversation.


2050 Intensive Elementary and Intermediate French (10) F,S Alternative to FREN 1001 and 2051 sequence. Credit will not be given for both this course and FREN 1001 and 2051. Basic speaking, comprehension, reading and writing skills; fundamental French grammar; emphasis on spontaneous oral expression.

2051 Intermediate French (5) F,S,Su An honors course, FREN 2052, is also available. Credit will not be given for both this course and FREN 2050. Oral, audio-visual approach to language, supplemented by aural-oral drill in the language laboratory; reading material of moderate difficulty.

2052 HONORS: Intermediate French (5) F,S,Same as FREN 2051, with special honors emphasis for qualified students.

2053 Intermediate French (3) F,S,Su An honors course, FREN 2054, is also available. Continued reading and oral work, vocabulary building, and review of the basic principles of grammar.

2054 HONORS: Intermediate French (3) F,S,Same as FREN 2053, with special honors emphasis for qualified students.

2055 Readings in French Literature (3) F,S,Su An honors course, FREN 2056, is also available. Emphasis on comprehension and oral and written expression in the language.

2056 HONORS: Readings in French Literature (3) V Same as FREN 2055, with special honors emphasis for qualified students.

2057 Introduction to French Phonetics (2) F Phonetic system of French; intensive oral practice with individual sounds; analysis of basic theoretical principles involved in French pronunciation.

2060 Advanced French Grammar and Composition (3) F,S Prereq: FREN 2055. Special problems in French grammar and syntax; emphasis on the written language.

2071 Survey of French Literature (3) F Development of French literature from its beginnings to the 18th century.

2072 Survey of French Literature (3) S Continuation of FREN 2071; the main authors and literary movements from the 18th century to the present.

3001 French Culture and Civilization (3) Y Taught in French, Various aspects of French culture and civilization; emphasis on those factors necessary for understanding contemporary France.

3058 French Conversation for Non-native Speakers (3) V Prereq: FREN 2060 or equivalent. Practice in speaking the language to develop fluency and increase vocabulary.

4000 Old French and Medieval Literature (3) V Major aspects of the language and literature of the period.

4001 History of the French Language (3) V Development of French from its beginnings to the present; attention to formation of the modern language.

4004 Critical Methods and Theory (3) V Current and past modes of critical discourse and their application to literary texts.

4005 Advanced French Syntax and Stylistics (3) F,S Syntactical structure of French, with attention to stylistic improvement of written and oral expression.

4010 French Literature of the 16th Century (3) V Major aspects of the literature of the period; topics will focus variously on an author, a theme, or a genre.

4015 Advanced French Phonetics (3) S Analysis of theoretical principles of French phonetics and their application in dictations, transcription, and corrective exercises; detailed examination of regular and irregular pronunciations to perfect overall pronunciation and listening comprehension.

4016 Applied French Linguistics (3) F Prereq: FREN 2060 and 4015. Techniques for teaching French; their application in the classroom.

4020 French Literature of the 17th Century (3) V Major aspects of the literature of the period.

4030 French Literature of the 18th Century (3) V Major literary, philosophic, and scientific currents of the period and their interrelations.

4031 The French Film (3) V Art of the French film from Louis Lumière to the present; its interrelations with French literature; screening and analyses of representative films.

4040 French Literature of the 19th Century (3) V Major aspects of the literature of the period.

4041 Translation Skills (3) V Prereq: FREN 2060 or equivalent. An analytic approach to the structures of English and French and the strategies and techniques for their translation in literary, technical, and scientific contexts.

4050 French Literature of the 20th Century (3) V Major aspects of the literature.

4051 French for Business (3) F Prereq: FREN 2053 or 3058. Taught in French. Language acquisition for students preparing for careers involving trade or business activities with French-speaking areas.

4060 French Literature of Quebec (3) V Major aspects of the literature of Quebec.

4064 Pidgin and Creole Languages (3) V See ANTH 4064.
4065 Louisiana French (3) V Dialect areas of Louisiana, including Cajun and Creole speech communities; language contact, language variation, and problems of analysis.

4070 Literature of Africa and the Caribbean (3) Major aspects of francophone African and Caribbean literature.

4081 French Literature in Translation (3) F,S Su Credit not applicable toward a major in French; knowledge of French not required. May be taken twice for credit when subject matter varies. Selected periods, topics, or movements.

4100 Special Topics in French (3) May be taken twice for credit with consent of department if content varies.

4150 Independent Work (1-3) F,S,Su May be repeated for credit for a maximum of 3 sem. hrs. Readings in French literature directed by a senior faculty member.

7005 François Villon and His Age (2) V François Villon and other important figures of the Middle French period, notably Guillaume de Machaut, Eustache Deschamps, Christine de Pisan, Alain Chartier, and Charles d'Orléans.

7006 Studies in Medieval French Literature (3) V May be taken twice for credit with consent of department if content varies. Topics focus on an author, movement, or literary mode.

7012 Studies in 16th-Century French Literature (3) V May be taken twice for credit with consent of department if content differs. Topics focus on an author, movement, or literary mode.

7013 Montaigne (3) V The Essais and their importance.

7021 French Classicism (3) V The classical mode in 17th-century French literature; literary and artistic doctrine, major authors, and genres.

7022 Studies in 17th-Century French Literature (3) V May be taken twice for credit with consent of department if content varies. Topics focus on an author, movement, or literary mode.

7031 Les Philosophes (3) V Aesthetic and language theory as developed in the Encyclopédie and in other major texts of the period.

7032 Studies in 18th-Century French Literature (3) V May be taken twice for credit with consent of department if content differs. Topics focus on an author, movement, or literary mode.

7041 French Romanticism (3) V Historical, epistemological, and semiotic aspects of French Romanticism.

7042 Studies in 19th-Century French Literature (3) V May be taken twice for credit with consent of department if content differs. Topics focus on an author, movement, or literary mode.

7051 The 20th-Century Novel (3) V The work of such major novelists as Gide, Proust, Malraux, Camus, Beckett, and Robbe-Grillet.

7052 Studies in 20th-Century French Literature (3) V May be taken twice for credit with consent of department if content differs. Topics focus on an author, movement, or literary mode.

7201 French Phonology and Morphology (3) V Sound structure, form, and function in French; principles and techniques of French phonological and morphological analysis.

7202 French Syntax and Semantics (3) V French transformational generative syntax; modern semantic theory, with emphasis on generative semantics and its relationship to the syntactic component.

7203 French Dialectology (3) V Principles and methods of areal linguistics and social dialectology in French-speaking areas.

7204 Field Methods in French Linguistics (3) V Methods of eliciting linguistic materials, processing and analyzing data, and writing linguistic descriptions; detailed study of dialects of Louisiana French.

7206 Louisiana French and Bilingualism (3) V Some field work required. Sociolinguistic, psychological, and linguistic aspects of bilingualism as they apply to Louisiana; analysis of language contact situations, language change and variation.

7300 Old Provençal (3) V Phonology and morphology of Old Provençal, based on the study of literary texts.

7960 Special Topics in French Literature (3) V May be taken twice for credit for the master's degree and 3 times for the doctorate when topics vary. Topics to be announced.

7962 Special Topics in French Linguistics (3) V May be taken twice for credit for the master's degree and 3 times for the doctorate when topics vary. Topics to be announced.

7970 Seminar in French Literature (3) V May be taken twice for credit when topics vary. Topics to be announced.

7980 Seminar in French Linguistics (3) V May be taken twice for credit when topics vary. Topics to be announced.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

GEOGRAPHY (GEOG)

1001, 1003 Human Geography (3,3) F,S,Su Courses need not be taken in numerical order. Credit will not be given for these courses and GEOG 2062. Culture traits—such as languages, religious beliefs, and cultural transformations of natural landscapes—as a basis for dividing the earth's surface into its most significant parts; the seven culture worlds and their development, present situation, and interaction.


2050 Physical Geography: The Atmosphere (3) F,S,Su Credit will not be given for both this course and GEOG 2061. Physical principles, processes, and operations in the atmosphere; world climatic realms.

2051 Physical Geography: Land and Water Surfaces, Plant and Animal Realms (3) F,S,Su Credit will not be given for both this course and GEOG 2061. Surface elements of the earth's environment; relationships among these elements.

2052 Geography of North America (3) V Credit will not be given for both this course and GEOG 4052. Physical and cultural analysis.

2055 Map Reading (3) F,S 2 hrs. lecture; 2 hrs. lab. Nature and interpretation of topographic maps.

2061 Physical Geography (3) F,S,Su Either GEOG 2050 or 2051 may be substituted for this course. Credit will not be given for both this course and GEOG 2050 or 2051. Analysis of landforms, hydrology, climate, vegetation, and soil; emphasis on world regional patterns.
2062 Cultural Geography (3) F,S,Su The only substitute for this course is satisfactory completion of both GEOG 1001 and 1003. Credit will not be given for both this course and GEOG 1001 or 1003. The nations of the world, integrated into regional patterns.

3039 Cartographic Drafting and Graphic Presentation (3) F 2 hrs. lecture; 2 hrs. lab. Use of basic drafting instruments and techniques necessary for preparation of maps and scientific graphics.

3065 Practical Geography of Petroleum Resources (3) Geographic aspects of petroleum resources; land and mineral ownership; compilation and application of maps, air photos, archives, surveys, and field work; utilization, site analysis, and impact; emphasis on Louisiana and Gulf Coast case studies.

4001 Geography of Louisiana (3) F,S,Su Natural and cultural elements and regions.

4012 Elements of Cultural Geography (3) F-E Culturally oriented proseminar in American geographical thought during the present century.

4013 Meteorology (3) F-O Temporal and areal variations in composition and structure of the atmosphere; meteorological instruments and measurements.

4014 Climatology (3) V Climatic phenomena; methods used in development of regional climatology.

4015 Microclimatology (3) F-O Prereq: GEOG 4013 or 4014 or equivalent. Exchanges of radiation, energy, and moisture between the earth's surface and the atmosphere producing characteristic environmental conditions near the ground important to both rural and urban land uses.

4016 Methods of Climatological Analysis (2) V Prereq: GEOG 4013 and 4014; or equivalents. 1 hr. lecture; 2 hrs. lab. Analysis and interpretation of climatological data and application to physical and human problems.

4020 Aerial Photo Interpretation (3) F Prereq: GEOG 1001. 2 hrs. lecture; 2 hrs. lab. May be taken for elective geology credit. Analysis and mapping of geologic structure, lithology, and landforms from aerial photographs.

4021 Alluvial Morphology (3) F-O Prereq: GEOG 1001, 1003. May be taken for elective geology credit. Processes that originate and change land and hydrographic forms of alluvial surfaces; particular emphasis on Louisiana.

4022 Geomorphology (3) F-E Prereq: GEOG 1001, 1003. May be taken for elective geology credit. Basic principles underlying the study of land forms; emphasis on processes shaping the natural landscape.

4023 Coastal Morphology and Processes (3) Prereq: consent of instructor. Also offered as GEO 4023. Coastal areas and processes; morphology, sedimentary properties, nearshore oceanographic characteristics, and beach and coastline development.

4026 The Mountain World (3) The world mountain environment; physical landforms and processes and human occupancy; basic description of mountains complemented by human perception of mountains, physiological and cultural adaptation to high altitudes, and current mountain land-use policies and strategies.

4028 The Ocean World (3) F Characterization and appraisal of physical and biological phenomena of marine and coastal environments.

4029 Marine and Coastal Resources (3) S Factors affecting human use of the oceans and coasts; areal, temporal, cultural, and economic controls affecting marine resource exploitation.

4031 Spanish America (3) F-O Physical and cultural geography of Mexico, Central America, and Spanish South America.

4032 Brazil and the Caribbean Area (3) F-E Physical and cultural geography of Brazil, the Guianas, and the Caribbean Islands.

4040 Advanced Cartography (3) V Prereq: GEOG 3039 or equivalent. 2 hrs. lecture; 2 hrs. lab. Cartographic history; map projection; advanced techniques of data presentation and cartographic production.

4041 Field Methods in Geography (3) F,S 1 hr. lecture; 4 hrs. lab. Cannot be repeated for credit. Students must have Saturdays free. Fall semester emphasis on interpretation of the cultural landscape; spring semester emphasis on the physical landscape.

4043 Computer Cartography (3) F,S 2 hrs. lecture; 2 hrs. lab. Use of certain prepared computer mapping programs (SYMAP, CALFORM, GEOMAP, CAM, ASP, SURFACE-II, and POLYVRT), and techniques necessary to prepare scientific graphics using these programs.

4045 Environmental Remote Sensing (3) S Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Basic energy and matter relationships; working principles of the primary remote sensors; environment studied via remote sensing techniques.

4047 Geographical Information Systems (3) F,S Prereq: CSC 1240 and GEOG 4045. 2 hrs. lecture; 2 hrs. lab. Geographical information systems used in land resource management and planning; data structures and algorithms for automated retrieval and analysis of spatial data; structuring cartographic data into spatial data; integration of remotely sensed data into geographical information systems.

4049 Advanced Computer Cartography (3) F-O Prereq: CSC 1240 and GEOG 4043. 2 hrs. lecture; 2 hrs. lab. Development and use of computer mapping programs; theory and methods of display of point, line, and area elements in thematic maps; algorithms involved in encoding, editing, storing, retrieving, and displaying data from a digital cartographic data base.

4050 Historical Geography of the South (3) F-O Physical and cultural geography of the southern U.S.; emphasis on geographical elements identified with the south and their historical development; environment, exploration, population, agriculture, and cultural landscape.

4052 Anglo-America (3) V Credit will not be given for both this course and GEOG 2052. Physical and cultural geography of Anglo-America.

4055 Geography of Europe (3) S-O Geographical survey of the natural, cultural, and economic resources of Europe and their relationships to the rest of the world.

4060 Political Geography (3) V Systematic, cultural-political geography, emphasizing both technical and philosophical aspects; general and comparative in scope, with emphasis on American political landscapes; territorial political entities (cadastral, civil, national, imperial), role of the lands and seas, nature and objects of war, impacts of political entities on the landscape.

4070 Environmental Conservation (3) F-E Factors governing human use of the earth and its resources.

4073 Urban Geography (3) V Internal arrangement, external
relations, and locational aspects of urban places, with emphasis on U.S.; urban places identified by presence of tertiary economic activities.

4077 Economic Geography (3) F-O Location, characteristics, and relationships of primary, secondary, and tertiary economic activity; measurements and theories of location of economic endeavor.

4082 Biogeography (3) F-O Different approaches to description and interpretation of plant and soil distribution patterns.

4083 Quaternary Paleocology (3) S-O Prereq: GEOG 4082 and a basic course in historical geology, or equivalents. 2 hrs. lecture; 4 hrs. lab. Also offered as ANTH 4083. Theory and method of reconstructing, biological, geological, and human history during the Pleistocene and Holocene periods.

4085 Tropical and Subtropical Biogeography (3) S-E Prereq: GEOG 4082 or equivalent. Includes field trip during spring vacation. Principles of tropical ecology and biogeography taught as preparation for an expedition to tropical America where field methods will be illustrated and ecological diversity studied.

4086 Cultural Geography (3) S-E Prereq: year course in biology. Also offered as ANTH 4086. Ethnobiology, human adaptation processes, energy flow, world biomes; emphasis on strategies of individuals and small groups in various regional contexts.

4090 The History of Geography (3) V 3 hrs. lecture and seminar discussion. Development of geography since ancient times; emphasis on the 19th and 20th centuries.

4164 Deltaic Geology (3) V See GEOG 4164.

4998 Independent Reading and Research in Geography (1-6) F.S.Su May be repeated for credit. An honors course, GEOG 4999, is also available. Supervised research or research on topics selected by qualified advanced students.

4999 HONORS: Independent Reading and Research in Geography (1-6) Same as GEOG 4998, with special honors emphasis for qualified students.

7901 Introduction to Graduate Study (1) F Same as ANTH 7901. Techniques and methods of their profession for incoming graduate students.

7906 Settlement Geography—Exploration (3) V May be taken 3 times for credit with consent of department.

7909 Coastal Swamps and Marshes (3) V See MRSC 7209.

7910 Form-Process Relationships in Coastal Environments (3) V See MRSC 7210.

7917 Advanced Physical Geography (3) V May be taken 3 times for credit with consent of department.

7921, 7922, 7923 Research and Field Work in Geography (3-6 each) F.S.Su Each course may be repeated for credit.

7926 Advanced Geomorphology (3) V May be taken 3 times for credit with consent of department.

7937 Geographical Literature (3) V

7938 Culture History (3) V May be taken 3 times for credit with consent of department.

7941 Coastal Ecology (3) V Prereq: GEOG 4028 or equivalent. 2 hrs. lecture; 4 hrs. lab. Also offered as MRSC 7241. All students must have weekends free.

7942 Coastal Climatology (3) V Prereq: GEOG 4028 and a basic course in either meteorology or climatology, or consent of instructor. Also offered as MRSC 7142. Meteorologic and climatologic phenomena occurring in coastal areas.

7946 Coastal and Estuarine Resources (3) V Prereq: GEOG 4028 and 4029; or equivalents. Also offered as MRSC 7246. The nature of coastal and estuarine resources and their perception, evaluation, and exploitation by people.

7950 Problems in the Geography of Latin America (3) S-O Prereq: reading knowledge of Spanish or Portuguese. Selected problems in the cultural and economic geography of Latin America.

7960 Hydroclimatology (3) F-O Prereq: GEOG 4014 or 4015 or equivalent. 1 hr. lecture; 4 hrs. lab. Field measurements and laboratory analyses of radiation and water budgets in rural and urban environments; emphasis on evapotranspiration rates and climatic consequences.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

GEOLOGY (GEOL)

1001 General Geology: Physical (3) Prereq: credit or eligibility for MATH 0092. Credit will not be given for both this course and GEOL 3001. An honors course, GEOL 1002, is also available. Earth materials and land forms; processes at work on and within the earth.

1002 HONORS: General Geology: Physical (3) Same as GEOL 1001, with special honors emphasis for qualified students.

1003 General Geology: Historical (3) Prereq: GEOL 1001. Credit will not be given for both this course and GEOL 2003. An honors course, GEOL 1004, is also available. History of the earth and life on it, as deciphered from study of its rocks and fossils.

1004 HONORS: General Geology: Historical (3) Same as GEOL 1003, with special honors emphasis for qualified students.

1005 Introduction to Oceanography (3) Prereq: GEOL 1001. The world’s oceans, their origin and evolution; interactions between physical, geological, chemical, and biological processes in the marine environment; use and abuse of oceans.

1006 Introduction to Computer Analysis in Geoscience (1) Prereq: GEOL 1001, 1003 or equivalents and consent of instructor. 2 hrs. lab. Role of computer systems in geological investigations; current computer use for automatic plotting, trend surface analysis, simulation studies, information storage and retrieval systems, and statistical analysis.

1007 Geology of the National Parks (1) Prereq: GEOL 1001. May not be taken for credit by geology majors. National parks and other scenic areas used to illustrate basic geology concepts.

1601 Physical Geology Laboratory (1) Prereq: credit or concurrent enrollment in GEOL 1001. Includes one Saturday field trip. Lab related to GEOL 1001; topographic maps; properties of minerals and rocks; analytical techniques used in geology; structural geology, and geologic maps.

1602 Historical Geology Laboratory (1) Prereq: credit or concurrent enrollment in GEOL 1003. Includes one Saturday field trip. Lab related to GEOL 1003; sedimentary rocks and environments, geobiological sequences, fossils, and the historical geologic record as interpreted from maps.
2001 World Energy Resources (3) Prereq: GEOL 1001. Also offered as GEOG 2001. Geological and geographical factors of energy; emphasis on distribution, use, reserves, and potential of hydroelectric, geothermal, tidal, and solar power; mineral fuels and raw materials; waste disposal; and site inspection.

2003 Geology of the Grand Canyon (3) Prereq: GEOL 1001 and consent of instructor. 1½ hrs. lecture; 10-day field trip to the Grand Canyon during spring vacation. Credit will not be given for both this course and GEOL 1003. Transportation fee. General principles of historical geology; regional geology of the Grand Canyon.

2071 Elementary Structural Geology (3) Prereq: GEOL 1006 and 2661; or equivalents. 2 hrs. lecture; 3 hrs. lab. Description, classification, illustration, and recognition of typical earth structures, especially folds, faults, and unconformities.

2081 Mineralogy (4) Prereq: CHEM 1002. 3 hrs. lecture; 3 hrs. lab. Elementary crystallography, the general chemical and physical properties of minerals, and optical crystallography.

2082 Mineralogy (4) Prereq: GEOL 2081. 3 hrs. lecture; 3 hrs. lab. X-ray crystallography, phase diagrams, and rock-forming minerals.

2661 Graphic Methods and Map Interpretation (2) Prereq: GEOL 1001, 1003, 1601, and 1602. 1 hr. lecture; 3 hrs. lab. Orthographic and stereographic projections; interpretation of geologic and structure contour maps; three-dimensional geology.

2666 Introductory Field Geology (1) Prereq: GEOL 1001 and 1003; or equivalents. Not open to students on scholastic probation. Saturday, weekend, and/or vacation field trips to points of geologic interest. Students must keep Saturdays open for these trips. Transportation fee for nonmajors.


3031 Sedimentary Geology for Petroleum Engineers (3) Prereq: GEOL 1001. Sediments and sedimentary rocks from the standpoint of processes and products through time; the natural rock system.

3666 Field Geology (6) Su only Prereq: GEOL 2082, 2661, and 2666; or equivalents. Students planning to take this course should apply to the camp director no later than Feb. 15. Camp fee. Six weeks in the Front Range of Colorado and adjacent mountainous areas.

3901, 3902 Senior Seminar (0,0) Approx. 2 hrs./wk. Weekly lectures given by extramural specialists on various aspects of geology; discussion sessions.

3909 Geological Research (1-3)

4001 Advanced Physical Geology (3)

4023 Coastal Morphology and Processes (3) See GEOG 4023.

4031 Introductory Sedimentation (3) Prereq: GEOL 1003. 2 hrs. lecture; 2 hrs. lab. Mineralogy, texture, structures, and stratigraphy of sediments and sedimentary rocks; their origin through weathering, erosion, transportation, deposition, and diagenesis.

4041 Igneous and Metamorphic Petrology (3) Prereq: GEOL 2082. 2 hrs. lecture; 3 hrs. lab. Composition, textures, structures, distribution, and origin of igneous and metamorphic rocks.

4042 Principles of Economic Geology (3) Prereq: GEOL 2071 and 2081. 2 hrs. lecture; 3 hrs. lab. Geology and genesis of metallic and nonmetallic earth resources.

4062 Applied Geophysics (3) Prereq: GEOL 2071 and MATH 1552. Application of seismic refraction and reflection, gravity, and magnetic techniques to mineral exploration and to interpretation of the structure of the earth's crust; geophysical data processing.

4064 Solid Earth Geophysics (3) Prereq: GEOL 2071 and MATH 1552. Fundamental concepts and methods used to study the structure and dynamics of the earth; rotation, gravity, seismology, heat flow, geomagnetism, paleomagnetism, radioactivity, and deformation.

4066 Plate Tectonics (3) Prereq: GEOL 2071. Basic and contemporary concepts of plate tectonics; geophysical observations and geologic implications.

4071 Advanced Structural Geology (3) Prereq: a minimum of 20 hrs. in geology courses, including GEOL 2071. 2 hrs. lecture; 3 hrs. lab. Structural geology of the U.S.; its application to problems of folding, faulting, rock mechanics, and plate interactions.

4081 Chemical Oceanography (3) Prereq: consent of instructor. 3 hrs. lecture/seminar. Also offered as MRSC 4126. Controls on the mass balance and distribution of major elements, trace elements, heavy metals, dissolved gases, and nutrients in estuarine and open-ocean systems.

4082 Introduction to Geochemistry (3) Prereq: GEOL 2082 and MATH 1550. Crystal chemistry; application of chemical principles to problems of the origin and evolution of the earth's crust, ocean, atmosphere, and economic resources; major geochemical cycles.

4083 Introduction to Isotope Geology (3) Prereq: GEOL 2082 and MATH 1550; or equivalents. Basic principles of nuclear chemistry, radioactive decay, and isotopic fractionation processes; introduction to radiometric dating techniques and stable isotope studies.

4111 Vertebrate Paleontology (3) Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Phylogenetic survey of fossil vertebrates; their origins and transitions; problems in vertebrate taphonomy, biostatigraphy, and fossil collection and preparation.

4131 Basin Analysis (3) Prereq: GEOL 4031. Basic environment of sediment deposition considered by use of sedimentological models and their relationships within depositional basins; analysis of theoretical basin models and comparison with modern and ancient sedimentary basins.

4161 Gulf Coast Geology (3) Prereq: GEOL 2071. Origin and evolution of the Gulf Basin; stratigraphy and structure of Mesozoic and Cenozoic rocks, sedimentary facies, sedimentary tectonics, geothermal heat flow, fluid migration, mineral and water diagenesis, salt and shale diapirism, structural deformation, and the occurrence of oil and gas.

4164 Deltaic Geology (3) Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Also offered as GEOL 4164. Processes of deltaic sedimentation and the nature of deltaic sediments; the Mississippi River delta compared to other modern and ancient deltas.

4165 Subsurface Geology (3) Prereq: GEOL 1001, 1003, 1601, 1602; GEOL 2661 and PETE 4088 strongly recommended. 2 hrs. lecture; 3 hrs. lab. Principles and methods of exploration, analysis, and interpretation using borehole data, electric logs, and samples of rocks and fluids; construc-
GERMAN (GERM)

1001 Elementary German (5) Intensive drill in German speech habits; conversation, aural comprehension, dictation, and functional grammar.

1020 German for Reading Knowledge (5) A specialized course intended to satisfy departmental foreign language reading requirement for graduate students, but carrying no graduate credit. Undergraduates may enroll on pass-fail basis only. Does not count toward satisfying foreign language requirement for undergraduates, although hours may count toward baccalaureate. Credit will not be given for both this course and introductory German courses.

2051 Intermediate German (5) Continuation of oral-aural practice; systematic grammar review; readings in modern German prose.

2053 Intermediate German (3) Extensive and rapid reading of German; continued oral work, vocabulary building, and review of grammar.

2055 Readings in German Literature (3)

2061 Advanced German Grammar (3) For German majors or students preparing to teach the language. Intensive course in German grammar.

2062 Advanced German Composition and Syntax (3) Prereq: GERM 2061. Intensive practice to acquire correctness and fluency in both oral and written expression, as well as the ability to understand lectures in German.

2075 German Civilization (3) German civilization from early Germanic times to the present.

2090 Germanic Mythology (3) Taught in English; knowledge of German not required. Credit not applicable toward a major in German. Germanic myths and legends; their manifestations in religion, literature, art, and music.

3081 Survey of German Literature from the Beginning to 1350 (3) Prereq: GERM 2055 or equivalent. Readings from the earliest records through the high Middle Ages to approximately 1350; emphasis on the courtly period (1180-1220).

3083 Survey of German Literature, 1830-1890 (3) Prereq: GERM 2055 or equivalent.

3084 Survey of German Literature, 1890-Present (3) Prereq: GERM 2055 or equivalent.

7909 Geological Research: General (1-6) General student-selected research topics; focused group research, including crustal geophysics.

7911 Seminar in Geology: Paleontology (2) May be repeated for credit.

7919 Geological Research: Paleontology (1-6)

7931 Seminar in Geology: Sedimentology (2) May be repeated for credit. Fall semester: carbonate sedimentology; spring semester: clastic sedimentology and sedimentary environments.

7939 Geological Research: Sedimentology (1-6)

7941 Seminar in Geology: Igneous and Metamorphic Petrology (2) May be repeated for credit.

7949 Geological Research: Igneous and Metamorphic Petrology (1-6)

7961 Seminar in Geology: Dimensional Geology (2) May be repeated for credit.

7966 Field Work (1-9)

7969 Geological Research: Dimensional Geology (1-6)

7971 Seminar in Tectonics (3) Topics such as plate tectonics, diapirism, isostasy, and the tectonics of specific areas.

7972 Seminar in Geophysics (3) May be taken twice for credit. Structure and composition of the mantle; physical processes at ridges, trenches, and transform faults; dynamics of plate interiors; intraplate stress; and thermal histories of the earth and other terrestrial planets.

7981 Seminar in Geochemistry (2) Prereq: consent of instructor. May be taken 3 times for credit. Mineralogy, paragenesis, geochemistry, and natural occurrence of authigenic silica in sediments; other topics such as hydrogeochemistry, isotope geochemistry, and the geochemistry of carbonates.

7989 Geological Research: Geochemistry and Mineralogy (1-6)

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

3090 Friedrich Nietzsche (3) Knowledge of German not required. German majors in culture and thought option may receive credit. Also offered as PHIL 3090. Major works of Nietzsche studied in the context of the three periods of productivity and evolution of his thought.

3091 Special Topics in German Literature in Translation (3) Knowledge of German not required. German majors in culture and thought option may receive credit. May be taken twice for credit when topics vary.

3490 Germanic Saga and Legend (3) Credit not applicable toward a major in German. Epics and tales grouped around cycles such as Theoderic/Dietrich of Bern and Siegfried/Sigurd; transformation of the historic figure into the legendary hero and chronological evolution of material from the earliest forms; readings in English translation.

4001 History of the German Language (3) Position of German among the Indo-European languages, and development of German from the time of its first written records; a comparison of development of German to that of English; examination of illustrative passages in various Teutonic languages and dialects; etymological studies.

4002 German Phonetics (3) Analysis of German phonetic principles with extensive practice and corrective drill in the language laboratory; teaching German pronunciation to English-speaking students.

4026 19th-Century German Drama (3)

4027 Classical German Literature (3) German classicism, with special reference to Lessing, Goethe, and Schiller.

4031 German Poetry (3) Lyric poetry, with emphasis on the period 1750-1925.

4033 The German Novel (3) History and theory of this genre with extensive readings illustrative of its stages of development from Goethe to Thomas Mann; attention to the novelle of the "poetic realists" of the late 19th century.

4041 Special Topics in Older Germanic Literature (3) May be taken twice for credit.

4042 Special Topics in 18th-Century German Literature (3) May be taken twice for credit.
GREEK (GREK)

1001 Elementary Greek (5) Readings to provide mastery of simple Greek prose; forms, vocabulary, syntax, and grammar.

2051 Intermediate Greek (5) A continuation of Greek 1001; readings of prose texts of moderate difficulty.

2053 Homer (3) Readings from the Iliad or Odyssey; selected passages from various books; some attention to aesthetic and historical problems.

2055 Greek Drama (3) Readings in Greek drama including a representative play of Sophocles or Euripides.

2075 Classical Epic in Translation (3) Taught in English; knowledge of the Greek and Latin languages not required. Growth and development of the type of classical literature called epic; includes both Greek and Latin works; emphasis on the nature and growth of this type of literature, its basic themes, the nature of a hero, and the possible relevance to the modern reader.

2092 Greek and Latin Word Study (3) No previous knowledge of Greek or Latin required; credit not applicable toward a major in classical languages or Latin. Etymology of common and scientific words derived from Greek and Latin; emphasis on medical terminology.

3015 The Archaeology of Ancient Greece (3) Also offered as ANTH 3015. Material culture of the great civilization of ancient Greece; includes Neolithic Age, Bronze Age (Mycenaean-Minoan), Classical Age, and the Age of Alexander the Great.

3032 Greek and Roman Tragedy in English Translation (3) Taught in English; knowledge of the Greek and Latin languages not required. Credit not applicable toward a major in Latin or classical languages. The drama of Greece and Rome; its origins, major examples, and their relevance; plays of Aeschylus, Sophocles, Euripides, and Seneca.

3040 Greek and Roman Comedy in English Translation (3) Knowledge of Greek or Latin not required. Masters of stage comedy from the ancient world with special attention to Aristophanes, Menander, Plautus, and Terence; origins and growth of comedy as an art form; problems in staging; social nature of comedy in the ancient world.

4023 Special Topics in Greek Poetry (3) May be taken twice for credit. Readings and studies in one or more of the following: Homer, Hesiod, Pindar, Greek lyric poetry, Aeschylus, Sophocles, Euripides, Aristophanes.

4024 Special Topics in Greek Prose (3) May be taken twice for credit. Readings and studies in one or more of the following: Herodotus, Thucydides, the Pre-Socratics, the orators, Plato, Aristotle.

4915 Independent Work (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings in Greek literature directed by a senior faculty member.

HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE (HPRD)

Courses offered are of two types: (1) basic activity courses such as tennis, golf, etc. open to all students of the University; and (2) professional courses in health, physical education, recreation, and dance. All activity courses are offered on a letter-grade basis; however, a student may petition to receive a pass-fail grade.
Basic Activity Courses

Students in these classes must furnish and wear clothing suitable to the activity.

1122 to 1160 Beginning Courses in Sports, Gymnastics, Aquatics, and Dance (1 each)
- 1122 Wrestling
- 1123 Archery
- 1124 Tennis
- 1125 Golf
- 1126 Gymnastics
- 1127 Modern Dance
- 1128 Riffery
- 1129 Badminton
- 1130 Bowling
- 1131 Ballet
- 1132 Ballroom Dance
- 1133 Children’s Rhythms For elementary grades, physical education, or special education majors.
- 1134 International Folk Dance
- 1136 Swimming
- 1140 Scuba Diving Prereq: HPRD 1236 or consent of instructor.
- 1142 Conditioning Exercises
- 1144 Aerobic Dance
- 1146 Weight Training
- 1148 Pistol Marksmanship
- 1151 Racquetball
- 1153 Jazz Dance
- 1154 Martial Arts
- 1155 Jogging
- 1156 Outdoor Living Skills American Red Cross Standard First Aid Certificate recommended.
- 1157 Aerobic Swimming Prereq: HPRD 1236 or intermediate swimming skills.
- 1158 Canoeing Prereq: must be able to swim 50 yards with a personal flotation device; tread water for one minute and swim 50 yards without a personal flotation device.
- 1160 Adapted Physical Education For students who cannot participate in vigorous physical exercise due to physical disability or other handicapping condition.

1223 to 1257 Intermediate Courses in Sports, Gymnastics, Aquatics, and Dance (1 each)
- 1223 Archery
- 1224 Tennis
- 1225 Golf
- 1226 Gymnastics
- 1227 Modern Dance
- 1229 Badminton
- 1230 Bowling Prereq: men must have at least a 140 average; women, 130 average.
- 1231 Ballet
- 1234 International Folk Dance Prereq: HPRD 1134 or equivalent.
- 1236 Swimming
- 1244 Aerobic Dance
- 1246 Weightlifting
- 1251 Racquetball
- 1253 Jazz Dance
- 1254 Martial Arts
- 1255 Jogging
- 1257 Aerobic Swimming

1324 to 1353 Advanced Courses in Sports, Gymnastics, Aquatics, and Dance (1 each)
- 1324 Tennis
- 1327 Modern Dance
- 1331 Ballet Prereq: HPRD 1231 and consent of instructor.
- 1336 Swimming
- 1337 Advanced Lifesaving Prereq: HPRD 1236 and consent of instructor. Advanced Swimming Certificate satisfies prerequisite.
- 1338 Water Safety Instructor’s Course Prereq: valid Advanced Lifesaving Certificate and consent of instructor.
- 1353 Jazz Dance

Professional Courses

In the School of Health, Physical Education, Recreation, and Dance, the second digit of the course number denotes the area of interest for professional courses, as follows: 4—physical education activity for majors; 5—physical education theory; 6—health; 7—recreation; and 8—dance.

1404 Orientation to Physical Education (1) 3 hrs. lab. Must be taken during student’s first semester as a physical education major or minor. Pass-fail grading. Introduction to physical education; assessment of proficiency in activities.

1405 Track and Field (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1406 Basketball (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1407 Softball (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1408 Volleyball (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1409 Flag Football (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1410 Field Sports (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1411 Gymnastics (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1412 Tennis (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1413 Badminton (1) Prereq: credit or registration in HPRD 1404. 3 hrs. lab. For physical education majors or minors.

1600 Personal and Community Health Problems (2)

1601 Cardiopulmonary Resuscitation and Basic Life Support (1) 1 hr. lecture; 1 hr. lab. Successful completion of this course leads to American Heart Association Certification. Development of knowledge, skill ability, and personal judgment in basic life support cardiopulmonary resuscitation; measurement of vital signs: temperature, pulse, respiration, and blood pressure.

1700 Introduction to Recreation (3) Same as LA 1651. Historical and philosophical foundations of leisure and recreation in modern society; emphasis on team efforts of land-
scape architects and recreation specialists in the planning, designing, and management of recreational space and programs.

1800 Introduction to Dance (3) Prereq: acceptance into dance curriculum. Dance as a performing art.

1801 Modern Dance Technique (1) 3 hrs. lab. May be repeated for credit every semester. For dance majors only. Instruction in modern dance technique.

1804 Dance Theatre (2) 6 hrs. lab. May be taken twice for degree credit. Admission by audition. Participation in Dance Theatre.

1805 Ballet Technique (1) 3 hrs. lab. May be repeated for credit every semester. For dance majors only. Instruction in the basic technique of classical ballet.

1809 Folk and Ethnic Dance Ensemble (2) 6 hrs. lab. May be repeated for credit every semester. Admission by audition. Participation in the folk and ethnic dance ensemble.

1810 Ballet Ensemble (2) 6 hrs. lab. May be taken twice for credit. Admission by audition. Participation in the ballet ensemble.

2500 Anatomy (3) Prereq: senior college standing.

2501 History and Principles of Physical Education (3) Development of school programs in physical education from ancient times to the present.

2502 Tests and Measurements in Physical Education (2) 1 hr. lecture; 2 hrs. lab.

2504 Principles of Conditioning (2) 1 ½ hrs. lecture; 1 ½ hrs. lab. Current methods and concepts of training and conditioning; place of physical fitness activities in the physical education program; current trends in fitness programs; participation in selected activities designed to promote fitness; planning programs for physical fitness for educational institutions and social agencies.

2507 Methods and Materials in Physical Education for the Elementary School (4) 2 hrs. lecture; 4 hrs. lab. For elementary teachers. Progressively graded programs of activities for elementary schools.

2508 Practicum in the Teaching of Sport and Dance Activities (1) Prereq: competency in the activity to be taught and consent of coordinator of undergraduate programs. 3 hrs. lab. May be repeated for credit when activity varies.

2511 Sports Officiating (2) Prereq: proficiency in sports indicated. 1 hr. lecture; 2 hrs. lab. Rules interpretation and techniques of officiating basketball, volleyball, and softball.

2515 The Coaching of Track and Field (2) Prereq: competency in track and field and consent of instructor. 1 hr. lecture; 2 hrs. lab. Principles and techniques of coaching track and field; organization and administration of practice and various levels of competition.

2516 The Coaching of Basketball (2) Prereq: competency in basketball and consent of instructor. 1 hr. lecture; 2 hrs. lab. Principles and techniques of coaching basketball; organization and administration of practice and various levels of competition.

2517 The Coaching of Baseball/Softball (2) Prereq: competency in baseball and softball and consent of instructor. 1 hr. lecture; 2 hrs. lab. Principles and techniques of coaching baseball/softball; organization and administration of practice and various levels of competition.

2518 The Coaching of Volleyball (2) Prereq: competency in volleyball and consent of instructor. 1 hr. lecture; 2 hrs. lab. Principles and techniques of coaching volleyball; organization and administration of practice and various levels of competition and administration of practice and various levels of competition.

2519 The Coaching of Football (2) Prereq: competency in football and consent of instructor. 1 hr. lecture; 2 hrs. lab. Principles and techniques of coaching football; organization and administration of practice and various levels of competition.

2525 Practicum in the Coaching of Individual and Team Sports (1-3) Prereq: competency in the sport to be coached and consent of coordinator of undergraduate programs. 3-9 hrs. lab. May be repeated for credit when sports vary.

2526 Psychology of Coaching (3) Important psychological perspectives applied to the athletic situation; includes coaching personalities, athletic personalities, psychological injuries, motivation, mental preparation, relaxation techniques, and stereotypes in athletics.

2530 Sport in Society (3) Interdisciplinary study of sport as a mirror of society which reflects the dynamics of man's social existence and emphasizes one important process through which individuals formulate their identity from youth to old age.

2600 Human Sexuality (3) Historical, semantic, religious, social, medical, and comparative cultural aspects of human sexuality from childhood to senility.

2601 First Aid (1) 1 hr. lecture; 1 hr. lab. American Red Cross certificates are awarded to those who satisfactorily pass the examination.

2602 Methods, Materials, and Content in Health Education for the Elementary School (3)

2603 Consumer Health (3) Major consumer health problems; selecting, purchasing, and financing of health services and products.

2604 Issues in Mental Health (3) Relevant issues in mental health; includes stress, depression, alienation, family violence, suicide, and death and dying.

2801 Rhythmic Analysis and Accompaniment for Movement (2) 1 hr. lecture; 2 hrs. lab. Rhythmic elements in movement; structural relationship between music and dance; use of percussion instruments for simple dance accompaniment.

2804 Dance Practicum (1-3) May be repeated for credit. For dance majors only. Pass-fail grading. Experience in technique, performance, or choreography.

3507 The Olympic Games: Ancient and Modern (3) Origins, growth, politicalization, and governance of the games.

3510 Techniques and Methods of Teaching Physical Education (3) Prereq: credit in HPRD 2504 and competency in four team sports. 2 hrs. lecture; 3 hrs. lab. Microteaching and field experience required. Current teaching methods and materials in physical education; teaching styles, utilization of teaching aids, formulation of lesson and unit plans.

3511 The Physical Education Program in Elementary Schools (3) 2 hrs. lecture; 2 hrs. lab/field experiences in multicultural settings. For physical education majors or minors. Progressively graded programs of activities.

3513 Introduction to Motor Learning and Development (3) Prereq: HPRD 2502 and PSYC 2060; or equivalents. 2 hrs. lecture; 2 hrs. lab. Principles of motor learning; application
of psychological and physiological principles to motor learning and improvement of physical performance; role of growth, development, and emotional and psychosocial phenomena in motor learning and performance.

3514 Kinesiology (3) Prereq: HPRD 2500. 2 hrs. lecture; 2 hrs. lab. Science of muscular movements; basic body movements and structures; applied myology, and kinesiologic analysis; application of kinesiology to physical education activities.

3515 The Physiological Basis of Physical Activity (3) Prereq: HPRD 2500. 2 hrs. lecture; 2 hrs. lab. Basic physiological concepts of the muscular, cardiovascular, and circu- lorespiratory systems; behavior of each system as related to exercise; determination of "normal" and "abnormal" physical conduct in learning situations; development of a philosophy of scientific inquiry.

3516 Curriculum Construction in Physical Education (3) Techniques of curriculum construction and of program content for elementary and secondary schools.

3540 Behavior Impairment and Physical Education (3) Prereq: EDCI 2700 and HPRD 2540. Substantial observation in schools required. Focus on children sometimes labeled as mentally retarded, emotionally disturbed, or learning disabled; appropriate physical education settings.

3541 Chronic Disability and Physical Education (3) Prereq: EDCI 2700 and HPRD 2540. Substantial observations in schools required. Focus on children with mostly overt physical and/or sensory disabilities of a long-lasting nature who need adjusted physical education programs.

3545 Handicapped Children in Physical Education (3) Prereq: EDCI 2700. Credit will not be given for both this course and HPRD 2540. Not open to physical education majors. Motor traits of handicapped children; curriculum implementation specified in federal and state legislation.

3602 Instructor's Course in First Aid (2) 1 hr. lecture; 2 hrs. lab. For persons qualifying to teach the junior and standard Red Cross courses in aid to the injured.

3603 Organization of the School Health Program (3) Prereq: HPRD 1600. Organization of school health programs involving health services, healthful school living, school environment, school health administration, and evaluation of school health programs.

3604 Methods of Teaching Secondary Health Education (3) Prereq: HPRD 1600. 2 hrs. lecture; 2 hrs. field experiences in multicultural settings. Structure of school health education and its relationship to official and voluntary health agencies and to professional associations; modern health resources suitable for teaching health.

3605 Health and the Aging Process (3) Health conservation of human resources; emphasis on understanding attitudes and practices related to health in the aging process.

3608 Communicable and Noncommunicable Diseases (3) Etiology, prophylaxis, and control of communicable and non-communicable diseases and impairments; includes cancer, diabetes, and cardiovascular, respiratory, and sexually transmitted diseases.

3660 The Holistic Health Approach to Stress (3) Sources of stress; evaluation of stress-related diseases; techniques for promoting stress reduction; prevention of stress-related diseases.

3663 Health Care Systems (3) Health care delivery systems; role of official health agencies, hospitals, and nursing homes; place of the allied health professions in the health care picture; preparation for field work.

3690 Field Work in Community Health (12) Open only to seniors in health science. 40 hrs. per week for entire semester. Field experience in a state, local, voluntary, or federal health agency.

3702 Camp Management (3) Camp organization policies; areas and facilities; program, leadership, and counselor skills.

3802 Dance Composition (3) Fundamental elements and principles of choreography.

3803 Improvisation (3) Structural problems and exploration in dance improvisation.

4500 Adapted Physical Education (3) 2 hrs. lecture; 2 hrs. lab. Preparation for teaching special activities to atypical or handicapped children; organization and administration of clinical exercise programs.

4501 Workshop for Physical Education Teachers (3) May be repeated for credit, but only 3 sem. hrs. may be counted toward the degree. For teachers who are interested in improving instructional physical education programs at the elementary or secondary level.

4503 Prevention and Emergency Care of Athletic Injuries (2) 1 hr. lecture; 2 hrs. lab. Primarily for physical education majors.

4504 Advanced Diagnosis and Treatment of Athletic Injuries (3) Prereq: HPRD 4503. 2 hrs. lecture; 2 hrs. lab. Training-room procedures; first aid treatment of injuries and rehabilitation; use of athletic training-room equipment; protective strapping, padding, etc. for all sports.

4505 Practicum in Athletic Training (5) Prereq: HPRD 4503. 10 hrs. lab.

4520 Psychosocial Aspects of Sport (3) Prereq: senior or graduate standing. Psychological and sociological perspectives of sport; the nature of play and sport, personalities of sport participants, sport as a social phenomenon, and current literature related to psychosocial aspects of sport.


4600 The School Health Program (3) Problems involved in promoting health of school children; prevention of and pro- tection against infectious diseases; physical inspection and examination; health instruction; provision of a wholesome environment.

4601 Community Health Issues (3) Survey of community health aspects and implications of tobacco, alcohol, drugs, and venereal disease and other communicable diseases; other current community health problems.

4602 Community Safety Education (3) Covers all grade levels in the school health program; community programs; home, traffic, and recreational safety; emphasis on organization and administration of these programs.

4604 School and Community Health Workshop (3) For nurses, school administrators, public health personnel, community health workers, and teachers in all fields of special- ization. Interrelations and interactions of school and community health programs; presentations of critical health topics by outstanding authorities from throughout Louisiana and other states.

4605 Habituating and Addictive Drugs in Our Culture (3) Prereq: HPRD 1600 and senior or graduate standing. Harmless, harmful, useful, and useless chemical substances which may affect physiological well-being and behavior or mood;
the interaction of psychological, sociological, and physiological components.

4608 Community Health Organization (3) Includes field trips. Incidence and prevalence of specific community health problems; solutions suggested through coordinated efforts of governmental and voluntary health agencies.

4619 Methods and Materials for Teaching Human Sexuality (3) Prereq: HPRD 1600 and 2600. For the present and future educator. Human sexuality; emphasis on need for education about sexuality, theories of sex education, sequential unit planning, survey and availability of audio-visual materials, and qualifications of the effective sex educator.

4700, 4701 Field Work in Recreation Leadership (4, 4) 1 hr. lecture; 6 hrs. lab. Development of abilities in leadership and programming techniques in recreation activities including arts and crafts, music, drama, social recreation, and sports.

4703 Philosophy of Recreation/Leisure Services (3) Delivering leisure services to the public; factors affecting leisure use; leisure and education; leisure and politics; leisure needs of people; leadership needs of the profession.

4704 School and Community Recreation Programs (3) Program planning for school and community; types of programming using resources of total community for leadership, program, and facilities.

4705 Administration of Recreation and Parks (3) Administration of public recreation and park organizations provided by municipal, state, and federal governments; includes surveys, policies, legislation, legal aspects, finance, and public relations.

4802 Advanced Dance Composition (3) Theoretical and creative aspects of advanced choreography.

4803 Methods for Teaching Modern, Folk, and Ballroom Dance (2) 1 hr. lecture; 2 hrs. lab. Modern, folk, and ballroom dance material; emphasis on creative approaches.

4804 Dance Theatre (2) 6 hrs. lab. May be repeated for credit every semester. Admission by audition. Experienced modern dancers participate in the modern dance theatre as lead dancers and choreographers in dance productions.

4805 Dance Production (3) Production elements for dance theatre.

4806 History of Dance (3) Development of dance from primitive people through the 19th century.


4808 Music Resources for Dance (3) Theory of the aesthetic and functional relationship of music to dance.

4900 Independent Study (1-3) Prereq: consent of department. May be repeated for credit for a maximum of 6 sem. hrs. Open to advanced undergraduate or graduate students. Reading, research, and/or field work on selected topics.

7501 Advanced Research Methods (3)

7502 Curriculum Construction in Physical Education (3)

7504 Tests and Measurements in Health and Physical Education (3)

7505 Problems in Physical Education (3) May be taken twice for credit when subject matter varies. Individual study.

7507 Historical and Philosophical Foundations of Physical Education (3)

7508 Advanced Kinesiology (3) 7510 Motor Learning (3)

7511 Administrative Problems in Health, Physical, and Recreation Education (3)

7513 Seminar in Physical Education Professional Preparation (3) Current issues and trends in physical education; emphasis on undergraduate and graduate professional preparation.

7514 Pedagogy in Physical Education (3) Prereq: HPRD 7502 and admission to the doctoral program. Theory and research relating to systematized instruction in physical education.

7520 Motor Development (3) 2 hrs. lecture; 2 hrs. lab. Psychomotor development of children; developmental implications for skill learning; analyzing and planning motor development research; motor development in special children; research on youth sports; evaluation and assessment of motor development; and perceptual-motor development.

7522 Physical Education for Preschool and Elementary School Children (3) Essentials for a successful movement program for children at the preschool and elementary school level; philosophy, objectives, trends, teaching methods, and materials necessary for program development.

7523 Theories of Motor Skill Acquisition (3) Prereq: HPRD 7510 and 7520. For Ph.D. students in the motor behavior track. Issues in motor control and learning, i.e., central and peripheral mechanisms, theories of motor learning, motor programs, and short-term memory.

7525 Children and Sport (3) Open to graduate students from any area. Children’s involvement in organized sports; an understanding of the present structure of youth sports; pertinent research in child development, training, injuries, social psychology, skill acquisition, and coaching behavior with their implications for children in sport.

7527 Seminar: Developmental Factors in Children’s Motor-Skill Learning (3) Prereq: HPRD 7510 and 7520; or equivalents. For doctoral students only. Developmental learning theory and literature; effects of developmental factors on children’s motor performance and learning.

7528 Sport Psychology (3) Central problems of several topical areas of social psychology related to sport; research methodology and theories.

7530 Exercise Physiology (3) 2 hrs. lecture; 2 hrs. lab. Physical, chemical, and environmental factors influencing physical performance; bioenergetics, cardiovascular and respiratory adjustments to exercise; current theories and research relevant to conditioning and physiological responses to exercise.

7531 Structural and Functional Characteristics of the Developing Child (3) 2 hrs. lecture; 2 hrs. lab. Structural changes of growth of prepubertal and pubertal children related to function in physical activity.

7533 Exercise for Adults: Prevention of and Rehabilitation from Coronary Heart Disease (3) Prereq: HPRD 7530. 1 hr. seminar; 4 hrs. lab. Theory and practicum in evaluating fitness, prescribing exercise, and planning and supervising group programs for adults.

7534 Exercise and Coronary Heart Disease Risk Factors (3) Contraindications and valid uses of exercise in mediating risk factors.

7535 Neuromuscular Aspects of Exercise (3) Prereq: HPRD 7530. Effects of exercise on muscle cell structure and function; neuromuscular integration and neural function in exercise.
7536 Cardiovascular and Respiratory Function in Exercise (3) Prereq: HPRD 7530. 2 hrs. lecture; 2 hrs. lab. Mechanics of cardiovascular and respiratory function as related to exercise.

7537 Exercise and Environment (3) Prereq: HPRD 7530. 2 hrs. lecture; 2 hrs. lab. Effects of environmental conditions on performance of various types of exercise.

7540 Motor Characteristics of Handicapped Children (3) Prereq: HPRD 4500 or 4530 or equivalent. Structure of gross and fine motor abilities in regular and handicapped children; inter- and intra-individual performance differences and factors associated with them.

7541 Motor Activity Programming for Handicapped Children (3) Prereq: HPRD 7540. Motor activity programs developed from factor analytic studies contrasted with those with an intuitive base; implications of current federal and state regulations.

7542 Program Approaches for Special Physical Education (3) Prereq: HPRD 7541. Open only to doctoral students. Range of approaches for eliciting behavior change in handicapped children, from a motor activity frame of reference.

7600 Advanced Personal and Community Health (3)

7601 Changing Health Behavior (3) Motivation and determinants of health behavior; behavior change strategies designed for utilization in individual and group health education programs; promoting innovative health education programs in schools and the community.

7602 Philosophic and Historical Foundations of Health Education (3) People, events, institutions, and ideologies influencing the historical development of health education; investigation of current philosophical perspectives and ethical issues in the health field.

7605 Problems in Health Science (3) May be taken twice for credit when subject matter varies. Individual study.

7620 Epidemiological Approach to Community Health (3) Prereq: EXST 4001 or equivalent. Vital health statistics via the disease model and its determinants; community organization and program development as related to community health education, both qualitatively and quantitatively.

7700 Organization and Administration of Recreation (3)

7701 Workshop in Recreation (3) 2 hrs. lecture; 3 hrs. lab.

7705 Problems in Recreational Studies (3) May be taken twice for credit when subject matter varies. Individual study.

7805 Problems in Dance (3) May be taken twice for credit when subject matter varies. Individual study.

7900 Introduction to Research Methods (3)

7999 Seminar in Selected Topics in Health, Physical Education, Recreation, and Dance (1-3) May be repeated for credit for a maximum of 6 sem. hrs. Topics vary.

8000 Thesis Research (1-12 per sem.) “S”/”U” grading.

8900 Independent Research (1-9) Prereq: consent of department chairman. Primarily for doctoral students who did not write a master’s thesis. May be taken by master’s students for special research projects. May be repeated for credit. Pass-fail grading.

9000 Dissertation Research (1-12 per sem.) “S”/”U” grading.

HEBREW (HEBR)

4001, 4002 Biblical Hebrew (3,3) HEBR 4001 is prerequisite for 4002. Grammar, syntax, and vocabulary; readings of narrative portions of the Old Testament.

HISTORY (HIST)

1001 History of Western Civilization (3) An honors course, HIST 1002, is also available. Ideas, trends, and institutions in western civilization from earliest times to the Reformation.

1002 HONORS: History of Western Civilization (3) Same as HIST 1001, with special honors emphasis for qualified students with consent of instructor. Independent reading and study.

1003 History of Western Civilization (3) An honors course, HIST 1004, is also available. Development of western civilization from the Reformation to the present.

1004 HONORS: History of Western Civilization (3) Same as HIST 1003, with special honors emphasis for qualified students with consent of instructor. Independent reading and study.

1105 Great Figures in World History (1) Lives and times of selected men and women who influenced events, institutions, and thought of world history.

1159 Great Figures in American History (1) Lives and times of selected men and women who influenced events, institutions, and thought of American history.

2001 History of the Ancient Orient and Greece (3) Ancient Near East and Greece, with emphasis on cultural phases and development of Athenian democracy.

2002 History of Rome (3) Roman history from the beginnings to the Emperor Constantine.

2011 English History (3) English history from Roman times to the Glorious Revolution (1688).

2012 English History (3) English history from 1689 to the present.

2021 Modern European History (3) Political, economic, and social developments and diplomacy from the Renaissance to the revolutionary movements of 1848.

2022 Modern European History (3) Political, economic, and social developments and diplomacy from the unification movements in Germany and Italy to the present.

2023 The World Since 1960 (3) Comparison of major events since 1960 in the U.S., U.S.S.R., and selected nations of western Europe, the Middle East, Latin America, Africa, and Asia; emphasis on how social, economic, and political conditions affect individuals born about 1960 in the nations treated.

2055 American History (3) Prerequisite for all advanced courses in American history. An honors course, HIST 2056.
is also available. American history from the earliest times to 1865.

2056 HONORS: American History (3) Same as HIST 2055, with special honors emphasis for qualified students.

2057 American History (3) Prerequisite for all advanced courses in American history. An honors course, HIST 2058, is also available. American history from 1865 to the present.

2058 HONORS: American History (3) Same as HIST 2057, with special honors emphasis for qualified students.

2061 History of Blacks in America (3) Social, cultural, and economic role of black people in the U.S. from 1619 to the present; the African heritage, slavery, the antebellum free people of color, the Reconstruction revolution, and the modern black protest movement.

2071 History of Louisiana (3) Political, economic, social, and cultural development of Louisiana.

2085 Colonial Latin America (3) Colonial period emphasizing the European background, explorations, political and economic systems, and wars of independence.

2086 Latin America Since Independence (3) Latin American countries in the 19th and 20th centuries; the search for political stability, economic and social progress, and international relations.

2095 History of East Asian Civilization to 1800 (3) An interdisciplinary and cultural approach to the civilization of East Asia, particularly China and Japan, from antiquity to early contacts with the West.

2096 History of East Asian Civilization Since 1800 (3) Modern Asian civilization, with emphasis on contacts with the West, and the rise of nationalism and communism.

2101 The History of Science to 1600 (3) Scientific thought from the ancient Orient and Greece to the Renaissance; origins of the scientific revolution; science in the age of Galileo; emphasis on the connections between the history of science and the histories of technology, magic and astrology, art, philosophy, and religion.

2102 History of Science from 1600 (3) History of the physical sciences, biology, and medicine from the 17th century to the present; impact of Newtonian and Darwinian science on 18th and 19th century culture; science and scientific institutions since the 17th century; recent trends in high-energy physics, molecular biology, and artificial intelligence.

2135 Introduction to Russian Culture and Civilization (3) See RUSS 2075.

3100 HONORS: Approaches to History (3) Open to honors students having credit for 6 sem. hrs. of history and to others with consent of instructor. Scope and meaning of history; biographies and writings of famous historians from the earliest times to the present.

3109 HONORS: Proseminar (3) Open to qualified honors students having credit for 12 hours of history with consent of instructor. Candidates for the honors degree in history will select an honors thesis topic before the end of the semester. Supervised reading in an assigned field of historical study; discussion of historical methods and research.

3110 HONORS: Senior Thesis Research Seminar (3) Prereq: HIST 3109. Open to honors students with consent of seminar director. Writing a thesis under supervision of the seminar director; on completion of the thesis, the student will be examined orally by a committee of three or four faculty members on the thesis and on his or her general field of historical interest.

3119 Undergraduate Proseminar (3) Prereq: consent of instructor. Open to students with at least 6 sem. hrs. of credit in history and with an overall 3.00 GPA. May be taken twice for credit when topics vary. Supervised reading and research in an assigned field of historical study.

4001 Greece of the City State (3) Political, social, and cultural evolution of the Greek world from the Bronze Age to the foundation of the Macedonian Empire of Alexander the Great; attention to growth of democratic institutions.

4003 History of the Roman Republic (3) History of the Roman state, culture, and society from the origin of the city to the dictatorship of Julius Caesar.

4004 History of the Roman Empire (3) Roman history, including the growth of absolute government, spread of Christianity, and other political, cultural, and social movements from the establishment of the Principate to the fall of the Western Empire.

4007 The Early Middle Ages, 300-1100 (3) History of Europe from the decline of Rome to the 12th century; development of medieval society and institutions.

4008 The Later Middle Ages, 1100-1500 (3) History of Europe from the First Crusade to the discovery of America; developments in social and political institutions and intellectual life.

4009 The Renaissance (3) Italian society and thought from Dante to Michelangelo, with emphasis on the medieval foundations of Renaissance culture; northern Europe from the Hundred Years War to the Reformation, with emphasis on political and economic development.

4111 The Age of the Reformation (3) 16th-century Europe, with emphasis on Protestant and Catholic reform movements.

413 Europa in the Age of Absolutism (3) Political, economic, and institutional history of Europe, 1500-1660.

414 The Old Regime and the Enlightenment (3) Institutions of the Old Regime, with emphasis on the Enlightenment, 1660-1760.

415 French Revolution and Napoleon (3) Background, constructive developments, and territorial changes resulting from wars of the period, with emphasis on Europe's emergence into a new era.

416 19th-Century Europe (3) The period 1815-1870.

418 Europe Since the First World War (3) The interwar period; crisis of the democratic state and emergence of totalitarian governments in Europe.

421 History of France (3) Cultural, political, economic, and social survey of France from earliest times to Louis XIV.

422 History of France (3) Cultural, political, economic, and social survey of France from Louis XIV to the present.

423 History of Spain (3) Political, economic, and social development from the earliest times to the present.

425 Germany from the Reformation to Bismarck (3) German political, social, and cultural development from 1500 to 1871; causes and consequences of German political fragmentation.

426 Germany from Empire to Division (3) The last century of German history; the Bismarckian Empire, impact of World War I, rise of National Socialism, division of Germany after World War II.

429 History of Eastern Europe, 1700-1914 (3) Intellectual,
social, and political history of Eastern Europe from 1700 to 1914, with emphasis on rise of nationalism in the 19th century.

4030 History of Eastern Europe, 1914-Present (3) Intellectual, social, and political history of Eastern Europe from 1914 to the present; emphasis on rise of the nation-states during and after World War I, impact of Fascism in the inter-war period, and Communist takeover following World War II.

4031 History of the Balkans, 1453-1878 (3) Origins of the Balkan peoples, development of the Ottoman Empire, and rise of the autonomous Balkan nation-states.

4032 History of the Balkans, 1879-Present (3) Events leading up to and including World War I, problems of the inter-war period, World War II, and rise of Communism in Southeastern Europe.

4033 History of Russia to 1861 (3) Kievian Rus, the Tsardom of Muscovy, and Imperial Russia to the emancipation of the serfs; emphasis on distinctive features of Russian historical development: autocracy, serfdom, Russian Orthodox Christianity, ambivalent attitudes toward Western culture, literature as social protest.

4034 History of Russia Since 1861 (3) Reaction and reform from 1861 to 1905; failure of parliamentary democracy amid war and revolution; Leninism and Stalinism; relaxation of totalitarian rule since Stalin's death.

4035 The Revolutionary Tradition in Russia (1790-1905) (3) Revolutionary ideas and activity in 19th-century Russia; native Russian socialist tradition as a basis for understanding the unique characteristics of Russian Marxism.

4036 The Development of Soviet Communism (3) Soviet Communism from the beginning of the 20th century to the 20th Party Congress in 1956; ideology and institutions and their inter-relations.

4039, 4040 English Constitutional History (3,3) Origin and development of English legal institutions; their influence on American legal institutions.


4044 Stuart England (3) The period of transition from kings who would be absolutists, through the crisis of civil wars, to the beginnings of parliamentary dominance; from a few settlements abroad in America to the beginnings of true empire; from a feudal economy to mercantilism; from the Elizabethan to the Augustan eras in society, literature, and the arts.

4045 Hanoverian England (3) Political, economic, social, and intellectual history of England in the 18th century—from the accession of George I to about 1793.

4046 19th-Century Britain (3) From the outbreak of the French Revolutionary Wars to the end of the Victorian Era; transformation of Great Britain from an agrarian to an industrial nation; establishment of a laissez-faire economy; transition from aristocracy to democracy; reform of traditional institutions; emergence of a class system; evolution of characteristic Victorian beliefs and attitudes; development of scientific, religious, and philosophic thought.

4047 The Age of Churchill (3) Political, social, and economic developments in England and the British Empire during recent times; emergence of the modern social state.

4049 The British Empire and Commonwealth (3) British Empire and development of the British Commonwealth of Nations.

4051 Colonial America, 1607-1763 (3) Political, economic, cultural, and military developments in the 13 colonies.

4052 The American Revolution, 1763-1789 (3) Political, intellectual, economic, and military developments in the formation of a permanent American union.

4053 The Age of Jefferson and Hamilton (3) Emergence of American political, economic, and social systems during the formative years, 1789-1820.

4054 The Old America (3) U.S. history between 1820 and 1860; Jacksonianism, territorial expansion, party development, and the national controversy over slavery.

4055 Civil War (3) Secession; social and economic conditions, principal military campaigns.

4056 Reconstruction (3) Political, social, and economic changes in the South from 1865 to 1880.

4057 The Emergence of Modern America (3) Industrialization, party politics, and social life in the U.S. from 1870 to 1900.

4059 The American Teens and Twenties (3) From the inaugural of Woodrow Wilson to the Crash of 1929; Wilson and reform at home and revolution abroad; the Great War and its impact; the Jazz Age, its tension and its collapse.

4060 The Age of Roosevelt (3) From the inaugural of FDR to the surrender of Japan: the Great Depression and the New Deal; the thirties' search for an American culture; the road to Pearl Harbor; America in World War II, at home and abroad.

4061 Intellectual and Social History of the United States to 1865 (3) Ideas and patterns of thought and their relationship to American society from the colonial period to the Civil War.

4062 Intellectual and Social History of the United States from 1865 to the Present (3) Ideas and patterns of thought; their relationship to American society from the Civil War to the present.

4063 Diplomatic History of the United States, 1776-1914 (3) American diplomatic history to the outbreak of World War I; connections between domestic politics and foreign affairs.

4064 Diplomatic History of the United States, 1914 to the Present (3) Basic interpretations of American foreign policy in the 20th century, with emphasis on public opinion and relationship of business investment to foreign policy.

4065 History of Contemporary America (3) History of America since 1945, focusing on domestic affairs.

4066 Military History of the United States (3) Military policy and campaigns, war economy, and organization of the armed forces.

4067 The Negro in America (3) Negro life and history from 1619 to 1876; the African background of American Negroes.

4068 The Negro in America (3) Negro life and history from 1876 to the present; emphasis on the 20th century as an era of change.

4069 The Early American Frontier (3)

4070 The Later American Frontier (3)

4071 The Antebellum South (3) Economic, social, intellectual, and political development of the South up to 1860.

4072 The New South (3) Political, economic, social, and intellectual history of the South since 1877.

4073 History of Louisiana to 1815 (3) Political, economic, and social development of Louisiana.

4075 American Economic History to 1860 (3) Also offered as ECON 4075. American economic growth and development
from the colonial period to 1860, including the railroad, slavery, technology, and nature of the industrial revolution; findings and method of the "new" or quantitative economic history.

4076 American Economic History, 1860 to the Present (3) Also offered as ECON 4076. American economic growth and development from 1860 to the present, including economic impact of the Civil War, technological change, mechanization of agriculture, railroads, automobiles, war, the Great Depression, and multinational corporations; findings and method of the "new" or quantitative economic history.

4081 History of the Caribbean, 1492-1830 (3)

4082 History of the Caribbean, 1830 to the Present (3)

4083 Great Powers of Latin America: Mexico (3) Political, economic, and social developments since independence.

4085 History of Argentina (3) Political, social, and economic development from the colonial period to the present.

4087 Mexico: The Colonial Era (3) Colonial social, economic, political, and intellectual events; emphasis on those that gave rise to the socioeconomic and political problems of modern Mexico.

4089 History of Brazil (3) Political, economic, social, and diplomatic developments from 1500 to the present.

4091 History of China (3) Political, economic, and cultural life of China from antiquity to 1800.

4092 History of China (3) Western impact on Chinese civilization; political and cultural developments.

4093 History of Pre-Modern Japan (3) Japanese political and cultural history and civilization from the beginnings to the close of the Japanese middle ages.

4094 History of Modern Japan (3) Japanese history from 1600 to the present; emphasis on historical and cultural roots of Japan's modernization in the late 19th century and quest for empire in the 20th; cultural and intellectual developments in modern Japan.

4097 History of Africa to 1800 (3) African social and historical development from prehistory to the beginning of the 19th century.

4098 History of Africa from 1800 to the Age of Independence (3) African societies in the 19th and early 20th centuries, focusing on internal African developments and including European colonization and the beginnings of independence movements on the continent.

4105 Studies in Classical History (3) Selected periods and problems in Greek and Roman history; methods and materials of ancient scholarship.

4111 Early Modern European Institutions (3) Emphasis on early modern European history.

4113 European Intellectual History since 1789 (3) Main currents in European thought affecting society in the last 200 years: romanticism, socialism, Darwinism, psychoanalysis, existentialism.

4130 History of World War II (3) Origins, evolution, and consequences of the most devastating conflict in modern times; special emphasis on diplomacy, the role of espionage, counter-espionage, propaganda and resistance, and the social impact of war; the war as a global phenomenon, with primary geographic focus on Europe and the United States.

4161 History of Religion in the United States (3) Also offered as REL 4161. Religion in the U.S. from the colonial period to the present; relation between changing religious beliefs and behavior of American people and political, social, economic, and intellectual developments; Puritanism, revivalism, response to Darwinian evolution, social gospel, and civil religion.

4191 Religions of China and Japan (3) Also offered as REL 4191. Major religious traditions of East Asia: Confucianism, Taoism, Mahayana Buddhism, Shinto, and Chinese and Japanese folk religion; religion in the context of Chinese and Japanese cultural history.

4195, 4196, 4197 Special Studies in History (3, 3, 3) Prereq: consent of department. Topics vary.

4901 Independent Study (3) Prereq: open to advanced students of high academic standing by consent of department. Reading and research on selected topics.

4902 Independent Study (3) Prereq: open to advanced students of high academic standing by consent of department. Reading and research on selected topics.

7000 History and Criticism: Its Nature and Meaning (3) Origin and evolution of concepts of history; emphasis on problems involved in both writing and philosophy of history.

7901 Introduction to Historical Research (3) Required of candidates for the M.A. degree in history. Use of bibliographical aids.

7904 American Historiography and Criticism (3) Required of candidates for the M.A. degree with concentration in American history. American historical writing from the colonial period to the present.

7911, 7912 Seminar in European History (3,3) Sources and bibliography; reports on original research.

7915, 7916 Seminar in European History (3,3) Sources and bibliography; reports on original research.

7951, 7952 Seminar in American History (3,3) Sources and bibliography; reports on original research.

7955, 7956 Seminar in American History (3,3) Sources and bibliography; reports on original research.

7981, 7982 Seminar in Latin American History (3,3) Sources and bibliography; reports on original research.

7983, 7984 Seminar in Latin American History (3,3) Sources and bibliography; reports on original research.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

HOME ECONOMICS (HEC)

In the School of Home Economics the third digit of the course number denotes the subject area of the course as follows: 1 and 2—food and nutrition; 3 and 4—textiles and clothing; 5 and 6—family life and environment; 9 and 0—general courses (except 7094 which is a nutrition course).
1000 Home Economics as a Profession (3) Attributes which identify home economics as a profession; includes historical and philosophical view of its mission, interrelationship of its various specializations, and competencies and commitments necessary in the various specializations.

1010 Introduction to Human Nutrition (3) Credit will not be given for both this course and HEC 2100. Nutrition needs of people; meeting these needs in different ways; weight control; evaluating dietary faddism.

1030 Clothing and Human Behavior (3) Uses and roles of clothing and textiles as affected by economic, social, and psychological forces.

1032 Design for Living (3) 2 hrs. lecture; 2 hrs. lab. Design elements and principles related to the environment and daily living.

1040 Textiles (3) 2 hrs. lecture; 2 hrs. lab. Fibers, fabrics, and factors influencing appearance and serviceability.


2010 Nutrition in Health and Disease (3) Prereq: Chem. 1002 or 1202. Credit will not be given for both this course and HEC 1010. Primarily for students planning to enter the health field. Principles of normal nutrition and dietary modifications related to disease conditions.

2015 Principles of Food Preparation (3) 2 hrs. lecture; 2 hrs. lab. Basic principles and techniques of food preparation; use and comparison of available types of food products.

2016 Family Meal Management (3) Prereq: HEC 1010 and 2015; or equivalents. 2 hrs. lecture; 3 hrs. lab. Selection, purchase, preparation, and service of foods; nutritional needs of individuals and socioeconomic status of family groups.

2035 Basic Clothing Construction (3) 1 hr. lecture; 4 hrs. lab. For students with limited experience in clothing construction. Credit will not be given for both this course and HEC 2037. Basic principles of clothing construction applied to selected practice problems and specific garment types.

2036 Intermediate Clothing Construction (3) Prereq: HEC 1040 and 2035. 1 hr. lecture; 4 hrs. lab. Credit will not be given for both this course and HEC 2037. Principles of garment fit and pattern alteration; fabric characteristics as related to garment design and construction techniques.

2037 Comparative Techniques of Apparel Production (3) Prereq: HEC 1040. Credit will not be given for both this course and HEC 2035 or 2036. Basic principles of clothing construction, pattern alteration, and fitting as applied to selection of ready-to-wear apparel.

2044 Directed Participation in Fashion Merchandising (1-3) 1 hr. lecture; field experiences. May be repeated for credit for a maximum of 6 sem. hrs. when experiences vary. Pass-fail grading. Structured educational situations that provide opportunities for students to observe and/or participate in professional practices of various careers within the local fashion industry and throughout the U.S.

2045 Fashion and the Clothing Industry (3) Fashion origin and movement including current trends; influence of fashion and designers on apparel manufacturing.

2055 The Young Child and the Family (3) 2 hrs. lecture; 2 hrs. lab. Observations and practical experiences in classroom situations in the School of Home Economics Preschool Laboratory; growth and development of the young child; adult-child relations.

2065 Management in Personal and Family Development (3) Discussion session and field experiences included. Fundamental elements of management, with major consideration to goal-setting, normative decision-making procedures, and resource identification.

3020 Food Systems Purchasing (3) Prereq: HEC 2015 and ECON 2030; or equivalents. The food service system concept, with emphasis on determining needs, procuring, and storing foods in quantity.

3032 Textile Design and Decoration (3) 1 hr. lecture; 4 hrs. lab. Creative experience in structural design and surface enrichment of textiles.

3036 Basic Tailoring (3) Prereq: HEC 2036. 1 hr. lecture; 4 hrs. lab. Principles of tailoring applied to suits and coats.

3037 Pattern Design (3) Prereq: HEC 2036. 1 hr. lecture; 4 hrs. lab. Apparel design by the flat pattern method; emphasis on relationships between body form, pattern shape, and fabric interpretation.

3040 Household and Institutional Textiles (3) Prereq: HEC 1040. 2 hrs. lecture; 2 hrs. lab. Household and institutional textiles; selection, serviceability, and maintenance.

3043 Quantitative Fashion Merchandising Concepts (3) Prereq: HEC 2045, MATH 1025 and 1100, and MKT 3401; or equivalents. Essential concepts and procedures as well as calculations and interpretations of figures involved in quantitative merchandising for a profit.

3044 Apparel Merchandise Selection and Costing (3) Prereq: HEC 1040, 2045, and either 2036 or 2037. Factors which affect the wholesale cost of apparel; specification buying and merchandise selection.

3045 Fashion Promotion (3) Prereq: HEC 1030 and 2045. Fashion promotion and salesmanship: advertising; display techniques, public relations, and personal selling.

3046 Apparel Merchandising (3) Prereq: HEC 3043, 3044, 3045, and MKT 4431; or equivalents. Principles of buying and managing fashion merchandise.

3047 Apprenticeship in Retailing (8) Prereq: senior standing with an overall gpa of at least 2.00 on all work taken at LSU; and credit or registration in HEC 3046. Two hrs. lecture and supervised experience in representative phases of retailing in designated Baton Rouge stores as arranged by instructor. Pass-fail grading.

3060 Family Finance (3) Prereq: ECON 2030 or AGEC 2075 or equivalent. Credit will not be given for both this course and ECON 3310. Development of bases for decision-making related to family income, saving, and spending.

3061 The Family in a Consumer Society (3) Prereq: ECON 2030 or AGEC 2075 or equivalent. Family consumer opportunities and problems in contemporary society.

3062 Families and the Law (3) Federal and state "consumer bills," one's status as a family member, effectiveness of warranties and the judicial process regarding consumers' rights; responsibilities delegated to consumers.

3070 Housing Fundamentals (3) F Housing functions, choices, economics, and trends.

3090 Senior Seminar (1) For home economics majors; open to others with consent of instructor. Pass-fail grading. The professional home economist in today's society; relationship of the various areas in home economics to the overall objectives of the field; current issues in home economics.

3091 Independent Reading and Research in Home Economics (3) Open to advanced students of high academic standing by consent of the director. May be taken twice for credit. Stu-
dents are responsible for registering with a faculty member with whom they will select the area of reading and research.

4010 Human Nutrition (3) Prereq: CHEM 2060 and ZOOL 2160; or equivalents. Energy metabolism and the functions, requirements, and food sources of the nutrients.

4011 Nutrition and Disease (3) Prereq: HEC 4010 and BCH 2083 and 2084. 2 hrs. lecture; 2 hrs. lab. Dietary modifications related to biochemical and physiological changes during disease.

4012 Applied Human Nutrition (3) Prereq: HEC 4010 or equivalent. Special problems in nutrition during pregnancy, infancy, early childhood, adolescence, adulthood, and later years.

4015 Food Theory and Experimentation (3) Prereq: HEC 2015 and CHEM 2060. 2 hrs. lecture; 3 hrs. lab. Chemical and physical bases of food preparation; the rationale for procedures and phenomena; evaluation of quality using experimental methods.

4016 Cultural Food Patterns (3) Prereq: HEC 1010 or equivalent. Cultural and ecological influences on the food practices of peoples.

4020 Quantity Food Production (4) Prereq: HEC 4015 or equivalent. 2 hrs. lecture; 4 hrs. lab. Principles of food production illustrated by demonstrations, experiments, and production laboratories; use and care of large equipment; sanitation and safety.

4022 Food Systems Management (7) Prereq: HEC 4020 or equivalent. 4 hrs. lecture; 6 hrs. lab. For dietetics majors with no previous management experience. Functions of management applied to food-service system operation; physical facility design and equipment selection based on needs of the system.

4031 History of Dress and Adornment to 1500 (3) F Male and female dress and adornment from earliest times to 1500; emphasis on styles of western civilization.

4032 History of Dress and Adornment Since 1500 (3) S Male and female dress and adornment from 1500 to present; emphasis on styles of western civilization.

4035 Clothing Design—Draping (3) Prereq: 9 sem. hrs. of drawing construction courses or equivalent. 1 hr. lecture; 4 hrs. lab. Designing garments by draping on the dress form.

4038 Advanced Techniques of Clothing Design and Construction (3) Prereq: HEC 3037 or 4035. 1 hr. lecture; 4 hrs. lab. Students design and construct garments for themselves and a client; one garment adapted to factory production.

4041 History of Textiles (3) Cultural, functional, and technological developments of textiles by selected periods and countries.

4042 Textile Analysis (3) S Prereq: HEC 1040. 2 hrs. lecture; 2 hrs. lab. Fabric structures and their relationships to performance and end-use characteristics; use of textile product specification and standard test methods for evaluating physical, aesthetic, comfort, performance, and functional aspects of textiles.

4043 Advanced Textiles (3) Prereq: HEC 1040. 2 hrs. lecture; 2 hrs. lab. Characteristics of natural and manmade textile fibers; physical and chemical modifications to meet consumer needs; textile dyes and finishes; methods of fiber identification and chemical testing of textiles.

4050 Dynamics of Family Living (3) The family in a democratic society; emphasis on establishment and maintenance, relationships, and environmental influences.

4051 The Adolescent and the Family (3) Growth, development, and guidance of the adolescent in the home, family, and community.

4055 Principles and Practices in Kindergarten Education (3) Prereq: HEC 2055 or PSYC 2076. Same as EDCI 4055. Classroom organization and instructional management using preacademic objectives for kindergarten as an entry point into elementary school.

4056 Foundations of Reading Concept Development (3) Prereq: HEC 2055. 3 hrs. lecture; experiences in the School of Home Economics Preschool Laboratory. Theories, processes, and models for the young child's concept formation; social and physical environmental factors of the family, the preschool, and society affecting basic cognitive processes and preparedness for reading.

4057 Methods of Teaching Nursery School and Kindergarten (3) Prereq: HEC 2055 or equivalent. 2 hrs. lecture; 2 hrs. lab. Same as EDCI 4057. Essentials needed for successful involvement with children from varying socioeconomic and cultural groups at the nursery-kindergarten level; philosophy, teaching methods, and materials providing optimum learning experiences for the child under six.

4058 Student Teaching in the Kindergarten (5) Prereq: prior application, EDCI/HEC 4057, and credit or registration in EDCI/HEC 4053 for undergraduates; credit or registration in EDCI/HEC 4055 for students with elementary certification. 1 hr. seminar; 12 hrs. lab. 2.20 or better gpa required before registration. Same as EDCI 4058. Supervised experiences in planning and guiding children's activities in kindergarten programs for varied cultural groups and socioeconomic levels.

4059 Student Teaching in the Nursery School and Other Early Childhood Settings (5) Prereq: prior application, HEC/EDCI 4057, and credit or registration in HEC/EDCI 4055. 2.20 or better gpa required before registration. 1 hr. seminar; 12 hrs. lab. Supervised experiences in planning and guiding children's activities in nursery school and other early childhood programs for varied cultural groups and socioeconomic levels.

4060 Organization and Administration of Early Childhood Programs (3) Prereq: HEC/EDCI 4057 or equivalent. Historical, cultural, and philosophical foundations; finances, budgeting, staff duties, policies and legal aspects, equipment and physical plant, parent education and communication, public relations.

4065 Home Management (3) Senior standing recommended. 2 hrs. lecture; 2 hrs. lab. Resource creation and use, management processes and value orientations involved in family ecological systems; laboratory provides opportunity to study and observe management in family situations.

4066 Household Equipment (3) 2 hrs. lecture; 2 hrs. lab. Construction, performance, care, and selection of equipment for home use; types of energy and their relative merits.

4067 Apprenticeship in Family Service Agencies (6) Prereq: 24 sem. hrs. of home economics courses including HEC 2065, senior standing with an overall 2.50 gpa in work taken at LSU, and consent of instructor. 8 hrs. lab; 2 hrs. discussion and conference. Application must be made at registration one semester in advance of proposed enrollment. Pass-fail grading. Supervised observation and experience in an agency, institutional, or business program providing services to homes and families.

4070 Entrepreneurship in the Fashion Industry (3) Prereq: senior standing or consent of instructor. Nature and require-
ments of independently owned, small retail institutions; external constraints, governmental regulations, and guidelines for evaluation of performance.

4091 Special Topics in Home Economics (1-3) Prereg: consent of director. May be repeated for credit for a maximum of 6 sem. hrs. when topics vary. Lectures and/or laboratories on selected topics not covered in other home economics courses.

7010 Food and Nutrition Seminar (1) May be taken twice for credit. Reports and discussion of current literature and research.

7011 Current Advances in Food and Nutrition (3) Recent research and developments.

7015 Nonmicrobial Deteriorative Mechanisms (3) Prereg: HEC 4015 or equivalent. Chemical, biochemical, and physical reactions involved in the deterioration of food; means of control.

7017 Advanced Human Nutrition (3) Prereg: HEC 4010 and BCH 4083. Human requirements, evaluation of nutritional status, and problems related to kind and amount of food consumed.

7018 Proteins in Nutrition (3) Prereg: BCH 4083. Nutritional aspects of proteins and amino acids interpreted from the viewpoint of deficiencies, interrelationships, requirements, and metabolic pathways.

7031 Social-Psychological Influence in Clothing (3) Influence of psychological and cultural factors in selection and use of clothing.

7041 Current Advances in Textiles and Clothing (3) Scientific and related literature reporting research developments.

7042 Research in Textiles (3) 1 hr. lecture; 4 hrs. lab. Research methods applied to fabric analysis and testing; trends and recent developments.

7043 Seminar in Textiles and Clothing (1) May be taken twice for credit. Reports and discussion of current literature and research.

7050 Research Seminar in Family Studies (1) May be taken twice for credit. Research goals and methodology.

7051 Seminar: The Family (3) The family, its change, and effects on family integration.

7052 Topics and Issues in Family Studies (3) May be taken twice for credit when topics vary. Lectures and research on topics and issues not covered in other family life courses.

7053 Infant Behavior and Development (3) F-O Infant personality, development, and socialization; major transactions in the infant's life; the family and the home; child-care facilities and caregivers; support systems within larger societies.

7054 Child Guidance and Behavior (3) S-E Normal, age-related behavior patterns; child guidance practices and their consequences; techniques and procedures for successful parenting and for improved classroom management; theoretical bases.

7055 Human Development (3) Prereg: consent of instructor. May be taken twice for credit. Dynamics of human development and practical implications.

7056 Theories of Child Development (3) Classical and contemporary research and theory in child development; research and theoretical issues of child development related to the major domains in the child's ecology—child development, the family, services, and the environment.

7059 Parent Involvement in Early Childhood Education (3) Su Prereg: EDAF/EXST 4006 or EXST 7003. 2 hrs. lecture; 2 hrs. lab. Interpersonal relationships and involvement of parents in early childhood education programs; research and existing models of parent involvement.

7061 The Consumer in the Economy (3) Synthesis and evaluation of the interrelationships among consumer knowledge and responsibility of the family, consumer legislation and protection, and competitive market processes.

7062 Family Financial Counseling (3) Prereg: HEC 3060. Personal, social, and legal climates affecting family financial decisions; development of skills designed to assist families to become self-sufficient in money management.

7065 Management of Family Resources (3) Individual and family resources, including identification and evaluation; principles of resources and management satisfaction for individuals and families.

7090 Seminar in Home Economics (3) Development and philosophy of home economics; recent developments, current issues, and trends; research development and needs.

7091 Independent Reading and Research in Home Economics (3) Prereg: consent of director. Directed individual reading and research in a selected area of home economics.

7094 Seminar in Nutrition (1) Same as ANSC 7094. DARY 7094, FDSC 7094, PLSC 7094. May be taken twice for credit.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

HONORS (HNRS)

1001 Seminar in Ancient Western Civilization (3) Coreq: HNRS 1003. The ancient world; ancient Hebrew and Greek civilizations, including literature, history, philosophy, religion, government, and fine arts.

1003 Lectures in Ancient Western Civilization (3) Coreq: HNRS 1001. Lectures, readings, and examinations coordinated with HNRS 1001.

1007 Introduction to Life Sciences (4) 2 hrs. lecture; 4 hrs. lab. Not open to students who have had ZOOL 1001, 1002; BIOL 1001, 1002; or BOTY 1001, 1002. A basic course, organized in accordance with the principle of organic evolution, emphasizing the chemical basis of life and cell biology.

1008 Introduction to the Life Sciences (4) 2 hrs. lecture; 4 hrs. lab. Not open to students who have had ZOOL 1001, 1002; BIOL 1001, 1002; or BOTY 1001, 1002. A basic course, organized in accordance with the principle of organic evolution, emphasizing phylogeny, morphology, function of multicellular organisms, and people's relation to their environment.

2002 Seminar in Roman, Medieval, and Renaissance Civilization (3) Prereg: HNRS 1001 and 1003; or ENGL 1002; or ENGL 1003. Coreq: HNRS 2004. European civilization from republican Rome through the Renaissance and Reformation; includes literature, history, philosophy, religion, government, and fine arts.


2011 The Age of Enlightenment (3) Literature, philosophy, history, art, and science of the age of enlightenment.
2012 The 19th Century (3) Perspectives fundamental to 19th-century culture; relevant works of literature, philosophy, art, science.

2013 The 20th Century (3) May be taken twice for credit. Selected themes in 20th-century civilization.

2021 Colloquium in the Arts (3) May be taken twice for credit. Art forms and their cultural significance; particular themes involving examination of art works.

3001 European Civilization from 1500 to 1789—The Old Regime (4) Continuation of HNRS 2002, 2004. Interdisciplinary presentation of development of western civilization from the Reformation through the Enlightenment; literature, history, philosophy, religion, government, and fine arts.

3003 Western Civilization from 1789—The Modern World (4) Continuation of HNRS 3001. Interdisciplinary presentation of development of western civilization from the era of revolution to the present; literature, history, philosophy, religion, government, and fine arts.

3030 Humanities Colloquium (3) May be taken twice for credit. Selected themes and materials in literature, philosophy, history, and art.

Horticulture (HORT)

2050 General Horticulture (4) 3 hrs. lecture; 2½ hrs. lab. Science and art of modern horticultural plant production, including propagation, fertilization, pest control, and pruning; major groups of garden crops including vegetables, fruits and nuts, ornamentals, houseplants, and florist crops; lab includes propagation and culture of garden plants in field and greenhouse.

2051 Commercial Fruit and Nut Culture (3) F 2 hrs. lecture; 2 hr. lab. Proper management and methods of improvement of the fruit and nut culture in Louisiana.

2052 Vegetable Crops (3) F Prereq: HORT 2050 or equivalent. 2 hrs. lecture; 2 hrs. lab. Vegetable industry and major vegetable crops in the U.S.; commercial vegetable production; lab compares new cultural practices with existing ones.

2061 Plant Propagation (3) S 2 hrs. lecture; 2 hrs. lab. Principles of sexual and asexual propagation; specific methods for reproduction of plants.

2075 Woody Ornamental Plants (3) S 2 hrs. lecture; 2 hrs. lab. Commonly used plants such as azaleas, camellias, roses, other shrubs, vines, and small trees; identification and uses of various plants.

2076 Foliage Plants and Greenhouse Management (3) F 2 hrs. lecture; 2 hrs. lab. Managing commercial and home greenhouses; identification and study of major greenhouse foliage plants.

4021 Florist Crop Production (3) S Prereq: HORT 2076 or equivalent. 2 hrs. lecture; 2 hrs. lab. Physiological phenomena of photoperiodism and thermoperiodism applied to commercial production of major greenhouse crops, including flowering, bulbous, and vining plants.

4051 Processing of Fruits and Vegetables (3) S, Su Prereq: FDSC 1049 or HORT 2050 or equivalent. 2 hrs. lecture; 2 hrs. lab. Methods of processing horticultural crops; includes canning, freezing, dehydration, and fermentation.

4071 Nursery Management (3) F Prereq: BOTY 3060 or equivalent. 2 hrs. lecture; 2 hrs. lab. General principles and practices involved in the commercial production, management, and marketing of nursery crops.

3031 American Studies (3) May be taken twice for credit. Selected topics in American civilization.

3033 Social Science Colloquium (3) May be taken twice for credit. Topics of significance from the standpoint of various social sciences.

3035 Natural Science Colloquium (3) Prereq: completion of one-year course in a physical science and one-year course in a biological science, at least one with laboratory; or consent of instructor. May be taken twice for credit. Selected topics illustrative of developing concepts of the natural and physical universe and of living organisms.

3100 Internships, Field Work, Off-campus Programs (1-6) Prereq: consent of director of the Division of Honors and Interdisciplinary Studies. May be repeated for credit for a maximum of 6 sem. hrs. For special learning opportunities.

3991 Thesis (3) Independent research and writing toward the honors thesis; the thesis itself to be completed in HNRS 3992.

3992 Thesis (3) An essay based on independent reading and research or a report on laboratory or field research.
day length, temperature, growth regulators, etc.; fruiting and production of vegetable crops.

7026 Current Topics in Pomology (3) S-E Seminar dealing with research publications topics in pomology.

7050 Plant Tissue Culture (4) Prereq: BOTY 4024, CPWS 3060, HORT 2061 and 7023. 2 hrs. lecture; 6 hrs. lab. The in vitro culture of selected higher vascular plants; media preparation; callus, and organ cultures; protoplast isolation, culture, and fusion; embryogenesis and plantlet regeneration and haploid culture.

HUMANITIES (HUMN)

7000 Humanities: Methods of Inquiry (3) Interdisciplinary study in the humanities; modes of inquiry in different disciplines, common themes in the humanities, and means of integrating these into the whole.

7900 Humanities: Themes and Commonalities (3) Major ideas in the humanities as reflected in exemplary published studies and student research; the cultural function of the humanities.

INDUSTRIAL EDUCATION (INED)

1001 Industrial Engines—Maintenance and Repair (3) F,S,Su 6 hrs. lab. Design, construction, operation, and maintenance procedures of industrial engines, including electrical, cooling, lubricating, and fuel systems.

1010 General Woodworking (3) F,S,Su 6 hrs. lab. Use and care of hand tools; application of machines in manufacturing wood products; machine safety; nomenclature.

1011 Materials and Methods of Residential and Light Commercial Construction (3) F S Prereq: INED 1010. Also offered as CONS 1011. 6 hrs. lab. Principles of building construction; implications of mass production; use and properties of new materials.

1021 General Metals (3) F,S,Su 6 hrs. lab. Technical knowledge and skills required in the areas of sheet metal, metal spinning, founding, forging, heat treatment, bench metal, and machine tool work.

2012 Woodworking Technology (3) S-O 6 hrs. lab. Advanced machine tool operations, job procedures, design and finishing.

2022 Advanced Metals (3) F,S,Su Prereq: INED 1021. 6 hrs. lab. Founding, forging, heat treatment, and machine tool work.

2024 Welding Technology (3) F,S,Su Also offered as CONS 2024. 6 hrs. lab. Application of arc and oxyacetylene processes including cutting and fusion, pressure, diffusion and braze welding; welding technology related to metallurgy, symbols, joint design, hard surfacing, and testing and inspection.

2030 General Electricity (3) F,S 6 hrs. lab. Fundamental principles of electricity; direct and alternating currents.

2031 Basic Electronics (3) F,S 6 hrs. lab. Basic electronic principles and circuitry as applied to diodes, vacuum tubes, power transformers, inductors, capacitors, resistors, and rectifiers.

2040 Technical Drawing, Reading, Sketching, and Takeoff (3) F,S,Su Prereq: INED 1011 or equivalent. 1 hr. lecture; 4 hrs. lab. Also offered as CONS 2040. Blueprint reading of the mechanical and building trades; freehand shop sketching, materials takeoff, and estimating.

2041 Industrial Crafts (3) V 6 hrs. lab. Techniques of art metalwork, plastics, and leather-craft.

2045 Fundamentals of Air Conditioning and Refrigeration (3) V 1 hr. lecture; 4 hrs. lab. Principles, parts, components, functions, and application of air conditioning and refrigeration systems; problems in equipment performance, operation, inspection, repair, and maintenance.

2051 Occupational Safety (3) F,S,Su Identification and appraisal of accident-producing conditions and practices; evaluation of accident problems in plant facilities, materials handling, machine safeguarding, hand tools, and occupational health.

2052 Introduction to Industrial Education (3) V 2 hrs. lecture; 2 hrs. lab. Purpose, objectives, development, and classroom observation of industrial education programs.

3043 Industrial Arts for Elementary Teachers (3) V 1 hr. lecture; 4 hrs. lab. Organization and construction of handicrafts activity units and methods of correlating with subject matter of elementary grades.

3055 Occupational Analysis Techniques (3) F Essential elements of an occupation or activity identified for purposes of job classification and instruction.

3057 Methods of Teaching Industrial Subjects (3) S Application of recognized methods of teaching.

3058 Planning and Organizing the Industrial Arts Curriculum and Laboratory (3) V Prereq: INED 2052. Preparation, organization, and evaluation of course materials and laboratory facilities for industrial arts.

3059 Occupational Guidance Principles (3) V Occupational guidance as applied to vocational education.

3060 Testing in Industrial Education (3) V Preparation and use of tests as a means of evaluating students.

3061 Industrial Supervisory Practice (3) F,S The supervisor as a key person in the industrial organization; duties, responsibilities, and successful supervisory practices.

3062 Principles of Industrial Training (3) F,S Functions of a training department, duties and responsibilities of a director, and teaching methods used to develop goals of teamwork and production in business and industry.

3063 Industrial Maintenance Practices (3) F,S 2 hrs. lecture; 2 hrs. lab. Functions of maintenance departments or divisions; duties and responsibilities of maintenance supervisors aimed toward efficient production for industry.
3064 Industrial Safety Management (3) F-E. Prereq: NED 2051 or equivalent. Management practices and principles applied to loss prevention and control; surveys of existing loss prevention programs, certification, professional ethics, and varied functions of the safety professional.


3069 Observation and Student Teaching (9) V. Prereq: senior standing and GPA of at least 2.20. 1 hr. seminar; 30 hrs. lab. Prior application required. Open only to students preparing to teach industrial education.

4065 Regulatory Considerations in Occupational Safety (3) F-Q. Practical understanding of major legislation impacting the occupational safety and health field; Occupational Safety and Health Act (OSHA), Worker Compensation laws, Consumer Product Safety Act (CPSA), and Mine Safety and Health Act (MSHA).

4066 Principles of Industrial Hygiene (3) S-O. Prereq: NED 2051 and ZOOL 2160; or equivalents. Introduction to industrial hygiene as related to environmental factors which produce adverse employee health.

4070 Teaching: Construction Industries (3) Su-V. An activity-oriented, conceptually based teacher education curriculum, incorporating methods and materials of The World of Construction as developed by the Industrial Arts Curriculum Project.

4080 Teaching: Manufacturing Industries (3) Su-V. An activity-oriented, conceptually based teacher education curriculum, incorporating methods and materials of The World of Manufacturing as developed by the Industrial Arts Curriculum Project.

INDUSTRIAL ENGINEERING (IE)


2154 Industrial Engineering Design and Analysis (3) Prereq: credit or registration in IE 2153. 2 hrs. lecture; 3 hrs. lab. Formulation and analysis of physical problems, design cycle, methods engineering, work measurement, balancing the manufacturing system, synthetic and real-time standard systems, and work sampling.

2603 Manufacturing Processes (3) Prereq: EGR 1001 or equivalent. 2 hrs. lecture; 3 hrs. lab. Theory, capabilities, and methods of manufacturing processes and production machinery; scheduling, planning, and cost analysis of production.

3201 Principles of Engineering Economy (3) Credit will not be given for both this course and IE 3710. Planning economy studies for decision making, including considerations of rate of return, cost and yield studies, depreciation and tax relationships, increment costs, replacement, and introduction to multivariate alternative studies.


3599 Senior Design Project in Industrial Engineering (1-3) Prereq: credit or registration in IE 4425. Aggregation of previous industrial engineering courses into a comprehensive design project.

4099 Advanced Problems in Industrial Education (1-3) F-S-S. May be repeated for credit for a maximum of 6 sem. hrs. Individual and group problems.

7080 History of Industrial Education (3) V. Development of industrial arts and vocational trade and industrial education; emphasis on growth of the profession in relation to societal changes, technical developments, and government laws.

7081 Principles of Vocational Trade and Industrial Education (3) V. Origins, practices, and status of vocational trade and industrial education in Louisiana and the U.S.; comparisons between VTIE and other vocational education programs.

7082 Conference Methods (3) V. Conference and reporting procedures used in industrial education; includes preparing, developing, and writing sample reports and reviews.

7083 Programmed Instruction (3) V. Principles of programmed instruction; emphasis on methods and application of instruction and development of materials.

7084 Administration and Supervision of Industrial Education (3) V. Philosophy, principles, and procedures of administering and supervising industrial education programs and staff.

7086 Curriculum Construction in Industrial Education (3) V. Curriculum research and development; actual industrial education curriculum programs evaluated and revised.

7087 Survey Techniques in Industrial Education (3) V.

7088 Administration of Adult Vocational Education Programs (3) V. Role of adult education in vocational training; determining needs, initiating, financing, and administering programs under state and federal legislation.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

3710 Engineering Systems Analysis and Optimization (3) Prereq: ENGR 2060 and MATH 2057. Credit will not be given for both this course and IE 3201. Project scheduling methods, engineering economy, linear and nonlinear programming in the analysis and optimization of engineering systems.

4104 Motion and Time Study (3) Not available for graduate IE degree credit. Process charting, operations analysis, motion and time studies, predetermined basic motion times, rating, allowances, work sampling, and wage payment plan.

4362 Advanced Engineering Statistics (3) Prereq: IE 3302. Linear regression and correlation, curvilinear regression, analysis of variance, and factorial experiments.

4382 Applied Probability Theory (3) Prereq: MATH 2057. Probability, including random variables and their transforms, discrete Markov processes, and some fundamental limit theorems.

4405 Production Control (3) Prereq: IE 4104. Not available for graduate IE degree credit. Routing, scheduling, dispatching in the plant; types of manufacturing industries; the production-control department, problems in production control.

4406 Plant Layout (3) Prereq: IE 4104. Not available for graduate IE degree credit. Layout planning, automation, materials handling, plant flow and arrangement, work place, department and plant arrangement, storage, receiving and shipping, and plant location.
4419 Engineering Production Control (3) Prereq: IE 2154, 4425, and 4510; or equivalents. 2 hrs. lecture; 3 hrs. lab. Organization and functions of industry; production control planning, scheduling, forecasting, and inventory relationships; network scheduling principles.

4425 Production Systems Engineering (3) Prereq: credit or registration in IE 4510; 2 hrs. lecture; 3 hrs. lab. Analysis and design of industrial information systems; projects relating comprehensive computer systems to typical industrial applications.

4453 Industrial Quality Control (3) Prereq: IE 2603 and IE 3302. Principles and practice of quality assurance and control; theory of statistical sampling and control and related economic analysis.

4480 Manufacturing Automation (3) Prereq: IE 2603 and 3201. 2 hrs. lecture; 3 hrs. lab. Application of computer-based control system techniques to manufacturing automation; programming of numerically controlled machine tools using Compact II and APT; robotics with midlegree of freedom linkages.

4485 Microcomputer Applications in Manufacturing (3) Prereq: ENGR 2060 and IE 2603. 2 hrs. lecture; 3 hrs. lab. Characteristics of microprocessors, microcomputer structure and operation, input/output and interfacing, and control and data acquisition in manufacturing.

4486 Basic Project Engineering (3) Prereq: basic course in thermodynamics and basic course in fluid mechanics. Not available for graduate IE degree credit. Basic principles in engineering and managing the design and construction of production facilities; steps in plant design, construction procedures, engineering design, and equipment selection.

4490 Engineering Maintenance Management (3) Prereq: IE 2154 and 4510. Design, operation, and monitoring of a system to efficiently control maintenance costs; maintenance organization and systems, preventive maintenance, maintenance planning and scheduling, maintenance work measurement, labor performance measures, and spare parts.

4510 Operations Research in Engineering (3) Prereq: MATH 2083 or 2090 or equivalent; and credit or registration in IE 3302. Linear programming, queuing theory, inventory theory, simulation models, and mathematical models relevant to engineering problems.

4511 Industrial Simulation (3) Prereq: IE 4510 and either ENGR 2060 or CSC 1241; or equivalents. 2 hrs. lecture; 3 hrs. lab. Computer used to simulate operating characteristics of industrial systems in time; problems encountered in constructing simulation programs applied to industrial plant operations and service-industry systems.

4516 Plant and Systems Design (3) Prereq: IE 3201, 4425, and 4510. Machine loading, assembly balancing techniques, design of physical-manufacturing systems, integrating the materials-handling systems into the plant, design of plant-service systems, site and plant location, and projects involving plant design using optimization techniques.

4540 Reliability Engineering (3) Prereq: IE 3302. Reliability in design; reliability models; reliability assessment during preproduction development and testing; and special problems in maintenance, spare parts, and Markov processes.

4607 Industrial Relations (3) Prereq: senior standing. Industrial organization; personnel forecasting; sources, selection, appraisal, and evaluation; training, compensation, and motivation; labor relations including contract negotiation, administration, and grievance handling.

4785 Special Topics in Industrial Engineering (3) Prereq: senior standing. May be taken twice for credit. Two sections may be taken concurrently if topics vary. Topics in industrial engineering not sufficiently covered in other undergraduate courses.

7201 Advanced Engineering Economy (3) Prereq: IE 3201 or equivalent. Engineering economic analysis, multiple projects and constraints, utility in project selection, preference ordering theory, and capital equipment pricing theory.

7211 Project Engineering (3) Prereq: IE 3201 or equivalent. Large-scale engineering construction or development projects from schematic to online condition.

7408 Industrial Systems Simulation (3) Prereq: IE 4510 and ME 4533; or equivalents. Design, testing, and operation of mathematical models to simulate industrial systems.

7425 Advanced Industrial Engineering Information Systems (3) Prereq: IE 4425 or equivalent. Concepts in systems analysis and design and emphasis on process selection and assignment related to these industrial engineering functions; includes data processing applications, computer-aided manufacturing applications, and other computer-based decision support systems.

7453 Advanced Quality Control (3) Prereq: IE 4453 or equivalent. Advanced procedures of statistical quality control, statistical analysis of quality control data, economic aspects of quality assurance, human element in quality control, and relationship of quality control to productivity and to ability of American products to compete in world markets.

7480 Automation and Computer-Aided Manufacturing (3) Prereq: IE 2603. IE 3201, and MATH 1552; or equivalents. Automated flow-line production, numerical control, industrial robots, computer-aided manufacturing, process monitoring and control, group technology, flexible manufacturing systems, and material requirements planning.

7485 Advanced Microcomputer Applications (3) Prereq: IE 4485 or equivalent. 2 hrs. lecture; 3 hrs. lab. Advanced topics in microprocessors/microcomputer control in manufacturing; input/output design; interfacing; hardware and software considerations.

7490 Advanced Maintenance Management (3) Prereq: IE 4490 and 4510; or equivalents. Statistical and operations research applied to maintenance management.

7541 Analysis of Industrial Operations (3) Prereq: IE 4510 or equivalent. Industrial operations research problems; emphasis on quantitative tools of problem analysis; methods, need for data, difficulties, action, and associated results.

7551 Industrial Queuing and Inventory Models (3) Prereq: IE 4510 or equivalent. Industrial waiting-line problems, including interference, equipment utilization, and maintenance theory; inventory models including industrial scheduling and reorder systems.

7561 Programming Methods in Operations Research (3) Prereq: IE 4510 or equivalent. Theoretical and practical aspects of advanced programming methods for unconstrained and constrained problems; development and application of goal, zero-one, gert, and multiple objective programming with application to industrial processes and planning.

7642 Administration of Engineering and Technical Personnel (3) Prereq: consent of instructor. Also offered as CHE 7302. Problems encountered by engineering personnel in administering other engineers and/or technical personnel; human relations; engineer as leader, supervisor, and administrator; wage and salary administration.

7720, 7721 Industrial Engineering Problems (3, 3) Problems of student interest in specialized industrial engineering areas such as design and analysis of complex production control.
maintenance, quality control, reliability, and work-measurement systems.

1051 Introduction to Interior Design (3) Contemporary practice of interior design as a profession; responsibilities of the interior designer.

1153 Architectural Basic Design (3) See ARCH 1153.

2720 Materials and Furnishings for Interior Design (3) F only Prereq: sophomore standing in the major. Materials, finishes, and furnishing types and sources available to the interior designer.

2750 Interior Design (3) F Prereq: admission to professional program and concurrent enrollment in ARCH 2151. 1 hr. lecture; 5 hrs. lab. Structured freehand drawing and quick-sketch techniques for decision making in interior design.

2751 Interior Design (3) S only Prereq: ARCH 2151 and ID 2750. 1 hr. lecture; 5 hrs. lab. Aesthetic and spatial decisions analyzed within the context of the interior environment; creative problem solving and communication techniques emphasized.

3720 Seminar in Interior Design (3) Prereq: consent of instructor. May be taken twice for credit when topics vary. Special topics not covered in other interior design courses.

3721 Home Planning (3) 2 hrs. lecture; 2 hrs. lab. Not open to interior design majors. Readings, trips, and practical studio problems. Basic principles of design as applied to housing; domestic planning and use of materials.

3722 Interior Designing (3) 2 hrs. lecture; 2 hrs. lab. Not open to interior design majors. Readings, trips, and practical studio problems. Planning and organizing single rooms, apartments, and residences to meet personal and family needs; home furnishing design, arrangement, color, and materials; relation of furnishings to architectural space.

3741 History of Interior Design and Decoration— I (3) F-O Interiors, interior architecture, furnishings, and cultural influences of the times, ancient through 17th century.

3742 History of Interior Design and Decoration— II (3) F-E Interiors, interior architecture, furnishings, and cultural influences of the times from 17th century to the present.

3751 Furniture Design (4) Prereq: ID 3752 and consent of instructor. 1 hr. lecture; 7 hrs. lab. Design, materials, construction, and production of interior components.

3752 Interior Design Studio—I (4) F only Prereq: ID 2751 or equivalent. Nonmajors by consent of instructor only. 1 hr. lecture; 6 hrs. lab. Design process involved in programming, space planning, analysis, communication, specification, and construction of interior spaces.

3753 Interior Design Studio—II (4) S only Prereq: ID 3752. Nonmajors by consent of instructor only. 1 hr. lecture; 6 hrs. lab. Interior design problems of a complex nature stressing interrelationship of multiple interior spaces, their equipment, and furnishings.

3754 Interior Design Studio—III (4) F only Prereq: ID 3753. For interior design majors only. 1 hr. lecture; 6 hrs. lab. Advanced interior design problems; experimental and innovative concepts; barrier-free design and behavioral responses to interior design.

3755 Interior Design Synthesis (6) S only Prereq: ID 3754. For interior design majors only. 12 hrs. lab. Individually prescribed advanced interior design study.

3759 Special Studies in Interior Design (1-6) Prereq: consent of instructor. May be repeated for credit a maximum of 6 sem. hrs. Advanced studio work in predetermined areas of specialization.

3760 Professional Practice (3) F only Prereq: senior standing in the major. Business practices for the interior designer; design contracts, office management, team projects; control, coordination, and supervision of service agencies.

3770 Color for Interior Spaces (3) F only Prereq: ID 2751 or equivalent; nonmajors by consent of instructor only. 1 hr. lecture; 4 hrs. lab. Nature, theories, and application of color.

3771 Lighting for Interior Spaces (3) S only Prereq: ID 3770 or equivalent; nonmajors by consent of instructor only. 1 hr. lecture; 4 hrs. lab. Qualitative and quantitative aspects of lighting; application to interior design.

ITALIAN (ITAL)

1001 Elementary Italian (5) F,S,Su Oral approach, with a minimum of formal grammar; emphasis on conversation, supplemented by aural-oral drill in the language laboratory.

2051 Intermediate Italian (5) F,S, Oral approach, supplemented by aural-oral drill in the laboratory; reading material of moderate difficulty.

2053 Intermediate Italian (3) F,S Continued audio-lingual drills, reading, vocabulary building, and review of basic principles of Italian grammar.

2055 Readings in Italian Literature (3) Readings in contemporary and older literature of Italy; emphasis on comprehension as well as oral and written expression in the language.

2061 Advanced Italian Grammar (3) For students majoring in Italian. Italian grammar and syntax.

2062 Advanced Italian Composition (3) Prereq: ITAL 2061. Drill in original descriptive and narrative composition in the language; style, syntax, idioms, and verb forms.

2071 Survey of Italian Literature (3) Development of Italian literature from the beginnings to the Renaissance.

2072 Survey of Italian Literature (3) Continuation of ITAL 2071; principal authors and literary movements from the Renaissance to the present.

3001 Italian Culture and Civilization (3) Taught in Italian. Italian culture and civilization; emphasis on understanding contemporary Italy.

4051 Dante (3) Dante, with emphasis on the Inferno.

4052 The Renaissance (3) Literary origins and productions of the Italian Renaissance; writings of Petrarch, Boccaccio, Lorenzo de' Medici, Poliziano, Sannazzaro, and Ariosto.
4915 Independent Work (1-3) F,S,Su May be repeated for credit for a maximum of 3 sem. hrs. Readings in Italian literature directed by a senior faculty member.

7971, 7972 Seminar (3 each)
7971 Old Italian Language and Pre-Renaissance Literature
7972 Italian Literature of the 18th and 19th Centuries

JAPANESE (JAPN)

3001, 3002 Elementary Japanese (5,5) Available only to students having no prior experience with Japanese. Cannot be used to satisfy an undergraduate foreign language requirement. Development of speaking and aural skills through intensive self-paced work; recorded materials and regular practice with a native speaker.

JOURNALISM (JOUR)

1700 Introduction to Broadcast Media (3) Y Organization, structure, and function of electronic media including history, regulation, social significance, and responsibilities.

2090 Introduction to the Mass Media (3) F,S,Su American mass media; development, structure, problems, and opportunities; mass communications theory and processes.

2091 History of American Journalism (3) Y Major developments in newspapers from colonial times to the present; history of news broadcasting from the 1920's to the present.

2095 Graphics of Communication (3) F,S Creative and practical aspects of typography; layout and design of visual communication through print and electronic media.

2151 Media Writing (3) F,S,Su Prereq: "B" or better in ENGL 1002 or English proficiency as certified by the College of Arts and Sciences English proficiency test or the English Writing Lab. Typing ability of about 35 words per minute recommended. 1 hr. lecture; 4 hrs. lab. Practice in locating sources of news, interviewing, and note-taking; evaluating and organizing facts; writing basic kinds of news stories using wire service style.

2152 News Reporting (3) F,S,Su Prereq: "C" or better in JOUR 2151. 2 hrs. lecture; 2 hrs. lab. Specialized kinds of news stories; assignments include reporting campus news for The Daily Reveille.

2710 Beginning Broadcast Newswriting (3) F,S Prereq: "B" or better in ENGL 1002 or English proficiency as certified by the College of Arts and Sciences proficiency test or the English Writing Lab. Typing ability of 35 words per minute recommended. 2 hrs. lecture; 2 hrs. lab. Practice in writing news stories for radio and television; emphasis on basic style and formatting.

2720 Radio Production (3) F,S 2 hrs. lecture; 3 hrs. lab. Principles of radio production and performance skills; participation in individual and group projects provides practical application of instruction in studio-equipment operation, writing, and announcing skills.

3000 Principles of Public Relations (3) Y Mass communication techniques applied to theories and principles of the public relations function.

3001 Business Journalism (3) V Writing for and editing house magazines, trade journals, and miscellaneous industrial publications; business news reporting for the daily newspaper.

3002 Feature Writing (3) F,S Prereq: JOUR 2151 and 2152. Developing and writing feature stories, vignettes, and other human-interest material.

3030 Principles of Advertising (3) F,S,Su Fundamentals of advertising theory and practice; social and economic role of advertising; functions of advertising in marketing and communication.
3998 Practicum (3) F,S,Su Prereq: consent of adviser and school director. At least 12 hours of work a week under general supervision of a faculty member and direct supervision of a professional in some field of journalism or communication, e.g., advertising or public relations agency, newspaper, magazine, journal, or broadcasting station.

4001 Public Relations Writing (3) Y Prereq: JOUR 2151 and 3000 and either a grade of "B" or better in ENGL 1002 or completion of the college English proficiency requirement. Typing ability of about 35 words per minute recommended. 2 hrs. lecture; 2 hrs. lab. Developing and writing news releases, speeches, audio-visual copy, feature stories, and other public relations communication materials.


4005 Public Relations Campaigns (3) V Prereq: JOUR 3000 and 4001. 1 hr. lecture; 4 hrs. lab. Developing and implementing public relations communication campaigns; hands-on experience in designing and producing print and audio-visual materials to be used in campaigns; emphasis on use of planning and evaluation techniques.

4010 Magazine Editing and Production (3) Y Prereq: JOUR 2095 and 3152; or consent of instructor. Magazine project required. Theory and techniques of magazine editing and production, including analysis of magazine industry and of specific magazines and their audiences; editorial objectives and formulas, issue planning, article selection, layout, illustration, typography, printing, and circulation.

4031 Advertising Design (3) F,S,Su Prereq: JOUR 2095, 2151, 3030, and 3031. 2 hrs. lecture; 2 hrs. lab. Advertising design concepts and techniques for print and electronic media; laboratory development of layouts and storyboards, emphasizing creative approaches to advertising problems.

4034 Advertising Media Analysis and Planning (3) F,S Prereq: JOUR 3030. Major analytical plan on current marketing problem required. Quantitative study of techniques and procedures used in determining advertising media selection, budget allocation, and levels of message intensity.

4035 Retail Advertising and Sales (3) Y Prereq: JOUR 3030, 3031, and 4031. 2 hrs. lecture; 2 hrs. lab. Retail advertising sales and management; layout and copywriting for retail businesses; advertising production; accounting procedures; case problems.

4036 Advertising Campaigns (3) F,S,S Prereq: JOUR 3030, 4031, and 4035. 2 hrs. lecture; 2 hrs. lab. Team development of advertising campaigns on a competitive basis (simulated advertising agency operation); emphasis on research marketing and advertising problems, budgetary planning, media strategy, and creative design.

4081 Opinion Journalism (3) Y Prereq: JOUR 2151 and 2152. Analysis of various forms of journalistic writing which involve subjective expression: interpretive reporting, news analysis, essays, editorials and columns, critical reviews, and interviews.

4082 The Law of the Mass Media (3)F,S,Su

4085 Newspaper Management (3) Y General management principles applied to publishing newspapers.

4092 Problems of Contemporary Journalism (3) F,S,Su Contemporary problems in publishing and broadcasting news, editorial materials, and advertising; examination of roles and responsibilities of the journalist, including journalistic ethics; media criticism.

4093 HONORS: Problems of Contemporary Journalism (1) V Coreq: JOUR 4092 for students enrolled in departmental honors program. Open to other qualified students with consent of instructor. Discussion and analysis of selected contemporary problems in the publishing and broadcasting of news, editorial material, and advertising.

4103 Comparative Media Systems (3) World mass media; news agencies, communication organizations, differing philosophies, international news flow, and political, economic, cultural, and geographical influences.

4114 Public Affairs Reporting (3) F,S Prereq: JOUR 3152. 2 hrs. lecture; 2 hrs. lab. News coverage of public affairs, such as news of the courts and government; assignments with local newspapers and broadcast media.

4170 Television and Radio Writing (3) V Form and substance of various program types; writing basic forms of program continuity, promotional and public service announcements, and documentary and dramatic programs for television and radio.

4710 Broadcast Management (3) V Prereq: JOUR 1700. Problems of managing a radio and television station; general management, programming, sales; engineering matters related to management.

4720 Broadcasting and Society (3) F Examines the interrelationship of the broadcast media and society by investigating the social impact of selected kinds of broadcast programming; effects of the broadcast industry, broadcast regulatory bodies, and public interest groups upon one another.

4730 Advanced Television Production and Directing (3) V Prereq: JOUR 3720 and consent of instructor. Planning, developing, and producing original television productions; studio and control-room work.

4971 Special Topics in Mass Communication (3) V Prereq: consent of instructor. May be taken twice for credit when topics vary. Analysis and discussion of a selected topic which goes beyond present advanced course offerings; topics to be announced.

4999 Independent Study (3) F,S,Su Prereq: at least a 3.00 gpa and consent of school director. Readings, projects, conferences, and reports under faculty direction.

7001 Research Methods in Mass Communications (3) F Methods common to most types of communications research; case studies, audiences, agencies of mass communications, and of communications content; occasional field work.

7005 Public Opinion (3) Y Formation and development of public opinion; role of the press in influencing thought and action.

7010 Seminar in Communications Literature (3) Y Basic issues and problems in journalism and mass communications as highlighted in relevant journals and books; journal articles and books of a catalytic nature.

7015 Mass Communications and Society (3) Y Roles of the mass media; responsibilities and rights of the communicator; interaction of mass media and society.

7016 International Mass Communications (3) F How nations get their news; organization and operation of press associations, newspapers, magazines, radio, and television.

7018 Legal Problems of the Mass Media (3) F Specific current legal problems affecting the mass media; basic principles of legal research methods.

7021 Mass Communication Theory (3) S The communication process; attention, perception, effects on individuals and
society; beginnings and development of symbolic communication and divergence of language systems; relation of language to the thought processes; uses of language in mass communications.

7971 Independent Research: Mass Communication (1-3) F.S,Su Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. For advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7999 Special Topics in Journalism (3) F,S,Su May be taken twice for credit when topics vary.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

JUNIOR DIVISION (JD)

0003 Study Skills (3) Not for degree credit. Pass-no credit grading. Basic learning principles; includes time management, goal setting, note-taking, listening skills, reading for retention, report writing, preparing for and taking tests, and study techniques; human development exercises, simulations, and discussions to promote self-esteem.

0006 Study Skills (2) 1 hr. lecture; 1 hr. lab. For students in Special Services Programs only. Not for degree credit. Pass-no credit grading. Basic learning principles; includes time management, goal setting, note-taking, listening skills, reading, theme and report writing, memory, and analyzing study problems.

0010 Developmental Reading—I (4) 4 hrs. lecture and individualized instruction. For students whose diagnostic tests indicate a reading level below 8.0. Not for degree credit. Pass-no credit grading. Intensive work with functional reading skills including word recognition, comprehension, structural analysis, phonetic analysis, and study techniques.

LANDSCAPE ARCHITECTURE (LA)

1151 Introduction to Landscape Architecture (3) Concerns and responsibilities of landscape architects; overview of the profession, elements and processes of design, and examples of public and private design work.

1153 Basic Design for Landscape Architecture (3) 1 hr. lecture; 4 hrs. lab. Two- and three-dimensional design; two-dimensional surfaces and three-dimensional spaces; materials, time, and meaning in design.

1181 Landscape Architectural Graphics (Freehand) (3) 1 hr. lecture; 4 hrs. lab. Freehand drawing skills and techniques used in illustrating components of the landscape; landscape elements as separate objects; composition and rendering of elements in combination.

1182 Landscape Architectural Graphics (Mechanical) (3) 1 hr. lecture; 4 hrs. lab. Technical drawing for the landscape architect; measured, scaled, and dimensioned drawings to illustrate components of the landscape and landscape materials; use of plans, sections, elevations, isometrics, and orthographic projections.

1651 Introduction to Recreation (3) Same as HPRD 1700. Historical and philosophical foundations of leisure and recreation in modern society; team efforts of landscape architects and recreation specialists in planning, designing, and management of recreational space and programs.

2111 Survey of Landscape Architecture (3) Primarily for non-landscape architecture majors. Awareness and appreciation of home and community problems which can be resolved by landscape architects.

2112 Ecology in Landscape Architecture (3) Use of ecological principles and relationships as basis for resource, recreation, and landscape planning; natural systems and the interaction between natural and man-made elements of the environment; environmental and conservation ethics.

2121 Plant Materials (3) 1 hr. lecture; 4 hrs. lab. Identification and study of plant materials; ecological and visual characteristics of plants used in landscape design.

2141 Landscape of the Ancient World (3) Development of the earliest landscape traditions; relationship of man to the landscape in the major culture areas of the ancient world.

2142 The Landscape of Western Civilization (3) LA 2141 recommended. Development of landscape traditions in western Europe and America from the 5th to the 20th centuries.

2143 The Contemporary Landscape (3) LA 2141 and 2142 recommended. Major landscape movements of the 20th century; various aspects of the contemporary practice of landscape architecture.

2145 Historic Preservation for the Landscape Architect (3) Theory and practice of historic preservation as a component of the landscape architect's responsibility for resource management; introduction to analysis, management, and design methodology for cultural resources.

2151 Site Planning Principles (3) 2 hrs. lecture; 2 hrs. lab. Theory and principles of site planning; site sensitivity; source material and design methods; site standards; roles of those concerned with site planning.

2152 Landscape Design Theory (3) Prereq: LA 1153 or equivalent. 2 hrs. lecture; 2 hrs. lab. Application of basic design concepts to landscape architectural design; design processes; sensitivity to role of site, client, materials, and designer.

2171 Landscape Architectural Implementation: Materials (3) Prereq: LA 1182 or equivalent. 2 hrs. lecture; 2 hrs. lab. Technical concepts, materials, and products used in landscape architecture; properties of materials and methods of construction.
2183 Landscape Architectural Design Graphics (2) Prereq: LA 1181 and 1182; or equivalents. 4 hrs. lab. Graphic techniques, tools, and methods used in landscape architectural analysis and design; communication of design ideas.

2652 Evolution of Park and Recreation Planning (3) History of parks in the U.S. from earliest developments to the present; interrelationships of cultural influences.

3000 Landscape Architecture Computer Applications (3) 1 hr. lecture; 4 hrs. lab. Microcomputers in the landscape architect's office; use of small systems and common software.

3122 Plant Materials in Design (3) Prereq: LA 2121 or equivalent. 1 hr. lecture; 4 hrs. lab. Identification and study of plant materials as landscape design elements integrated with and related to theoretical aspects of planting design.

3153 Detail Design (4) Prereq: LA 2122 and 2152; or equivalents. 8 hrs. lab. Comprehensive landscape architectural design; use of earth, structural materials, plants, and other elements.

3154 Site Design (4) Prereq: LA 2151 and 3153; or equivalents. 8 hrs. lab. Arrangement of buildings, circulation, and other landscape design elements; design processes and conceptualization.

3183 Applied Landscape Architectural Graphics (2) Prereq: LA 2183 or equivalent. 4 hrs. lab. Design and presentation graphics applied to landscape architectural design projects.

4000 Integrated Studio (4) Prereq: consent of instructor. 8 hrs. lab. Project-oriented design studio for landscape architects, architects, and other design majors. Integration of various design professions and student levels on a comprehensive design project.

4112 Environmental Issues in Design (3) Institutional factors and relationships as they affect resource, recreation, and landscape planning and design; assessment and mitigation of the environmental impact of design activities.

4156 Planting Design (3) Prereq: LA 3122 and 3154; or equivalents. 1 hr. lecture; 4 hrs. lab. Plant arrangement for a series of landscape design projects from detailed to regional scale.

4157 Site Master Planning (4) Prereq: LA 3154 and 4173; or equivalents. 8 hrs. lab. Arrangement of complex multiple land uses, buildings, circulation, and other landscape design elements; design processes and conceptualization.

4158 Landscape Architectural Design Implementation (6) Prereq: LA 4135, 4157, and 4177; or equivalents. 2 hrs. lecture; 8 hrs. lab. Synthesis of previous design and construction courses; preparation of sets of design and construction drawings for larger-scale projects through an integrated design implementation approach.

4173 Landscape Architectural Implementation: Grading (4) Prereq: LA 2171, MATH 1015 or 1022, and either AGE 2307 or CE 2500 and 2510; or equivalents. 2 hrs. lecture; 4 hrs. lab. Topographic grading, earth volume-estimation, and horizontal and vertical roadway alignment.

4174 Landscape Architectural Implementation: Structures (4) Prereq: LA 4173 or equivalent. 2 hrs. lecture; 4 hrs. lab. Design, technical layout, and construction of site structures; specialized aspects such as structural mechanics, wood construction, and retaining walls.

4175 Landscape Architectural Implementation: Systems (4) Prereq: LA 4173 or equivalent. 2 hrs. lecture; 4 hrs. lab. Design, technical layout, and construction of site systems; specialized aspects such as drainage, irrigation, and utilities.

4183 Advanced Landscape Architectural Graphics (4) Prereq: LA 3183 or equivalent. 8 hrs. lab. Professional quality presentation techniques; model building, computer graphics, video, graphic media.

4184 Communication Media in Landscape Architecture (3) Prereq: LA 2183 and 3153; or equivalents. 2 hrs. lecture; 2 hrs. lab. Use of various media to promote and clarify the exchange of ideas and attitudes among designers; communication of design to the public.

4191 Independent Studies in Landscape Architecture (1-6) May be repeated for credit for a maximum of 6 sem. hrs. Problems in landscape architecture adapted to specific needs of students.

4195 Field Studies in Landscape Architecture (1-2) May be repeated for credit for a maximum of 6 sem. hrs. $100 non-refundable deposit required at registration. Additional amount required for transportation may be nonrefundable. Balance due no later than one month prior to departure. Field trips to landscape architectural offices, projects, and schools throughout the U.S. and abroad; discussions with professional landscape architects at their offices and with students and faculty of other universities to promote exchange of ideas and to observe professional practice.

4196 Seminar: Field Studies in Landscape Architecture (1) Prereq: LA 4195. May be taken 3 times for credit. Seminar papers and discussions used to promote exchange of ideas and review of design concepts and professional practice.

4250 Comprehensive Design (6) Prereq: LA 4158 or equivalent. 12 hrs. lab. Comprehensive design package relating site planting and detail design with implementation documents.

4251 Design Specialization (6) Prereq: LA 4158. 12 hrs. lab. Concepts of and approaches to specialized design projects developed around faculty expertise and/or emerging design opportunities.

4252 Independent Study Project (6) Prereq: LA 4158. 12 hrs. lab. Execution of a project selected by the advanced student with guidance of an advisory committee; allows credit for work in the academic setting or for structured study away from campus.

4276 Landscape Architectural Professional Practice (3) Legal, business, and professional aspects of landscape architectural practice; significance of orderly, ethical procedures in the relationship of landscape architect to clients, contractors, and other consultants.

4291, 4292 Specialized Aspects of Landscape Architecture (2,2) Prereq: consent of instructor. Advanced research, design, and discussion.

4654 Areas and Facilities for Recreation (3) 1 hr. lecture; 6 hrs. lab. Design and management of recreation areas.

5123 Landscape Plant Materials (3) 1 hr. lecture; 6 hrs. lab. Identification and study of approximately 300 plants; emphasis on their visual characteristics.

5124 Planting Design (3) 1 hr. lecture; 6 hrs. lab. Development of skills in planting design for a series of projects from detailed to regional scale; emphasis on visual characteristics and ecological value of plants and conceptual attitudes behind their use.

5141 History of Landscape Architecture (3) Landscape development in western civilization from the earliest cultures through the 19th century.

5142 History of Landscape Architecture (3) Landscape development in the 20th century; evolution of Oriental attitude toward the landscape and contrasts in viewpoint with western civilization.
5151 Landscape Design—I (6) 3 hrs. lecture; 9 hrs. lab. Tools, scope, and working vocabulary of the profession.

5152 Landscape Design—II (4) 1 hr. lecture; 9 hrs. lab. Approaches and techniques of site design; emphasis on strategies and methods of approaching site design problems, use of site analysis, design program information, and elements of design form.

5171 Landscape Construction—I (3) 2 hrs. lecture; 3 hrs. lab. Site engineering; materials; elements and principles of structures; basic concepts of topographic grading.

5172 Landscape Construction—II (4) 2 hrs. lecture; 6 hrs. lab. Topographic grading, drainage, earth volume estimation, and roadway alignment.

5191 Research in Landscape Architecture (3) Prereq: EXST 4011 or equivalent. 2 hrs. lecture; 3 hrs. lab. Approaches to research problems; skills and concepts; selection and use of data sources; review and evaluation of research in landscape architecture and related fields; conduct of a research endeavor; application of research to landscape design.

7173 Landscape Construction—III (4) Prereq: LA 5172 or equivalent. 2 hrs. lecture; 6 hrs. lab. Advanced site engineering; synthesis and utilization of previous design and engineering courses; enhancement of knowledge and skills in design, technical layout, and construction of site structures and systems.

7351 Landscape Design—III (4) 1 hr. lecture; 9 hrs. lab. Approaches and techniques of site planning; methods of solving site planning problems; development and use of advanced site analysis techniques and land use program information; design elements of plan resolution.

7352 Regional Design (4) 1 hr. lecture; 9 hrs. lab. Regional landscape; methods of assessing environmental problems and identifying landscape resources; use of interdisciplinary data base.

7353 Urban Design (4) 1 hr. lecture; 9 hrs. lab. Development of strategic land areas in the urban core; land development including financial, social, and environmental feasibility.

7354 Independent Study in Landscape Architecture (1-4) Enrollment based on faculty acceptance of student's proposal prior to registration. For the superior and advanced student. Student supervised by and responsible to a graduate faculty member in all case-study situations; faculty evaluations based on periodic reviews and final written report and verbal presentation. Student may work individually with a faculty member who has special expertise but is not teaching a course on the topic, work with a professional in the community or with a government agency on projects of meaningful academic experience, or engage in individual study away from campus.

7393 Document Survey in Landscape Architecture (1-4) Prereq: LA 5191 or equivalent. Supervised reading and research on topics selected by advanced students; literature and other document review related to specific landscape architectural problem areas; analysis of reporting techniques and relationship of literature to landscape design.

7394 Research Project in Landscape Architecture (1-4) Prereq: LA 5191 or equivalent. Supervised research projects selected by advanced students; design determinants or specific landscape architectural problems examined through a term research project of limited scope.

7398 Seminar in Landscape Architecture (2) Issues and problems in landscape architecture; student presentations and use of informed guests from University and community.

7399 Seminar in Landscape Architecture (2) 2 hrs. recitation. Issues and problems in landscape architecture; student presentations and use of informed guests from the University and community.

7695 Research in Recreation Planning (1-4) Prereq: LA 5191 or equivalent. Analysis of recreation problems; written documentation of application of research study to recreation planning.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

**LATIN (LATN)**

1001 Elementary Latin (5) Nonlaboratory reading course in classical Latin; emphasis on comprehension rather than grammar; repetition of controlled vocabulary and contextual clues used to read extensive passages of simple Latin.

2051 Intermediate Latin (5) Reading comprehension approach to language continued in extensive passages of moderate difficulty; vocabulary and basic Latin grammatical constructions.

2053 Intermediate Latin (3) Nonlaboratory comprehension approach includes material of the difficulty of 1st century Latin poetry and prose.

2065 Golden Age Narrative Poetry (3) Representative readings from the narrative poets, including selections from Vergil's *Aeneid* and from Ovid's *Metamorphoses*.

2066 Golden Age Prose (3) Representative readings from Roman prose writers (excluding the historians); the major speeches, letters, and philosophical works of Cicero.

2073 Roman Historians (3) Representative readings from Roman historians; selections from Livy and Tacitus; the differing prose styles and philosophies of history of the authors.

2074 Golden Age Lyric Poetry (3) Representative readings from the lyric poets; selections from the *Carmina* of Catullus and the *Odes* of Horace, with attention to emotional content.

2090 Greek and Roman Mythology (3) Taught in English; knowledge of the Greek and Latin languages not required. Credit not applicable toward a major in Latin or classical languages.

4001 Intensive Latin Language (3) A specialized course intended to provide a reading knowledge of Latin. For graduate students and advanced undergraduates for whom a familiarity with another foreign language is strongly recommended. Successful completion of this course will be regarded as sufficient preparation for LATN 4006. Does not count toward satisfying foreign language requirement for undergraduates, although hours may count toward baccalaureate. Credit will not be given for both this course and introductory Latin courses. Syntax, grammar, and lexicology of Latin; graduated readings from representative authors.

4002 Roman Satire (3) Readings from Petronius' *Satyricon*, Martial, and Juvenal for their humor, with attention to evidence of the lives and language of ordinary Roman people.

4003 Readings in the History of Livy (3) Selections from the History of Livy; literary and historical significance.

4004 Roman Comedy (3) Reading of representative plays of Plautus and Terence, with attention to dramatic techniques and comic situations.
4006 Medieval and Renaissance Latin (3) Selected readings from the time of the Latin writers to Milton.

4007 Latin Prose Composition (3) Practice in writing Latin prose; emphasis on grammar and syntax of classical Latin, using Ciceronian prose style as the model.

4100 Survey of Latin Literature (3) Readings in major Roman authors from the beginning to Ammianus Marcellinus; supplementary readings in English in the literary, political, and social history of Rome.

4120 Roman Elegy (3) Readings in the major Latin elegiac poets such as Ovid, Propertius, and Tibullus; attention to poetic technique and to Roman attitudes toward love and women.

4915 Independent Work (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings in Latin literature directed by a senior faculty member.

LATIN AMERICAN STUDIES (LAS)

7900 Reading Seminar in Latin American Studies (3) Required of all M.A. candidates in Latin American studies. Open to other graduate students with consent of instructor. Directed interdisciplinary readings on social and political context of economic development in Latin America.


7979 Tropical Biology: An Ecological Approach (1-8) Eight-week field course at research sites in Costa Rica; conducted by Organization for Tropical Studies. Also offered as BOTY 7979 and ENTM 7979. Complexities of tropical plants and animals and their interactions.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

LIBRARY SCIENCE (LIBS)

7002 Reference and Bibliography (3) Core course. Preparation for reference and bibliographic work in public, college, school, and university libraries; selection, evaluation, and use of scholarly general and specialized reference materials in various subject fields; basic introduction to one machine readable data base system.

7003 Library and Information Agencies and their Resources (3) V Core course. Social role of library and information agencies and the profession; includes principles and techniques for selection of materials and evaluation of collections in the context of user needs.

7004 Principles of Library Management (3) Core course. Basic functions of management and their application to library operations.

7008 Organization of Knowledge and its Technology (3) Core course. Social aspects of knowledge and its growth; role of libraries and information agencies in its dissemination; technology of libraries in general, especially the technology of bibliographic organization.

7101 Media and Services for Children (3) Aspects of child development and the place of library resources, both print and nonprint, in meeting the needs of children through library programs of all types.

7102 Media and Services for Young Adults (3) Specialized area of young adult librarianship; contemporary literature and non-book formats, programming, and services.

7106 Problems in Selection and Evaluation of Library Resources (3) Critical evaluation of materials and systems by subject, format, special topic, and accessibility.

7200 Resources for the Humanities (3) Literature in major divisions of the humanities, including bibliographical and reference materials, audio-visual media, periodicals, and machine readable data bases. Fields: art, music, religion, philosophy, and literature.

7201 Resources for the Social Sciences (3) Literature in major areas of the social sciences, including special reference books, pertinent government documents, periodicals, audio-visual materials, and machine readable data bases. Fields: history, geography, education, economics, political science, sociology, anthropology, business, and law.

7202 Resources for Science and Technology (3) Literature of science; modern concepts and representative literary works in the major fields of pure and applied sciences; special reference and audio-visual materials, periodicals, and machine readable data bases.


7204 Resources of the Health Sciences (3) History and structure of health sciences literature; resources; problems of bibliographic control.

7206 Resources of American Research Libraries (3) Problems of building and maintaining research collections; distribution and extent of these libraries; methods of surveying library facilities; interinstitutional agreements for specialization of collections and other forms of library cooperation; printed catalogs, union catalogs, and bibliographical centers.

7209 Resources in Special Literatures (3) May be taken twice for credit when topics vary. Literature and resources found in special libraries such as law, theology, music; one type of literature per semester; sources studied include those useful for both reference work and collection development.
7400 School Librarianship (3) Philosophy and objectives of school library service; trends influencing development of the school library and its increased responsibilities for new services; the school library as a multimedia learning center.

7401 Academic Librarianship (3) The library in the college and university community; organization, financing, and administration; materials selection and buying; reference works; reserved books; graduate research; interlibrary loans; instruction in use of the library.

7402 Cooperative Systems Librarianship (3) Interrelationships of all types of libraries in a system; management procedures with emphasis on personnel, legal frame of reference of the systems, and use of new technological developments in communication with transmission of information.

7403 Special Librarianship (3) Major types of special libraries; their purpose and function in business, government, and other organizations; principles of administration; technical processing; reference services, as applied to special libraries; special methods, techniques, routines, and records.

7404 Health Sciences Librarianship (3) Administration, organization, function, and services of health sciences libraries; networks and cooperative programs, with emphasis on Medline.

7405 Public Librarianship (3) Role of the public library in the past and present; relationship of the public library to the community; political and budgetary aspects of library functioning; major service responsibilities of the public library.

7501 Management of Library and Information Systems (3) Development of management thought; application of management functions to library operations; contemporary thinking of library managers; research problems related to library management concerns.

7505 Analysis of Libraries and Information Systems (3) Application of systems analysis techniques to management of libraries and information centers; analysis and evaluation of current operating systems; design and implementation of more effective manual and/or computerized information processing and delivery systems.

7506 Library Technical Operations and Automation (3) Also offered as CSC 7405. Management and automation of library technical operations—acquisitions, materials organization, serials, and circulation; evaluation, acquisition, and application of integrated automation systems.

7507 Microcomputers in Libraries (3) Use of microcomputers in library processes; evaluation and use of software, evaluation of user patterns and needs, and library management concerns.

7603 Organization of Document Systems—Description (3) Principles and practices of document description and nomenclature access in document information systems, especially in library catalogs and databases.

7604 Organization of Document Systems—Subject Access (3) Principles and practices of subject access in document information systems, especially library catalogs and shelf arrangements.

7605 Information Science (3) Also offered as CSC 7406. Theory, history, and philosophy of information science and information retrieval; analysis and evaluation of existing information retrieval systems; information-system design for library application.

7606 Abstracting and Indexing (3) Also offered as CSC 7407. Abstracting and indexing methods, evaluation of manual and computerized abstracting and indexing systems; problems confronting abstracting and indexing services; question analysis and search strategies; evaluation of search results.

7607 Online Library Systems and Services (3) Also offered as CSC 7410. Development and use of online systems and services in libraries; in-depth training in their use; impact of online services on libraries and information systems.

7700 History of Books and Libraries (3) History and cultural relationships of the book and libraries; rise of the modern library since the mid-19th century.

7701 Printing and Publishing (3) History of printing and publishing; development of the publishing industry in the 19th and 20th centuries.

7800 The Art and Practice of Storytelling (3) Role of storytelling as a form of communication, past and present; selection, preparation, and presentation of stories for all age groups; planning story programs for libraries and television.

7809 Research Methods in Library and Information Science (3) Research methodology applicable to library and information phenomenon; definition of research problems, selection of inquiry tools, and data collection; emphasis on evaluation of research.

7901 Issues in Libraries (1) Pass-fail grading. Core course. All graduating students are expected to participate in faculty-directed discussions in which a synthesis of contemporary professional issues is the focus.

7902 Field Experience in School Librarianship (3) Prereq: completion of core courses and LIBS 7101, 7102, and 7400; or equivalents. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of school libraries.

7903 Field Experience in Special Librarianship (3) Prereq: completion of core courses and LIBS 7403; or equivalents. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of special libraries.

7904 Field Experience in Academic Librarianship (3) Prereq: completion of core courses and LIBS 7401; or equivalents. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of academic libraries.

7905 Field Experience in Public Librarianship (3) Prereq: completion of core courses and LIBS 7405; or equivalents. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of public libraries.

7906 Field Experience in Health Sciences Librarianship (3) Prereq: completion of core courses and LIBS 7204 and 7404; or equivalents. Preparation for course begins semester prior to registration. 120 hrs. per semester at field site. Experience in administration and management of health sciences libraries.

7907, 7908 Special Topics in Library and Information Systems (1-3, 1-3) Only 6 sem. hrs. in 7907 and 7908 applicable to M.L.S. degree Areas of current interest.

7909 Directed Independent Study (1-3) May be repeated for credit for a maximum of 6 sem. hrs.

8000 Thesis Research (1-12 per semester) "S"/"U" grading.
3000 Petroleum Land Management Practice (1) Open only to petroleum land management majors. Required of petroleum land management majors; waived only by consent of department. Pass-fail grading. A minimum of 6 weeks of full-time employment by a firm participating in the program.

3115 Operations and Information Systems (3) See QBA 3115.

3127 Collective Bargaining in the Private Sector (3) Limitations placed on managerial prerogatives by collectively bargained agreements in the private sector.

3129 Cases in Personnel and Labor Relations (3) Prereq: MGT 4130 and 4170. Case presentation and simulations on recruitment, selection, training and development, compensation, labor relations, personnel planning, performance appraisal, and job analysis; emphasis on interrelationships among the various personnel functions and their importance to the organization.

3159 Management Principles and Policies (3) Credit will not be given for both this course and MGT 4159. Nature and principles of management; problems of policies, organizations, and external relationship.

3190 Business Policies and Problems (3) Prereq: FIN 3715, MGT 3159, and MKT 3401. May be taken only during the final semester of course work. Specific problems involved in formulation of consistent business policies and maintenance of an efficient organization; actual cases used as basis for discussion and preparation of reports which call for executive decision making.

3193 Business and Society (3) Prereq: senior standing. Problems involved when social roles are required of organizations where a primary function is the accumulation of profits; emphasis on current issues; historical development of business-society relationships.

3270 Independent Study: Advanced Management Topics (1-6) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. Independent research under direction of a faculty member.

3471 Employee Selection and Placement (3) Prereq: MGT 4167 and QBA 2000; or equivalents. Staffing requirements, recruitment strategies, development and validation of selection instruments/procedures, classification and placement of personnel; problems associated with person-job matching; the socialization of new employees.

4110 Management of Innovation (3) The competitive environment; innovative process and invention evaluation; anatomy of successful innovation; management of creativity; patenting innovation; social/cultural, organizational, and governmental influence on innovation.

4120 Managing Technology Transfer (3) Models of technological transfer; sources, mechanisms, and barriers to technological transfer; technological transfer and industrial innovation; domestic and international aspects of technology transfer.

4125 Analysis of Organization and Information Systems (3) No prior programming experience required. Systems problems related to accounting, management, marketing, production, organization theory, economics, and electronic data processing; systems design and analysis project using computer simulation language.

4128 Collective Bargaining in the Public Sector (3) Special problems and issues in public sector bargaining; those aspects different from private sector bargaining.

4130 Government Regulation of Human Resource Management (3) Impact of federal legislation on human resource managers; hiring, retention, and promotion policies of employers.

4140 Multinational Management (3) Prereq: MGT 3159 or equivalent. Management concepts, analytical processes, and philosophical bases for international management operations; environmental dynamics, multinational business organizations, cultural constraints, organizational structures and processes, and conceptual systems of international operations.

4159 Analysis of Organizations and Management (3) Offered for the M.B.A. student (and others intending to enter the program) without previous course work in these areas. Credit will not be given for both this course and MGT 3159. Intensive foundation course in organizations and management.

4164 Human Behavior in Organizations (3) The behavioral sciences applied to understanding of interpersonal relationships in business; philosophies, theories, and concepts of human aspects of American business as distinguished from economic and technical aspects; how these factors influence efficiency, morale, and business practices; group dynamics; effects of informal organization as opposed to formal organization.

4167 Personnel—Human Resources (3) Personnel functions: personnel planning, recruitment, selection, development, utilization, maintenance, and reward of employees; relationships with environment and employee associations.

4170 Compensation Administration (3) Prereq: MGT 4167. Quantitative and nonquantitative methods of job evaluation, wage level, wage structure, incentive plans, and contemporary issues of employee compensation.

5220 Administrative Theory and Behavior (3) Management fundamentals and organizational behavior; structure, processes, behavior in, and development of organizations.

7140 International Business Management (3) Theories and practice of international business; management of international operations; development of environmental, operational, strategic, and decision-making perspectives relative to functional areas of business in an international context.

7200 Research Methods and Reports (3) Prereq: QBA 3001 or equivalent. Methods of primary research as used in business; major sources of business information; analysis, organization, and writing of research reports; problem work in the major forms of business research.

7205 Business and Society (3) Role of business in the broader societal context; changes occurring in business and resulting modifications of the relationship of business to society; roles of business as viewed by business and by society.

7210 The Development of Management Thought (3) Origin and growth of managerial philosophies, theories, principles, and concepts; contributions of the leaders of the main channels of thought, including scientific management, the process approach, behavioral sciences, quantitative methods, systems, and other past and present approaches to management theory.

7218 Organization Development (3) Theories, strategies, and techniques for improving effectiveness of organizations through improved interpersonal and person-group relationships.

7240 Organization Theory (3) The macro aspects of organizations; processes by which organizations are formed, struc-
tures used in their elaboration; internal processes of organizations, environmental considerations, conditions of organizational viability and renewal.

7241 Organizational Behavior (3) Behavior of people within organizations; special concentration on the environment within which organizations function, components of the behavioral unit, processes, interactions, and outputs of organizational behavior.

7267 Seminar in Personnel—Human Resources (3) Role of personnel executives; emphasis on their relationships to employees, employee associations, external environment, organizational environment.

7268 Operations Management (3) See QBA 7268.

7269 Systems Management (3) General systems concept, its application to understanding of the management of human organizations; isomorphism, entropy, information, cybernetics, law of requisite variety, management information systems, systems ecology, testing of management systems, effects of computers on systems; quantitative techniques used in systems analysis and design as they relate to human organizations.

7270 Seminar in Advanced Business Problems (3) May be taken twice for credit. Directed work in advanced topics.

7280 Seminar in Policy Formulation and Administration (3) Integration of material learned in the functional and tool areas of business; extensive use of case studies and field projects to provide a top management perspective of the business enterprise.

7300 Labor Management Relations (3) Primarily for master's level students. Collective bargaining and strategies, public policy, and current issues in the public and private sectors.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Predissertation Research (1-9) May be repeated for credit. Pass-fail grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

MARINE SCIENCES (MRSC)

2007 Introduction to Marine Sciences—Physical Processes (4) F 3 hrs. lecture; 3 hrs. lab. Does not satisfy major field course requirement for students in natural science curricula. Also offered as BIOL 207 at Southern University in Baton Rouge. Physical processes in marine and aquatic environments; how they influence coastal Louisiana.

2008 Introduction to Marine Sciences—Life Processes (4) S 3 hrs. lecture; 3 hrs. lab. Does not satisfy major field course requirement for students in natural science curricula. Also offered as BIOL 208 at Southern University in Baton Rouge. Life and environmental processes in marine and aquatic settings; how they influence coastal Louisiana.

4010, 4011 Marine and Wetland Ecology for Teachers (3,3) V Credit for these courses can be applied only to professional degrees in education. Specifically for science and social science teachers. Marine sciences and wetland ecology; emphasis on the Louisiana coastal zone.

4020 Introduction to Marine Sciences for Graduate Students (3) V Prereq: marine sciences major or minor, or consent of department chairman. Geological, physical, chemical, and biological aspects of marine study; their application to past and present LSU research activities.

4041 Salt Marsh Ecology (4) Su only Prereq: general botany and 10 semester hours of biology. Four weeks at Gulf Coast Research Laboratory, Ocean Springs, Mississippi. Botanical aspects of local marshes; plant identification, composition, structure, distribution, and development of coastal marshes; biological and physical interrelationships; primary productivity and relation of marshes to estuaries and associated fauna.

4086 Marine Food Resources and Technology (3) F-O See FDSC 4086.

4090 Marine Microbiology (3) F-O Prereq: MBIO 2051 or equivalent. Also offered as MBIO 4090. Characterization and distribution of estuarine and open-ocean microorganisms; role of marine heterotrophs in organic and inorganic cycling processes and food web dynamics; microbial contribution to diagenesis, antibiotics, and biomagnification in the sea; indicator species; microbial activities in marine corrosion, decomposition, and fish pathology and spoilage.

4095 Marine Field Ecology (4) Su only Prereq: general biology, invertebrate or vertebrate zoology, introductory chemistry, and consent of instructor. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory. Also offered as ZOOL 4095. Relationships of marine and estuarine organisms to environmental factors; interactions among organisms; ecological processes of energy and materials flow; field studies of communities and ecosystems of the Louisiana coastal zone.

4126 Chemical Oceanography (3) S See GEOL 4081.

4170 Physical Oceanography (3) S Prereq: CE 2200; and graduate standing or consent of instructor. Physics of the ocean, with emphasis on dynamical problems; physical properties of sea water, marine instrumentation, flow dynamics in the earth's rotating coordinate system, water waves, general circulation.

4171 Coastal and Marine Meteorology (3) F-E. Prereq: MATH 1552, PHYS 2102, and either graduate standing or consent of instructor. Dynamical and physical behavior of the atmosphere; application of basic laws and concepts of physics; flow characteristics and thermodynamic processes, as well as the chemistry, electricity, and radioactivity of the marine atmosphere.

4210 Geological Oceanography (3) F Prereq: two-semester introductory course in geology. Also offered as GEOL 4210. Basic principles of marine geology; sediments and sedimentation in the marine environment from the nearshore zone to the abyssal plain; geological effects of bottom currents; sea-level history; geophysical techniques; continental drift and sea-floor spreading; tectonic history of the oceanic crust.

4308 Plants in Coastal Environments (3) V Prereq: one-semester course in biology or ecology; or consent of instructor. 2 hrs. lecture; field trips equivalent to 3 hrs. lab. Also offered as BOTY 4308. Ecology of Louisiana's major coastal plant communities; emphasis on the influence of environmental factors controlling plant distribution and productivity, importance of physiological, morphological, and anatomical mechanisms aiding plant survival, and man's impact on Louisiana's coastal plant communities.

4372 Estuarine Ecology (3) F Prereq: graduate standing or consent of instructor. 3 hrs. lecture; seminar; field trips to coastal areas. Ecological processes in shallow waters of the sea; emphasis on estuaries.
4395 Marine Field Microbiology (4) Su only Prereq: 12 sem. hrs. of biology including an introductory course in microbiology and consent of instructor. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory. Also offered as MBIO 4395. Estuarine and marine microbes, especially bacteria and fungi; classification, methodology, role in marine ecosystems, biogeochemical cycles, and diseases of marine animals.

4410 Ecosystem Modeling and Analysis (3) F Prereq: MATH 1552 and knowledge of a programming language. Mathematical description and analysis of ecological systems; emphasis on systems approach using matter and energy flow models for quantifying and analyzing interdependence and dynamics in ecosystems; linear flow models, dynamic nonlinear models, optimization models, stochastic models, and computer techniques for modeling, validation, sensitivity analysis, and parameter optimization.

4464 Marine Resources Law (1-4) V Also offered as LAW 5414. Legal, political, economic, and scientific aspects of exploitation of ocean resources and use of ocean space, including concepts of freedom of the high seas, territorial waters, special contiguous zones, ocean boundaries, navigation in the territorial sea and on the high seas, the continental shelf, deep sea bed mining, domestic and international fisheries management, oceanographic research, military interests, pollution of the marine environment, dispute settlement, marine technology transfer, and development of U.S. oceans policy; special emphasis on the work of the Third United Nations Conference on the Law of the Sea.

4465 Seminar in Coastal Zone Management (1-4) S-O Also offered as LAW 5803. Non-law students encouraged to participate. Written and oral presentation required; special projects relating to the primary field of interest permitted. Multidisciplinary investigation into specific resources allocation and environmental quality issues arising in coastal and estuarine zones of the U.S.; resource manager's role in evaluating alternative solutions to topical coastal zone issues and preparing legal devices for meeting the issues, such as legislation, regulations, contract provisions, and deed restrictions; aspects of traditional law courses in water law, environmental law, natural-resources law, and land-use planning, as applied to the coastal zone.

4666 Coastal Field Geology (4) Su only See GEOL 4666.

7001 Advanced Topics in Marine Sciences (1-3) V May be repeated for credit for a maximum of 9 sem. hrs. when topics vary. Topics determined by instructor's interest.

7010 The Concepts of the Ecosystem (3) S-O Prereq: one-semester course in ecology or consent of instructor. Principles of structure, function, diversity, and succession of ecosystems viewed as a whole and as applied to major biomes.

7016 Coastal and Shallow-Water Literature (3) V Individual and group-assigned readings concerning availability and content of source references.

7020 Marine Microbial Ecology (3) S-O Prereq: one semester course in microbiology and consent of instructor. Also offered as MBIO 7022. Microbial ecosystems and population dynamics; response of marine microorganisms to physical-chemical factors and environmental alterations; microbial interactions; microbial nutrient regeneration processes; nutritional requirements and microenvironments; modeling and systems analysis in marine microbial ecology.

7028 Numerical Modeling of Ocean Circulation (3) V Prereq: MRSC 4170 or ME 4563 or equivalent. Numerical modeling of ocean dynamics; numerical methods; parameterization schemes; review of state-of-art models.

7122 Gravity Waves in Shallow Water (3) V Prereq: MATH 1550, 1552; PHYS 2101, 2102; and consent of instructor. Linear and nonlinear theories of water gravity waves considered by classical mathematical derivation and numerical methods; wave transformation in shallow water, characteristics of boundary layer under wave action, and selected topics of wave-related phenomena in nearshore zone.

7125 Estuarine and Shallow-Water Oceanography (3) V Prereq: consent of instructor. Wind-driven and mass-driven currents in estuaries, turbulence and mixing in estuaries, seiches, storm surges, internal waves, salt balance, and inlet flows.

7127 Dynamics and Sedimentary Response Features of Coastal Environments (3) Su-O Interactions between major dynamical forcing mechanisms and sedimentary-geomorphic responses in major types of coastal environments (deltas, sandy coasts, and coral-reef coasts); variability of physical processes and corresponding response features.

7128 Wetland Hydrology and Hydrodynamics (3) S Prereq: CE 2200, CSC 1240, and MATH 1552; or equivalents. Application of hydrology and hydrodynamics to wetland studies; computational approaches, using existing water quantity and water quality models, for quantifying and identifying hydrologic and biologic functions in wetland.

7132 Coastal Physical/Chemical Systems: Analytical Methods (3) F-O Prereq: consent of instructor. 6 hrs. lab. Sampling techniques, proper handling and preservation of samples, identification and determination of mineral components in sediments, qualitative characterization of organic components, and measurements of inorganic nutrients and toxic substances in water and sediments; techniques tested and evaluated in terms of application of results to understanding of natural environmental systems.

7142 Coastal Climatology (3) F-E. See GEOG 7942.

7165 Chemistry and Microbiology of Flooded Soils and Sediments (3) S Same as AGRO 7165. Chemical and microbiological changes in fresh water, brackish water, and estuarine-flooded soils and sediments affecting availability of nutrients and growth of plants.

7209 Coastal Swamps and Marshes (3) V Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. and field trips. Also offered as GEOG 7909. Morphology, sedimentary processes, and geochemistry in marsh and swamp environments.

7210 Form-Process Relationships in Coastal Environments (3) F Prereq: advanced standing in coastal oceanography or consent of instructor. Also offered as GEOG 7910. Environmental approach to coastal morphology.

7241 Coastal Ecology (3) V See GEOG 7941.

7246 Coastal and Estuarine Resources (3) S-E See GEOG 7946.

7311 Marine and Estuarine Plankton (3) V Prereq: background in ecology, invertebrate zoology, limnology, or physiology; and consent of instructor. 2 hrs. lecture; 1-3 hrs. lab with 2 field trips during lab periods. Structure and function of marine plankton populations; changes of species and numbers in relation to various environmental factors such as temperature, nutrients, radiation, transparency, currents, and water-masses; elementary aspects of identification, life history, and biogeographic features; sampling theory, collecting techniques, distribution, abundances, production, analytical models, and economic significance.

7317 Marine Ecology (3) V See ZOOL 7120.
2000 Marketing and Society (3) Not open to students in the College of Business Administration. Marketing aspects of contemporary social issues; emphasis on the methods and approaches for dealing with societal issues and their impact on marketing activities.

3401 Principles of Marketing (3) Prereq: ACCT 2001, and either ECON 2030 or ECON 2010 and 2020. Lecture-discussion, case analysis, marketing-simulation game; the field of marketing; marketing environment, functions, and institutional structure at a macro level; marketing strategy and policies at a micro level; problems of cost and productivity at both macro and micro levels; viewpoint of society, consumer, and marketing manager.

3411 Consumer Analysis and Behavior (3) Prereq: MKT 3401. Nature and dynamics of consumer markets and significance of these markets to marketing executives; concepts and constructs employed to identify and measure market segments and to analyze behavioral patterns of these segments as a basis for marketing strategy.

3413 Marketing Research (3) Prereq: MKT 3401. Use of findings in formulation of marketing policies; theories, concepts, and methodology involved in applying research to marketing problems.

3414 Marketing Research Field Project (3) Prereq: MKT 3413. Advanced marketing research problems, concepts, and theory; client-supplier relations; research proposals and reports.

3427 Buyer-Seller Communication (3) Prereq: MKT 3401. Fundamentals of communication theory and correct sales principles needed for successful sales career; buyer behavior and sales tactics; development and implementation of sales strategies; communication in buyer-seller relationships.

3445 Internship in Marketing (1-6) Prereq: consent of department chairman. Primarily for seniors in marketing. On-the-job experience in approved marketing positions.

3477 Independent Study: Advanced Marketing Problems (1-6) For undergraduate students in the College of Business Administration with a GPA of 3.00 or above. Independent research under direction of a faculty member.

4421 Marketing Communication: Selling and Advertising (3) Prereq: MKT 3401. Nature, scope, and contributions of personal selling and advertising to the firm's problems of demand stimulation; principles and concepts related to integration and organization of promotional effort to facilitate movement of goods.

4423 Sales Management (3) Prereq: MKT 3401. Principles and concepts of sales planning and control; organizing sales departments, developing territories, motivating salespersons, and controlling sales operations.

4431 Retailing Management (3) Prereq: MKT 3401. Store organization, operation, and management; retail method of inventory; problems connected with retail buying and selling.

4433 Distribution Channels, Structure, and Management (3) Prereq: MKT 3401. Distribution channel's functions, structures, and processes; the channel as an economic and behav-
7715 Advertising Management (3) Prereq: MKT 4421 or equivalent. Systematic approach to advertising decision making; decision-making responsibilities inherent in managing the advertising function; advertising opportunities, identification of needed information, development of a decision framework, delineation of economic and societal interfaces.

7716 Advanced Marketing Research Techniques (3) Prereq: MKT 7711 and 7713. Advanced analytical designs and techniques applied to marketing research; theory and assumptions of analytical methods; marketing applications; use of computer programs in applying techniques; marketing strategy; interpretations of the empirical results.

7717 Advanced Seminar in Consumer Behavior (3) Prereq: MKT 7714 and either MKT 4451 or 7711. Open only to doctoral students. Theoretical, conceptual, and methodological issues for selected topics in this area.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Predissertation Research (1-9) May be repeated for credit.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

MATHEMATICS (MATH)

Sequence of Mathematics Courses
0911 Preparation for College Mathematics—I (4) Prereq: placement by department. 3 hrs. lecture; 1 hr. recitation/lab. For students not prepared to take MATH 0902. Not for degree credit; 4 sem. hrs. will be added to the degree program of any student taking this course. No student who has received credit for a mathematics course numbered 1000 or above may register for this course. Fractions, decimals, per cent, ratio and proportion, measurement of simple geometric figures, signed numbers, polynomials, linear equations and inequalities, applications of linear equations.

0921 Preparation for College Mathematics—II (4) Prereq: MATH 0901 or placement by department. 3 hrs. lecture; 1 hr. recitation/lab. For students not prepared to take MATH 1009, 1015, or 1021. Not for degree credit; 4 sem. hrs. will be added to the degree program of any student taking this course. No student who has received credit for a mathematics course numbered 1000 or above may register for this course. Linear equations and inequalities, polynomials and factoring, algebraic fractions, operations on radical expressions, rational exponents, quadratic equations, graphing.

1001 Mathematics for Prospective Elementary School Teachers—I (3) F,S,Su Prereq: MATH 0092 or placement by department. Logic; counting numbers, integers, rational numbers, real numbers; emphasis on field properties; set nomenclature and some number theory; units of measurement.

1002 Mathematics for Prospective Elementary School Teachers—II (3) F,S,Su Prereq: MATH 1009. Continuation of MATH 1009; measurement, informal geometry, systems of equations, introduction to probability and statistics.

1011 Basic Mathematics and Applications (3) F,S Prereq: MATH 0092 or placement by department. This course does not serve as a prerequisite for calculus. Credit will not be given for both this course and MATH 1021, 1022, or 1023. Basic mathematical skills of graphing, formulas for geometric measurement, systems of linear equations and inequalities, review of quadratic equations, logarithms and application to exponential growth and decay, triangle trigonometry and its application to geometry and measurements.

1012 College Algebra (3) F,S,Su Prereq: MATH 0092 or placement by department. Credit will not be given for both this course and MATH 1015 or 1023. Quadratic equations, systems of linear equations, inequalities, functions, graphs, exponential and logarithmic functions, complex numbers, theory of equations.

1022 Plane Trigonometry (3) F,S,Su Prereq: MATH 1021 or placement by department. Credit will not be given for both this course and MATH 1015 or 1023. Trigonometric functions and identities, inverse trigonometric functions, graphs, solving triangles and equations, complex numbers, polar coordinates.

1023 College Algebra and Trigonometry (5) F,S,Su Prereq: placement by department or grade of "A" in MATH 0092. Credit will not be given for both this course and MATH 1015, 1021, or 1022. For qualified students, a replacement for MATH 1021 and 1022 as preparation for calculus.

1025 Mathematics of Commerce (3) F Prereq: MATH 1015 or 1021. Interest, discount, annuities, depreciation, and insurance.

1100 The Nature of Mathematics (3) F,S Prereq: MATH 1021 or consent of department. Not for science, engineering, or mathematics majors. For students who desire an exposure to mathematics as part of a liberal education. An honors course, MATH 1101, is also available. Logic; the algebra of logic, computers, and number systems; networks and combinatorics; probability and statistics.

1101 HONORS: The Nature of Mathematics (3) V Prereq: a grade of "A" in MATH 1021 or consent of department. Same as MATH 1100, with special honors emphasis for qualified students. Logic; the algebra of sets, logic, and networks; probability and statistics; game theory; infinities; famous impossibilities and unsolved problems.

1431 Calculus with Business and Economic Applications (3) F,S,Su Prereq: MATH 1021 or equivalent. Credit will be given for only one of the following: MATH 1431, 1441, 1530. Differential and integral calculus of algebraic, logarithmic, and exponential functions; applications to business and economics, such as maximum-minimum problems, marginal analysis, and exponential growth models.

1435 Mathematics for Business Analysis (3) F,S,Su Prereq: MATH 1431 or equivalent. Sets and counting; probability, including conditional probability, discrete and continuous random variables, variance, and normal distributions; matrices and echelon method for solving systems of equations; functions of several variables and partial derivatives.

1441 Calculus with Application to Technology (3) F,S Prereq: MATH 1021 and 1022; or 1023; or consent of department. Credit will be given for only one of the following: MATH 1431, 1441, 1550. Differentiation and integration of algebraic and trigonometric functions; application to technology.

1550 Analytic Geometry and Calculus—I (5) F,S,Su Prereq: MATH 1022 or 1023 or consent of department. An honors course, MATH 1551, is also available. Credit will be given for only one of the following: MATH 1431, 1441, 1550. Analytic geometry, limits, derivatives, integrals.

1551 HONORS: Analytic Geometry and Calculus—I (5) F Same as MATH 1550, with special honors emphasis for qualified students.

1552 Analytic Geometry and Calculus—II (5) F,S,Su Prereq: MATH 1550. An honors course, MATH 1553, is also available. Conics, arc length, transcendental functions, coordinate systems, infinite series.

1553 HONORS: Analytic Geometry and Calculus—II (5) S Same as MATH 1552 with special honors emphasis for qualified students.

2019 Fundamentals of Mathematics (3) F,S Prereq: MATH 1550. Historical and logical development of various systems of mathematics, including number theory, Euclidean and non-Euclidean geometries, topology, and calculus.

2057 Multidimensional Calculus (3) F,S,Su Prereq: MATH 1552. An honors course, MATH 2058, is also available. Three-dimensional analytic geometry, partial derivatives, multiple integrals.

2058 HONORS: Multidimensional Calculus (3) F Same as MATH 2057, with special honors emphasis for qualified students.

2065 Elementary Differential Equations (3) F,S,Su Prereq: MATH 1552. Credit will be given for only one of the following: Math 2065, 2090, 4037. Ordinary differential equations; emphasis on solving linear differential equations.

2085 Linear Algebra (3) F,S,Su Prereq: MATH 1552 or 2019 or equivalent. An honors course, MATH 2086, is also available. Credit will not be given for both this course and MATH 2090. Systems of linear equations, vector spaces, linear transformations, matrices, determinants.

2086 HONORS: Linear Algebra (3) V Same as MATH 2085, with special honors emphasis for qualified students.

2090 Elementary Differential Equations and Linear Algebra (4) F,S,Su Prereq: MATH 1552. Credit will be given for only one of the following: MATH 2065, 2090, 4037. Credit will
not be given for both this course and MATH 2085. First
order differential equations, linear differential equations
with constant coefficients, and systems of differential equa-
tions; vector spaces, linear transformations, matrices, deter-
mnants, linear dependence, bases, systems of equations,
eigenvalues, and eigenvectors.

2901 Selected Topics in Mathematics (3) V Prereq: consent
department. May not be repeated for credit.

3998 Undergraduate Major Seminar (1) V May be taken 4
times for credit. Pass-fail grading. Topics of current inter-
est.

4005 Geometry (3) S Prereq: MATH 2019. The foundations
of geometry, including work in Euclidean and non-Euclidean
geometries.

4022 Abstract Algebra (3) F Prereq: MATH 2085 or equiva-
 lent. Credit will not be given for both this course and MATH
4023. Elementary properties of sets, relations, mappings,
together with homomorphisms, isomorphisms, and permuta-
tions; rings, ring homomorphisms, ideals and quotient rings, polynomial rings, and finite fields.

4023 Applied Algebra (3) S Prereq: MATH 2085 or equiva-
 lent. Credit will not be given for both this course and MATH
4022. Finite algebraic structures relevant to computers:
groups, graphs, groups and computer design, group codes,
semigroups, finite-state machines.

4024 Mathematical Models (3) S Prereq: MATH 1552 and
credit or registration in MATH 2085; or equivalents. Con-
ruction, development, and study of mathematical models for
real situations; basic examples, model construction,
Markov chain models, models for linear optimization, select-
ed case studies.

4025 Optimization Theory and Applications (3) F Prereq:
MATH 2057 and credit or registration in MATH 2085; or
equivalents. Basic methods and techniques for solving
optimization problems; n-dimensional geometry and convex
sets; classical and search optimization of functions of one and
several variables; linear, nonlinear, and integer program-
ing.

4027 Differential Equations (3) Su Prereq: MATH 2057 and
2085. Ordinary differential equations, with attention to the-
ory.

4031 Advanced Calculus— I (3) F Prereq: MATH 2057 and
2085. Differential and integral calculus of real and vector-valued functions of several real variables.

4032 Advanced Calculus— II (3) S Prereq: MATH 4031 or
equivalent. Vector integral calculus, Stokes's Theorem,
surfaces, orthogonal functions, selected related topics.

4036 Complex Variables (3) F,S,Su Prereq: MATH 2057.
Analytic functions, integration, power series, residues, and
conformal mapping.

4037 Mathematical Methods in Engineering (3) F,S,Su Prereq:
MATH 2057 or equivalent. Credit will be given for only
one of the following: MATH 2065, 2090, 4037. Also offered
as ME 4533. Ordinary differential equations, Laplace trans-
forms, and Fourier series; physical applications stressed.

4038 Mathematical Methods in Engineering (3) F,S Prereq:
MATH 2065 or 2090 or 4037. Also offered as ME 4563.
Vector analysis; solution of partial differential equations by
the method of separation of variables; introduction to orthog-
onal functions including Bessel functions.

4039 Introduction to Topology (3) V Prereq: MATH 4031 or
equivalent. Examples and classification of two-dimensional
manifolds, covering spaces, the Brouwer theorem, and other
selected topics.

4055 Introduction to Probability (3) F Prereq: MATH 2057.
Suggested for preparation for actuarial exams. Intro-
duction to probability, emphasizing concrete problems and
applications; combinatorial analysis, random variables, con-
ditional probability, special distributions, Law of Large
Numbers, Central Limit Theorem, and Markov Chains.

4056 Mathematical Statistics (3) S Prereq: MATH 4055.
Suggested for preparation for actuarial exams. Experimen-
tal design, sampling methods, nonparametric methods,
hypothesis testing, and regression.

4065 Numerical Analysis—I (3) F Prereq: MATH 2057.
Newton's method, Lagrange interpolation, least-squares
approximation, orthogonal polynomials, numerical different-
ation and integration, Gaussian elimination.

4066 Numerical Analysis— II (3) S Prereq: MATH 4065 and
one of the following: MATH 2065, 2090, 4027, or 4037.
Numerical solutions of initial value problems and boundary
value problems for ordinary and partial differential equa-
tions.

4153 Finite Dimensional Vector Spaces (3) S Prereq: MATH
2057 or 2085. Vector spaces, linear transformations, deter-
mnants, eigenvalues and vectors, and topics such as inner
product space and canonical forms.

4158 Foundations of Mathematics (3) V Prereq: MATH
2057 or equivalent. Real number systems, sets, relations,
product spaces, order, and cardinality.

4171 Theory of Graphs (3) S Prereq: MATH 2085 or equiva-
 lent. Fundamental concepts of undirected and directed
graphs, trees, connectivity and traversability, planarity, col-
orability, network flows, matching theory, and applications.

4172 Combinatorics (3) F Prereq: MATH 2085 or equiva-
 lent. Topics selected from permutations and combinations,
generating functions, principle of inclusion and exclusion,
configurations and designs, matching theory, existence prob-
lems, applications.

4181 Elementary Number Theory (3) F Prereq: MATH 2057
or 2085. Divisibility, Euclidean algorithm, prime numbers,
congruences, and topics such as Chinese remainder theorem
and sums of integral squares.

4340 Partial Differential Equations (3) V Prereq: either
MATH 2057, 2090, and knowledge of Laplace transforms;
or MATH 2057, 2065 or 4037, and 2085. First-order partial
differential equations and systems, canonical second-order
linear equations, Green's functions, method of characteris-
tics, properties of solutions, and applications.

4345 Special Functions (3) V Prereq: either MATH 2057 and
2090; or MATH 2057, 2065 or 4037, and 2085. Sturm-
Liouville problems, orthogonal functions (Bessel, Laguerre,
Legendre, Hermite), orthogonal expansions including Fou-
rier series, recurrence relations and generating functions,
gamma and beta functions, Chebychev polynomials, and
other topics.

4470 Error-Correcting Codes (3) V Prereq: MATH 2085 or
2090 or equivalent knowledge of linear algebra. Vector
spaces over finite fields, basic properties of codes, examples
of important codes and decoding schemes, bounds on sizes
and rates of codes, the weight enumerator polynomial, per-
fect codes, and other topics.

4999 Selected Readings in Mathematics (1-3) Prereq: consent
department. May be repeated for credit for a maximum
of 9 sem. hrs.
5100 Elements of Calculus (3) Prereq: MATH 1550 and 1552; or equivalents. For secondary school teachers; mathematics graduate credit only for the M.A. degree. Limits, continuity, derivatives, integrals, infinite series; review of first-year calculus with a more theoretical emphasis.

5200 Multidimensional Calculus and Linear Algebra (3) F Prereq: MATH 2057 and 2085; or equivalents. For secondary school teachers; mathematics graduate credit only for the M.A. degree. Three-dimensional analytic geometry, partial derivatives, multiple integrals, linear equations and systems, determinants, vector spaces, linear transformations; review of multidimensional calculus and linear algebra with a more theoretical emphasis.

7200 Geometric and Abstract Algebra (3) Prereq: MATH 2085 or equivalent. Linear algebra, rings, finite fields, groups, multilinear algebra, other topics.

7210, 7211 Algebra—I, II (3,3) 7210 offered F; 7211 offered S Prereq: MATH 7200 or equivalent. Groups: Sylow Theorems, finitely generated abelian groups; rings and modules: exact sequences, projective modules; fields: algebraic, transcendental, normal, separable field extensions; Galois theory, valuation theory, Noetherian and Dedekind domains, topics from commutative rings.

7280 Seminar in Commutative Algebra (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as commutative rings, homological algebra, algebraic curves, or algebraic geometry.

7290 Seminar in Algebra and Number Theory (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as algebraic number theory, algebraic semigroups, quadratic forms, or algebraic K-theory.

7300, 7301 Elementary Classical Analysis—I, II (3,3) 7300 offered F; 7301 offered S Prereq: MATH 2057 or equivalent. Real number system, topology of Euclidean space, continuous functions, convergence, series, differentiation and Riemann-Stieltjes integration on the line, differentiation and Riemann integration on Euclidean space; other topics.

7320 Ordinary Differential Equations (3) S Prereq: MATH 2085 and 7300; or equivalents. Existence and uniqueness theorems, approximation methods, linear equations, linear systems, stability theory, other topics such as boundary value problems.

7330 Functional Analysis (3) S Prereq: MATH 7301 or equivalent. Banach spaces and their generalizations; Baire category, Banach-Steinhaus, open mapping, closed graph, and Hahn-Banach theorems; duality in Banach spaces, weak topologies; other topics such as commutative Banach algebras, spectral theory, distributions, and Fourier transforms.

7340 Measure and Integration (3) F Prereq: MATH 7301 or equivalent. Lebesgue and abstract measure and integration convergence theorems, $L^p$ spaces, Riesz representation theorem, complex measures, Radon-Nikodým theorem, Hahn decomposition theorem, product measures, Fubini's theorem.

7350 Complex Analysis (3) S Prereq: MATH 7301 or equivalent. Theory of holomorphic functions of one complex variable; path integrals, power series, singularities, mapping properties, normal families, other topics.

7360 Probability Theory (3) F Prereq: MATH 7301 or equivalent. Probability spaces, random variables and expectations, independence, convergence concepts, laws of large numbers, convergence of series, law of iterated logarithm, characteristic functions, limit theorems, limiting distributions, martingales.

7380 Seminar in Functional Analysis (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as topological vector spaces, Banach algebras, operator theory, or nonlinear functional analysis.

7390 Seminar in Analysis (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as harmonic analysis, differential equations, Lie group representation theory, several complex variables, or probability theory.

7400 Combinatorial Theory (3) S Prereq: MATH 7200 or equivalent. Problems of existence and enumeration in the study of arrangements of elements into sets; combinations and permutations; other topics such as generating functions, recurrence relations, inclusion-exclusion, Polya's Theorem, graphs and digraphs, combinatorial designs, incidence matrices, partially ordered sets, matroids, finite geometries, Latin squares, difference sets, matching theory.

7490 Seminar in Combinatorics, Graph Theory, and Discrete Structures (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as combinatorics, graph theory, automata theory, or optimization.

7500 Algebraic Topology (3) S Prereq: MATH 7200 and 7300; or equivalents. Basic concepts of homology, cohomology, and homotopy theory.

7550 Differential Geometry (3) F Prereq: MATH 7200 and 7301; or equivalents. Manifolds, vector fields, Frobenius Theorem, exterior calculus, Stokes's Theorem, Riemannian geometry, other topics.

7590 Seminar in Geometry and Algebraic Topology (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as advanced algebraic topology, transformation groups, surgery theory, sheaf theory, or fiber bundles.

7600 General Topology (3) S Prereq: MATH 7300 or equivalent. Topological spaces, continuous functions; compactness, connectedness, products, separation, metrizability, completeness, paracompactness, function spaces, fundamental groups, covering spaces, other topics.

7680 Seminar in Geometric and Infinite-Dimensional Topology (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as geometric and infinite-dimensional topology, infinite-dimensional spaces and manifolds, geometric manifold topology, ANR and shape theory, or dimension theory.

7690 Seminar in Topological Algebra (1-3) V Prereq: consent of department. May be repeated for credit with consent of department. Advanced topics such as topological groups, topological semigroups, or topological lattices.

7999 Selected Readings in Mathematics (1-3) Prereq: consent of department. May be repeated for credit with consent of department.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.
MECHANICAL ENGINEERING (ME)

2333 Principles of Thermodynamics—I (3) Prereq: grade of "C" or better in CHEM 1202, MATH 1552, and PHYS 2101; or equivalent courses. Required for mechanical engineering majors. Basic laws of thermodynamics and behavior of gases and vapors.

2733 Materials of Engineering (3) Prereq: CHEM 1202 and credit or registration in PHYS 2102. Students whose curriculum requires ME 3701 must take ME 3701 and 2733 concurrently. Classification and study of engineering materials, their structure, properties, and behavior; typical metals and alloys, plastics and rubber, and ceramic materials; phase equilibria and manipulation of properties and behavior by adjustment of composition and processing variables; responses of engineering materials to stresses and environmental variables.

2833 Fluid Mechanics (3) Prereq: CE 2450. Same as CE 2200. Statics and dynamics of continuous liquids and gases; control volume laws; conservation of mass, momentum, and energy; dimensional analysis and similitude; applications to pipe flows, boundary layers, isentropic compressible flow.

3133 Dynamics (3) Prereq: CE 2450 and MATH 1552. 2 hrs. lecture; 2 hrs. recitation. Vectorial treatment of kinematics and kinetics of particles and rigid bodies; force, mass, acceleration; impulse and momentum; work and energy.

3249, 3250 Engineering Practice (1-3,1-3) Su only Prereq: consent of instructor. Pass-fail grading. A minimum of 6 weeks of full-time employment by an industry participating in the summer program. Same as ENGR 3049, 3050. Selected engineering problems in an industrial environment.

3333 Thermodynamics (3) Prereq: PHYS 2102 and MATH 1552; or equivalents. Not open to mechanical engineering majors. Basic laws of thermodynamics, availability, perfect gases and pure substances, fluid flow, and basic heat transfer.

3602 Fundamentals of Instrumentation (2) Prereq: EE 3950 and 3951; or equivalents; and proficiency in English as required by the College of Engineering. 1 hr. lecture; 3 hrs. lab. Basic measurements theory; instrumentation fundamentals; includes both analog and digital instrumentation.

3701 Materials of Engineering Laboratory (1) Prereq: proficiency in English as required by the College of Engineering. Coreq: ME 2733. 3 hrs. lab. Demonstrative and participative experiments to develop better understanding of characteristics of metals, ceramics, and plastics.

3752 Material Selection for Mechanical Engineers (2) Prereq: ME 2733 and credit or registration in CE 3405; or equivalents. Analysis of mechanical and other properties of engineering materials required for material selection; advanced engineering materials in mechanical engineering; applications and problems in processing and shaping; materials in selected mechanical systems.

3801 Fluid Mechanics Laboratory (1) Prereq: ME 2833 and 3602. 3 hrs. lab. Demonstrations and experiments in fluid mechanics; experimental procedures and instrumentation in incompressible and compressible fluid flows; pressure, velocity, and force measurements.

3903 Special Projects for Undergraduates (3) Prereq: 2.50 cumulative GPA with consent of department. May be taken 3 times for credit. Library research, comprehensive design problems, and laboratory investigations.

4033 Kinematics and Dynamics of Machines for Technology (3) Prereq: MATH 1550 or equivalent. 2 hrs. lecture; 3 hrs. lab. For basic engineering design technology majors and for students in graduate or undergraduate programs in other colleges; may be approved by petition for use in bachelor's or graduate programs in the College of Engineering. Kinematic and dynamic analysis of plane mechanisms; calculation of forces in mechanisms.

4133 Machine Design—II (3) Prereq: CSC 2262 and ME 3133; or equivalents. Kinematic and dynamic analysis and synthesis of mechanisms.

4143 Mechanical Vibrations (3) Prereq: CE 3405, MATH 4037, and ME 4133; or equivalents. Basic principles of oscillating systems; single and multiple degrees of freedom; dynamic balancing; applications to mechanical systems.

4153 Kinematic Synthesis of Mechanisms (3) S Prereq: ME 4133 or equivalent. Three-dimensional mechanisms; emphasis on computer solution methods.


4172 Theory and Design of Mechanical Control Systems (2) Prereq: MATH 4037, ME 3602, and credit or registration in ME 4143. Basic principles and concepts of linear feedback control systems; stability analysis; root locus method; frequency response; compensation techniques.

4173 Vibration of Discretized Systems (3) S Prereq: ME 4143 or equivalent. Analysis of the oscillation of multidegree of freedom systems using finite difference, finite element, lumped parameter, and receptance techniques.

4183 Noise Control for Engineers (3) F Prereq: credit or registration in ME 4143 or graduate standing. Basic principles of acoustics; noise measurement; instrumentation; fundamental source theory; the application of silencers, barriers, and absorptive materials; case studies.

4201 Mechanical Engineering Design Laboratory (1) Prereq: ME 3602 and 4233 or equivalents; and credit or registration in ME 4143. 3 hrs. lab. Experiments involving basic concepts in machine design.

4202 Mechanical Engineering Design—II (2) Prereq: ME 3752, 4232, 4233, 4343, 4433, and credit or registration in ME 4172. 6 hrs. lab. Principles from heat transfer, thermodynamics, design, fluids, and materials courses utilized to complete the project set forth in the preliminary design outline submitted in ME 4232.

4232 Mechanical Engineering Design—II (2) Prereq: ECON 2030. Coreq: ME 4233 and 4433. Design project, to be completed in ME 4202, will be selected and approved; project feasibility study and outline of the design project will be completed; topics from design philosophy, optimization, product reliability and liability, economics, use of ASME codes, and professional ethics.

4233 Machine Design—II (3) Prereq: CE 3405, IE 2603, ME 3701, and ME 4133; or equivalents. Principles and practice of mechanical design.

4243 Computer Graphics (3) See EGR 4243.

4253 Applied Interactive-Graphic Computer-Aided Design (3) See EGR 4255.

4343 Principles of Thermodynamics—II (3) Prereq: ME 2333 or equivalent. Principles of thermodynamics applied to classical vapor and gas cycles, equations of state, combustion, and equilibrium.
4353 Advanced Engineering Thermodynamics (3) Prereq: ME 4343 or equivalent. Postulational treatment of the laws of thermodynamics; equilibrium and maximum entropy postulates; development of formal relationships; principles and application to general systems.

4383 Thermal System Design (3) Prereq: ECON 2030, ME 4343, and ME 4433. Principles and practices concerning the design and optimization of thermal systems.

4401 Heat Transfer Laboratory (1) Prereq: ME 3602 and 4433; or equivalents. 3 hrs. lab. Independent experimentation in conduction, convection, and radiation heat transfer.

4433 Heat Transfer (3) Prereq: ME 2333 or 3333, ME 4553 or MATH 4037, and ME 2833; or equivalents. Principles of heat transfer by conduction, radiation, and convection.

4553 Engineering Use of Electronic Computers (3) F Prereq: CSC 2262 or ENGR 2060 or equivalent; or graduate standing. General rules of FORTRAN programming with specific details applicable to campus machines; construction of FORTRAN programs to solve mathematical problems of basic importance common to all engineers; using numerical methods including solutions to linear and nonlinear differential equations, least-squares approximation, interpolations, and integration.

4553 Mathematical Methods in Engineering (3) See MATH 4037.

4563 Mathematical Methods in Engineering (3) See MATH 4038.

4611 Mechanical Engineering Laboratory (1) Prereq: ME 3602 and 4443; or equivalents. 3 hrs. lab. System analysis and independent experimentation.

4633 Internal Combustion Engines (3) F Prereq: ME 2333 or 3333 or equivalent. Classification of internal combustion engines, gas turbines, cycles with different components, spark-ignition gasoline engines, detonation, carburetion, compression-ignition engines, combustion and diesel knock, fuel atomization and atomizers, combustion chambers, two- and four-stroke cycle engines, and supercharging.

4643 Thermal Environmental Engineering (3) S Prereq: ME 4343 and credit or registration in ME 4433; or equivalents. Design of thermal environment for humans, animals, processes, and inanimate objects; the means of control.

4653 Safety Engineering (3) F Prereq: senior standing or equivalent or consent of instructor. Relationship between safety and efficiency of all engineering functions, i.e. design control, planning, layout and arrangement, maintenance, inspections, and job methods.

4663 Power Plant Engineering (3) F Prereq: ME 4343 and 4443; or equivalents. Power plants for industrial and central-station use; emphasis on cycles, design, capabilities, and economics of the plant as a whole; components used in various types of plants.

4673 Introduction to Modern Control Theory (3) S Prereq: ME 4172 or equivalent. State space modeling, controllability, observability and stability, pole placement, optimal control laws via minimum principle and dynamic programming.

4683 Legal Aspects of Engineering and Product Liability (3) S Prereq: senior standing in mechanical engineering or related discipline. Not for graduate credit in mechanical engineering. Legal and ethical issues of professional engineering; aspects of contracts, bids, specifications, patents, and inventions; product liability, responsibility for design and function, force-seeability of use, and available defenses.

4713 Macroscopic and Microscopic Examination of Materials (3) S Prereq: ME 2733 or equivalent. Survey of image forming systems for macroscopic and microscopic examination of materials; optics; photographic and electronic image storage; excitation by photons, electrons, ions, x-rays, and ultrasonic waves; topography and internal structure; demonstration of selected techniques.

4733 Deformation and Fracture of Engineering Materials (3) F Prereq: CE 3405 and either ME 2733 or equivalent. The effect of temperature, strain rate, corrosion, and microstructure on the stress-strain behavior and fracture of engineering materials, including metals, ceramics, and plastics.

4743 Principles of Physical Metallurgy (3) S Prereq: ME 2733 or equivalent; and any first course in thermodynamics. Theory of metals; emphasis on solidification and solid state transformation theory and related phenomena; thermodynamic and kinetic models used to describe transformation processes; physical and mathematical models used to describe crystal structure, point and line defects, deformation, and diffusion.

4753 Thermodynamics of Solids (3) F Prereq: ME 2333 and 2733; or equivalents. Application of classical thermodynamics to metallurgical and other solid systems; statistical interpretation of entropy; free energy and its use in explaining phase transformations; solid solutions.

4763 Fundamentals of Corrosion Science and Engineering (3) F Prereq: ME 2733 or equivalent, and any first course in thermodynamics. Corrosion principles; polarization, passivation, inhibition, and other phenomena; principal methods used in corrosion prevention.

4833 Intermediate Fluid Dynamics (3) Prereq: MATH 4037 and ME 2833; or equivalents. Derivation of fundamental flow equations; incompressible, two-dimensional and axisymmetric, inviscid and viscous flow analysis; laminar boundary layers; introduction to turbulence.

4843 Gas Dynamics (3) F Prereq: MATH 4037 and ME 4433; or equivalents. Derivation and review of basic equations of compressible fluid flow; reduction of the general problem to 1-D flow; 1-D flow in nozzles with and without friction; 1-D flow with heat addition; normal shock wave, Prandtl-Meyer turn, and oblique shock waves.

4933 Advanced Topics in Mechanical Engineering (3) May be taken twice for credit with consent of department. Two sections may be taken concurrently.

4943 Special Problems in Aerospace Engineering (3) Prereq: senior standing in mechanical engineering or related discipline. Aerodynamic problems of special interest in the analysis and design of water, land, air, and space transportation systems.

7103 Mechanical Analysis (3) Prereq: CE 3405, EE 2950, ME 4201 and MATH 2057; or equivalents. 2 hrs. lecture; 3 hrs. lab. Analytical prediction and experimental verification of strains velocities, accelerations, and jerk in various machine members (static and dynamic) using a wide variety of instrumentation, simplification, and recording equipment; photoelasticity, brittle coatings, and Moire fringe methods; seismic-response theory.

7133 Optimum Synthesis of Mechanical Systems (3) S Computational design of mechanical engineering components and systems; optimum performance and design using nonlinear programming with constraints.

7143 Theory of Thermal Stress (3) F Prereq: CE 4440 or equivalent. Origin of thermal stress; external constraints.
fundamental equations of uncoupled isotropic thermoelasticity; some solutions of typical thermoelastic problems; properties of materials at high temperatures; problems in creep.

7153 Vibration of Continuous Systems (3) F Prereq: ME 4143 or equivalent. Analysis of continuous systems using Love’s equations, Mushtari-Vislov equation, and Galerkin method; shells of revolution, membranes, beams, and wires.

7233 Advanced Machine Design (3) S Prereq: ME 4233 or equivalent.

7243 Bearing Design and Lubrication (3) F Prereq: ME 4843 or equivalent. Derivation of fluid flow in bearings; principles of hydrodynamics lubrication and application to journal and thrust bearings; effect of environment on type of lubrication systems and lubricants; heat generation in bearing and heat transfer; compressible fluid and solid lubricants.

7253 Advanced Computer-Aided Design (3) F Prereq: CSC 2262 or equivalent. Systematic application and integration of modern interactive computer graphics.

7263 Advanced Computer Graphics (3) S Prereq: ME 4243 or equivalent. Mathematical elements of computer graphics; mathematical modeling of complex geometry in two and three dimensions for design, analysis and display; selected advanced topics in graphics.

7333 Advanced Thermodynamics—Energy Conversion (3) V Prereq: ME 4353 and 4843; or equivalents. Thermodynamics of classical, direct, and nuclear-energy conversion devices.

7343 Advanced Thermodynamics—Irreversible Thermodynamics (3) V Prereq: ME 4353 and 4453; or equivalents.

7353 Advanced Thermodynamics—Statistical Thermodynamics (3) V Prereq: ME 4343 and 4453; or equivalents. A statistical-mechanical approach to thermodynamics, with emphasis on solution of engineering problems in nuclear engineering, gas dynamics, plasma engineering, etc.

7433 Advanced Heat Transfer—I (3) F Prereq: MATH 4016 or equivalent. Steady and transient heat conduction.

7443 Advanced Heat Transfer—II (3) F Prereq: ME 7843 or equivalent. Convection heat transfer.

7453 Advanced Heat Transfer—III (3) S Prereq: consent of instructor. Radiation heat transfer and advanced topics.

7533 Advanced Engineering Use of Electronic Computers (3) V Prereq: ME 4533 or equivalent. Computer methods used to solve engineering problems; advanced numerical methods.

7603 Advanced Experimental Methods (3) S Prereq: consent of instructor. 2 hrs. lecture; 3 hrs. lab. Applied course in contemporary analog and digital laboratory tools and techniques.

7673 Advanced Mechanical Systems Control (3) F Prereq: ME 4172 or equivalent. Analysis and design of distributed parameter feedback control systems; observability, controllability, and stability of distributed parameter systems; state estimation and optimal control of distributed systems; parameter identification and adaptive control techniques.

7701 Electron Microscopy (2) Same as BOTY 7701, GEOL 7701, MBIO 7701, ZOOL 7701. Transmission and scanning electron microscopy and x-ray analysis of biological and non-biological materials; theory, operation, and application of instruments.

7733 Flow and Fracture in Solids (3) S Prereq: CE 4440 or equivalent. Plastic deformation of single crystals and polycrystalline aggregates; theories of ductile and brittle fracture; internal friction; fatigue, creep and stress rupture; residual stresses; plastic forming of metals.

7743 Physical Metallurgy (3) F Prereq: ME 2733 or graduate standing. Quantitative evaluation of metallurgical ideas; atomistic mechanisms, statistical mechanics, dislocation theory, and thermodynamic principles.

7753 Advanced X-Ray Metallography and Electron Diffraction (3) S Prereq: ME 2733 or equivalent. X-rays applied to problems in materials science; small-angle x-ray scattering; x-ray diffraction in crystalline and amorphous media; principles of electron diffraction and electron microscopy.

7763 Advanced Corrosion Science and Engineering (3) S Prereq: ME 4763 or equivalent. Advanced topics in corrosion; stress corrosion, high temperature corrosion, hydrogen embrittlement, etc.; thermodynamics of surfaces and corrosion.

7773 Engineering Fracture Mechanics (3) V Prereq: ME 4733 and either CE 4440 or 4460; or equivalents. Fundamentals of linear elastic fracture mechanics; elastic-plastic behavior; applications to brittle fracture, fatigue, and creep; fracture-safe design and control.

7783 Dislocation Mechanics (3) S Prereq: CE 3405, MATH 4037, and ME 2733; or equivalents. Theory of dislocations with applications to strengthening mechanisms; the interaction of dislocations with point defects, other dislocations, and grain boundaries and precipitates.

7813 Computation of Boundary Layer Flows and Heat Transfer (3) F Prereq: ME 2833 and 4443 or equivalents, and CSC 1240 or 1241 or 2262 or ME 4533 or equivalent. Finite-difference methods for the solution of parabolic or boundary layer equations; use of a computer program for two-dimensional boundary layers; wall boundary layers, jets and wakes, flows in pipes, annuli, nozzles, and diffusers.

7823 Computation of Fluid Flow and Heat Transfer (3) S Prereq: ME 2833 and 4443 and either CSC 1240 or 1241 or 2262 or ME 4533; or equivalents. Finite-difference methods for solving equations of fluid motions and energy; computer program used to solve complex problems involving fluid flow, heat transfer, and chemical reaction; mathematical models for turbulence, radiation, and combustion; their computing implications; application of prediction procedures for practical situations.

7833 Inviscid Flow Fluid (3) S Prereq: ME 7863 or equivalent. Advanced topics in potential flow theory and gas dynamics; multidimensional compressible flow; introduction to computational gas dynamics.

7843 Viscous Fluid Flow (3) S Prereq: ME 7863 or equivalent. Navier-Stokes equations; Stokes and Oseen approximations for low Reynolds number flows; incompressible laminar boundary layer theory; transition; introduction to turbulent boundary layers, compressibility effects, and numerical methods.

7853 Advanced Boundary Layer Theory (3) F Prereq: ME 7843 or equivalent. Non-Newtonian and turbulent fluid mechanics.

7863 Fluid Dynamics (3) F Prereq: credit or registration in MATH 4038 or equivalent. Fundamental fluid dynamics as continuum mechanics; potential flow using complex variables in two dimensions and superposition in three dimensions; introduction to viscous flow and Navier-Stokes equations; introduction to compressible flow including Mach waves, shocks, and linearized aerodynamics.

7901 Seminar (1) All graduate students expected to attend this course every semester; only 1 sem. hr. of credit in this course allowed toward degree. Pass-fail grading.

7933, 7943 Mechanical Engineering Problems (3,3)
9000 Dissertation Research (1-12 per sem.) “S”/“U” grading.

MICROBIOLOGY (MBIO)

1001 Microorganisms and Man (3) Credit will not be given for both this course and MBIO 2051. Not open to microbiology majors. World of microorganisms and their relationship to people; microbial form and function; the role of bacteria in health and disease, ecology, and industry from food production to genetic engineering.

1002 Microorganisms and Man Laboratory (1) Prereq: credit or registration in MBIO 1001. 3 hrs. lab. Credit will not be given for both this course and MBIO 2051. Not open to microbiology majors. Basic laboratory skills for handling and observing microorganisms; demonstration of features of microorganisms discussed in MBIO 1001.

2051 General Microbiology (4) F,S,Su Prereq: CHEM 1001 or 1201. 2 hrs. lecture; 4 hrs. lab. Credit will not be given for both this course and MBIO 1001 or 1002. Structure and function of microbial cells and their relationship to people and the environment.

2155 Morphologic Hematology (3) F,S See BCH 2155.

3115 Advanced General Microbiology (4) F Prereq: MBIO 2051 and organic chemistry. 2 hrs. lecture; 4 hrs. lab. Growth and differentiation of microorganisms; definition, quantitation, regulation, and manipulation of these processes; their importance in basic, applied, and medical research.

4090 Marine Microbiology (3) See MRSC 4090.

4110 Introductory Microbiological Physiology (3) F,S,Su Prereq: MBIO 2051 and organic chemistry; or equivalent. Concepts of bacterial nutrition, metabolism, adaptation, and genetics, as related to growth and environment.

4111 Microbial Physiology Laboratory (2) V 6 hrs. lab. Laboratory techniques used to study growth, metabolism, and cellular control of microorganisms.

4121 Immunology and Serology (4) F,Su Prereq: MBIO 2051. 2 hrs. lecture; 4 hrs. lab.

4122 Pathogenic Microbiology (4) S Prereq: MBIO 4121 or equivalent. 2 hrs. lecture; 4 hrs. lab.

4132 Eukaryotic Molecular Genetics (3) Prereq: ZOOL 2153; BCH 4084 recommended. Same as BOTY 4132 and ZOOL 4132. Molecular genetics, primarily in higher eukaryotes; gene structure and packaging in chromosomes; gene transcription and mRNA processing; translation; gene regulation; genetics in development; genetics of cancer; immuno-genetics; genetic engineering in eukaryotes.

4146 Genetics of Bacteria and Bacteriophage (3) F,S Prereq: MBIO 4110 or equivalent. Mutation in bacteria, conjugation, transformation, and transduction; physiology of bacteriophage, bacteriophage as genetic material, chemical basis of heredity, and molecular aspects of mutation.

4147 Biology of Eukaryotic Microorganisms (4) Prereq: MBIO 2051, and 3115 or equivalent. 2 hrs. lecture; 4 hrs. lab. Molecular biology, physiology, genetics, morphology, development, and taxonomy of the yeasts, molds, slime molds, algae, and protozoa.

4156 Soil Microbiology (4) See AGRO 4056.

4161 Microbiology of Water, Sewage, and Industrial Wastes (4) V Prereq: MBIO 3115 and 4110; or equivalent. 2 hrs. lecture; 4 hrs. lab.

4162 Microbiology of the Dairy and Food Industries (4) V Prereq: MBIO 2051, and either 3115 or 4110; or equivalents. 2 hrs. lecture; 4 hrs. lab. Also offered as FDSC 4162.

4163 Industrial Microbiology (4) S Prereq: MBIO 3115 or 4110; or equivalent. 2 hrs. lecture; 4 hrs. lab. Microbes used in industrial processes such as production of chemicals, antibiotics, and vitamins.

4180 Cell Culture (3) Prereq: MBIO 2051. 1 hr. lecture; 4 hrs. lab. In vitro growth and development of cells derived from plants and animals.

4190 Introductory Virology (2) F Viruses and their host cells; role and significance of viruses in the environment.

4395 Marine Field Microbiology (4) See MRSC 4395.

4919, 4920 Current Microbiological Literature (1,1) F,S,Prereq: MBIO 3115 or 4110.

4933, 4934 Special Problems in Microbiology (2,2) F,S,Su 1 hr. conference; 4 hrs. lab.

7022 Marine Microbial Ecology (3) See MRSC 7020.

7148 Microbial Anatomy and Ultrastructure (2) V Prereq: MBIO 4110 or equivalent. Structure of various microbial forms.

7150 Special Topics in Microbiology (2) V Prereq: 6 sem. hrs. of microbiology beyond MBIO 2051. May be taken twice for credit when topics vary. Specialized areas of current interest.

7161 Higher Bacteria (3) V Prereq: MBIO 4110 or equivalent. Microbial systematics and ecology; emphasis on morphology and physiology of the higher bacteria.

7162 Molecular Biology of Microorganisms (3) Prereq: MBIO 4146, and either MBIO 4110 or BCH 4084; or equivalents. Synthesis, activity, and interactions of various molecular components of microbial cells; macromolecules and their relationship to cellular function and heredity.

7163 Advanced Technology of Molecular Biology—General Aspects (3) V Prereq: credit or registration in BCH 7280 or MBIO 7162. 1 hr. lecture; 6 hrs. lab. Same as BCH 7163. Laboratory techniques used to study mutation, chromosomal mapping, conjugation, and transduction in bacteria and their phages.

7164 Advanced Technology of Molecular Biology—Biochemical Aspects (3) V Prereq: credit or registration in BCH 7280 or MBIO 7162. 1 hr. lecture; 6 hrs. lab. Same as BCH 7164. DNA cloning (between prokaryotes), mapping of restriction enzyme cutting sites, sequencing, heteroduplex, ultracentrifugation, and gel electrophoresis; principles of genetics emphasized.

7701 Electron Microscopy (2) F Same as BOTY 7701, ME 7701, GEOI 7701, and ZOOL 7701. Transmission and scanning electron microscopy; x-ray analysis of biological and nonbiological materials; theory, operation, and application of the instruments.

7702 Transmission Electron Microscopy Laboratory: Biological Materials (3) S Prereq: credit or registration in MBIO 7701 or equivalent. 9 hrs. lab. Same as BOTY 7702 and ZOOL 7702. Preparation of biological specimens for transmission electron microscopy; use of the electron microscope.
MILITARY SCIENCE (MILS)

Nonimmigrant aliens require approval from their governments prior to enrollment in these courses.

1011 Introduction to Army Organization (1) F,S,Su 1 hr. lecture; 1.5 hrs. lab. Role of ROTC; leadership; military customs and courtesies; army rank structure; first aid.

1012 Army Organization: Leadership and Management (1) F,S,Su Prereq: MILS 1011 or equivalent. 1 hr. lecture; 1.5 hrs. lab. Organization and structure of the U.S. Army; weapons systems and communications equipment.

2061 Land Navigation (2) F,S,Su Prereq: MILS 1011 and 1012; or equivalents. 2 hrs. lecture; 1½ hrs. lab. Map reference systems; map symbols, military map reading, and land navigation.

2062 Military History and World Affairs (2) F,S,Su Prereq: MILS 1011 and 1012; or equivalents. 2 hrs. lecture; 1½ hrs. lab. U.S. history in military and political context; current events and their relationship to America's national interests.

8903 Microbiology for Teachers (4) Su 2 hrs. lecture; 4 hrs. lab. Relation of microorganisms to everyday living; how knowledge of these forms is used in effective teaching of high school science and home economics.

8910 Research Participation (3) Su For high school science teachers.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

MUSIC (MUS)

Applied Music and Ensemble Courses

Applied music instruction in the MUS 3130-3150 sequence is offered for 3 semester hours during the academic year and 1.5 semester hours during the summer term. Courses in the MUS 3130-3150 sequence consist of 60 minutes of instruction per week; courses in the MUS 3170-3190 sequence consist of 30 minutes of instruction per week. Instructor assignments are made by the School of Music. All applied music and ensemble courses may be repeated for credit every semester.

APPLIED MUSIC COURSES

60-minute lesson per week

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3130</td>
<td>Voice</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3131</td>
<td>Piano</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3132</td>
<td>Harpsichord</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3133</td>
<td>Organ</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3134</td>
<td>Harp</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3135</td>
<td>Violin</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3136</td>
<td>Viola</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3137</td>
<td>Cello</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3138</td>
<td>String Bass</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3139</td>
<td>Flute</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3140</td>
<td>Oboe</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3141</td>
<td>Clarinet</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3142</td>
<td>Saxophone</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3143</td>
<td>Bassoon</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3144</td>
<td>Trumpet</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3145</td>
<td>French Horn</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3146</td>
<td>Euphonium</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3147</td>
<td>Trombone</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3148</td>
<td>Tuba</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3149</td>
<td>Percussion</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>3150</td>
<td>Guitar</td>
<td>1.5 or 3</td>
</tr>
<tr>
<td>7000</td>
<td>Graduate Applied Music</td>
<td>1.5 or 3</td>
</tr>
</tbody>
</table>

30-minute lesson per week

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3170</td>
<td>Voice</td>
<td>1.5</td>
</tr>
<tr>
<td>3171</td>
<td>Piano</td>
<td>1.5</td>
</tr>
<tr>
<td>3172</td>
<td>Harpsichord</td>
<td>1.5</td>
</tr>
<tr>
<td>3173</td>
<td>Organ</td>
<td>1.5</td>
</tr>
</tbody>
</table>
### 30-minute lesson per week (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>3174</td>
<td>Harp (1.5)</td>
<td></td>
</tr>
<tr>
<td>3175</td>
<td>Violin (1.5)</td>
<td></td>
</tr>
<tr>
<td>3176</td>
<td>Viola (1.5)</td>
<td></td>
</tr>
<tr>
<td>3177</td>
<td>Cello (1.5)</td>
<td></td>
</tr>
<tr>
<td>3178</td>
<td>String Bass (1.5)</td>
<td></td>
</tr>
<tr>
<td>3179</td>
<td>Flute (1.5)</td>
<td></td>
</tr>
<tr>
<td>3180</td>
<td>Oboe (1.5)</td>
<td></td>
</tr>
<tr>
<td>3181</td>
<td>Clarinet (1.5)</td>
<td></td>
</tr>
<tr>
<td>3182</td>
<td>Saxophone (1.5)</td>
<td></td>
</tr>
<tr>
<td>3183</td>
<td>Bassoon (1.5)</td>
<td></td>
</tr>
<tr>
<td>3184</td>
<td>Trumpet (1.5)</td>
<td></td>
</tr>
<tr>
<td>3185</td>
<td>French Horn (1.5)</td>
<td></td>
</tr>
<tr>
<td>3186</td>
<td>Euphonium (1.5)</td>
<td></td>
</tr>
<tr>
<td>3187</td>
<td>Trombone (1.5)</td>
<td></td>
</tr>
<tr>
<td>3188</td>
<td>Tuba (1.5)</td>
<td></td>
</tr>
<tr>
<td>3189</td>
<td>Percussion (1.5)</td>
<td></td>
</tr>
<tr>
<td>3190</td>
<td>Guitar (1.5)</td>
<td></td>
</tr>
<tr>
<td>7050</td>
<td>Graduate Applied Music (1.5)</td>
<td></td>
</tr>
</tbody>
</table>

### ENSEMBLE COURSES

Auditions for new students are held during registration at the beginning of each semester. These courses are open to freshmen and sophomores.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4220</td>
<td>Piano Chamber Music (1)</td>
<td></td>
</tr>
<tr>
<td>4221</td>
<td>Vocal Chamber Music (1)</td>
<td></td>
</tr>
<tr>
<td>4222</td>
<td>Woodwind Chamber Music (1)</td>
<td></td>
</tr>
<tr>
<td>4223</td>
<td>Brass Chamber Music (1)</td>
<td></td>
</tr>
<tr>
<td>4224</td>
<td>String Chamber Music (1)</td>
<td></td>
</tr>
<tr>
<td>4225</td>
<td>Collegium Musicum (1)</td>
<td></td>
</tr>
<tr>
<td>4226</td>
<td>Percussion Ensemble (1)</td>
<td></td>
</tr>
<tr>
<td>4227</td>
<td>Marimba Ensemble (1)</td>
<td></td>
</tr>
<tr>
<td>4228</td>
<td>New Music Ensemble (1)</td>
<td></td>
</tr>
<tr>
<td>4230</td>
<td>Gospel Choir (1)</td>
<td></td>
</tr>
<tr>
<td>4231</td>
<td>Swing Choir (1)</td>
<td></td>
</tr>
<tr>
<td>4232</td>
<td>Men's Chorus (1)</td>
<td></td>
</tr>
<tr>
<td>4233</td>
<td>Women's Chorus (1)</td>
<td></td>
</tr>
<tr>
<td>4234</td>
<td>University Chorus (1)</td>
<td></td>
</tr>
<tr>
<td>4235</td>
<td>Chamber Choir (1)</td>
<td></td>
</tr>
<tr>
<td>4236</td>
<td>A Cappella Choir (1)</td>
<td></td>
</tr>
<tr>
<td>4240</td>
<td>Opera Chorus (1)</td>
<td></td>
</tr>
<tr>
<td>4250</td>
<td>Tiger Marching Band (1)</td>
<td></td>
</tr>
<tr>
<td>4251</td>
<td>Wind Ensemble (1)</td>
<td></td>
</tr>
<tr>
<td>4252</td>
<td>Concert Bands (1)</td>
<td></td>
</tr>
<tr>
<td>4253</td>
<td>Jazz Band (1)</td>
<td></td>
</tr>
<tr>
<td>4260</td>
<td>Philharmonia (1)</td>
<td></td>
</tr>
<tr>
<td>4261</td>
<td>Symphony Orchestra (1)</td>
<td></td>
</tr>
</tbody>
</table>

### General Courses

A nontechnical approach to understanding vocabulary and materials of music; correlation of musical literature with other disciplines in the humanities.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001, 1002</td>
<td>Voice Class (2,2)</td>
<td>Open to nonmusic majors with consent of instructor. Group instruction in voice production.</td>
</tr>
<tr>
<td>1018, 1019</td>
<td>Diction for Singers—I,II (2,2)</td>
<td>Phonetics and phonemes used in singing in different languages; 1018 includes the phonetic alphabet and English and Italian diction; 1019 includes German and French diction.</td>
</tr>
<tr>
<td>1107</td>
<td>Secondary Piano (3)</td>
<td>2 half-hour lessons. May be taken twice for credit.</td>
</tr>
<tr>
<td>1108, 1109</td>
<td>Piano Class (2,2)</td>
<td>MUS 1108 is prerequisite for MUS 1109. 1 hr. lecture; 2 hrs. lab. Open only to nonmusic majors. Instruction for the beginner and lower intermediate student.</td>
</tr>
<tr>
<td>1130, 1131, 1132, 1133 Group Piano—I, II, III, IV (1 each)</td>
<td>Open only to music majors. Required of all non-keyboard music majors who do not meet proficiency requirements. Functional use of the piano.</td>
<td></td>
</tr>
<tr>
<td>1700</td>
<td>Recital Hour (6)</td>
<td>May be repeated. Pass-fail grading. Weekly student recital and music seminar.</td>
</tr>
<tr>
<td>1701</td>
<td>First-Year Theory (4)</td>
<td>5-6 hrs. lecture and lab. Lab assignments depend on student's needs. Elements of form, melody, rhythm, harmony, and aural skills.</td>
</tr>
<tr>
<td>1702</td>
<td>First-Year Theory (4) Prereq: MUS 1701 or equivalent.</td>
<td>5-6 hrs. lecture and lab. Lab assignments depend on student's needs. Elements of form, melody, rhythm, harmony, and aural skills.</td>
</tr>
<tr>
<td>1742</td>
<td>Introduction to Composition (3) Prereq: MUS 1701 or equivalent.</td>
<td>Compositional techniques, analysis, and audition of selected works.</td>
</tr>
<tr>
<td>1751</td>
<td>Music Appreciation (3)</td>
<td>Primarily for nonmusic majors. The art of music, with emphasis on listening skills;</td>
</tr>
</tbody>
</table>

1752 | Music Appreciation (3) | Primarily for nonmusic majors. The varied facets of the musical arts: folk music, symphony, opera, ballet, vocal, and chamber music. |

1753, 1754 | Music Literature and Appreciation (2,2) | For music majors: open to others by consent of instructor. Western art music from medieval Gregorian chant to 20th-century serialism. |

1799 | Rudiments of Music (3) | Not open to music majors. The grammar of music, including basic notation and elementary construction leading to a study of tonal harmony. |

2000 | History of Jazz (3) | Open to nonmusic majors. Survey of the evolution of jazz and jazz styles. |

2100, 2101 | Advanced Keyboard Skills—I, II (1,1) | Open only to keyboard majors. Functional use of the piano; emphasis on reading, harmonization, and improvisation. |

2170 | Music Education in the Elementary School—I (3) | Music fundamentals, materials, methods, and skills involved in teaching general music in the elementary school. |

2171 | Music Education in the Elementary School—II (3) Prereq: MUS 2170 or equivalent. | Fundamentals of music theory, advanced materials, methods, and skills involved in teaching general music in the elementary school; emphasis on use of guitar to teach music lessons. |

2300 | Instrumental Techniques (1-3) | May be repeated for credit. For prospective secondary school teachers. Development of fundamental skills in wind and percussion instruments. |
4102 The Advanced Coaching and Accompanying of Art Songs (2) Open to singers and pianists who have completed the sophomore year, or its equivalent, in their major performance areas.

4241 Opera Theater (2) Admission by audition. 4 hrs. lab; 1 hr. individual musical coaching. May be taken 4 times for credit toward the master's degree. May not be taken concurrently with MUS 9007. Because the first production scheduled in the spring semester is cast and rehearsals are begun during the last part of the fall semester, students must schedule this course both semesters unless permission to schedule one semester only is granted by instructor. Except in special cases, fall-semester grades will be "I" until the first spring-semester opera has been produced. Techniques of the musical theater, including actual performance.

4351 Song Literature—II (3) The art song repertoire from the classical songs of Haydn and Mozart to the Romantic period.

4352 Song Literature—II (3) The art song repertoire from the French mélodie to contemporary English and American song.

4701, 4702 Organ Practicum (2, 2) Prereq: consent of instructor. MUS 4701 is prerequisite for 4702. Techniques of service playing; techniques and materials of organ pedagogy.

4703 The Scientific Bases of Music (2) Musical acoustics; nature and generation of sound; computation of intervals and scales within various systems of tuning and temperament.

4712 Advanced Form and Analysis (3) Prereq: MUS 3711. Complex forms and harmonic techniques of the 19th and 20th centuries.

4719 Advanced Harmony (3) Prereq: MUS 2712. Musical style of the 19th century; chromatic harmony, complex tertian sonorities, foreign modulation, free voice writing, and expressionist style.

4720 20th-Century Harmony (3) Prereq: MUS 2712. Impressionistic harmony, tertian sonorities with added tones, quartal harmony, and other techniques of the pre-symphonic school.

4721, 4722 Modal Counterpoint (3, 3) Prereq: MUS 2712 or equivalent. MUS 4721 is prerequisite for 4722. 16th-century counterpoint.

4723 Tonal Counterpoint (3) Prereq: MUS 2712 or equivalent. Writing of counterpoint in two and three parts to a given cantus firmus; imitative contrapuntal forms such as the invention and the fugue.

4724 Advanced Tonal Counterpoint (3) Prereq: MUS 4723 or equivalent. Writing of contrapuntal forms in four and five parts with use of advanced contrapuntal techniques and expanded harmonic vocabulary.

4730 Elementary Orchestration (2) Prereq: MUS 2712. Traditional scoring practices.

4731 Intermediate Orchestration (2) Prereq: MUS 4730. Orchestrating for full orchestra including extraordinary instruments; avant-garde orchestral practice.

4732 Band Arranging (2) Prereq: MUS 2712. Scoring for band; transcription from other media and original composition.

4735 Jazz Arranging (2) Prereq: MUS 2712 or consent of instructor. Jazz arranging styles and techniques, from Dixieland to modern jazz.

4743 Electronic Music Composition (3) Prereq: composition in other media and consent of instructor. May be repeated
for credit. Use of equipment in the electronic studio; compositional techniques used in construction of electronically assembled works.

4745 Computer Music (3) Prereq: MUS 4743 or equivalent. May be taken twice for credit. Digital sound synthesis; composition with digital synthesizers.

4751 Survey in Music History—I (2) Prereq: MUS 1754 or equivalent. Required of music majors; open to others with consent of instructor. Music of the western world from ancient Greece to ca. 1700.

4752 Survey in Music History—II (2) Required of music majors; open to others with consent of instructor. Continuation of MUS 4751; late Baroque, classic, romantic, and modern eras to the present.

4753 Folk and Traditional Music—Music History and Literature (2) Background and history of folk and traditional music; emphasis on Anglo-American folksongs.

4754 Folk and Traditional Music—Music History and Literature (2) Prereq: MUS 4753 or equivalent. Unwritten music of folk cultures; emphasis on Afro-American styles.

4755, 4756 Hymnology and Church Music (3,3) Music in worship from the Middle Ages to the 20th century; literary and musical aspects of the hymn and of the liturgy of the devotional year.

4757 Piano Literature—I (2) Changing styles and forms of keyboard music from early examples to 1700.

4758 Piano Literature—II (2) Keyboard styles and forms from J.S. Bach through the end of the 18th century.

4759 Piano Literature—III (2) Piano literature from Beethoven through the end of the 19th century.

4760 Piano Literature—IV (2) 20th-century piano literature from Impressionism through the most recent trends.

4761, 4762 The Care and Repair of Band and Orchestral Instruments (1,1) Prereq: MUS 2300 or equivalent. 2 hrs. lab. For students with experience in instrumental music and a practical knowledge of the problems in instrumental upkeep.

4763, 4764 Piano Methods and Materials (3,3) Materials and techniques for the piano teacher.

4766 Marching Band Techniques (3) Charting techniques for marching band; emphasis on contemporary drill design; practical projects in charting drill.

4767 Piano Design, Construction, and the Theory of Tuning and Temperament (2) 1 hr. lecture; 2 hrs. lab. Open only to music majors. Piano and harpsichord design, construction, regulation, voicing, and tunings; knowledge important to pianists; laboratory experience in regulation, tuning, and voicing.

4769, 4770 Supervised Studio Instruction (2,2) Program tailored to the needs of each student by the major applied teacher who supervised the student's studio teaching program.

4789, 4790 Musical Theatre Production (2,2) Each course may be repeated for credit. Open to advanced musicians interested in producing musical theatre. Various aspects of the lyric theatre: creation of the musical dramatic role, staging techniques for singers, coordination of set design, lighting, makeup, costuming, budgeting, and publicity.

4791 Introduction to Opera (3) Open to majors and nonmajors. History, production, and performance of opera from 1600 to the present.

4797 Senior Recital (1-3) May be repeated for a maximum of 3 sem. hrs. credit.

4798 Senior Composition Recital (1) Concert of solo and chamber works.

4799 Coaching in Applied Music (2) Prereq: MUS 4797 and recommendation of the applied-music faculty concerned. May be repeated for credit.

4800 Foundations and Principles of Music Education (3) Historical, philosophical, and aesthetic foundations of music education; derivation of contemporary principles from the practice of music education; current trends and issues in music education.

4801 Psychology of Music (3) Prereq: PSYC 2060 and 4070. Physical and psychological bases of musical phenomena, perception of musical phenomena, musical preferences, musical ability, and musical learnings in the cognitive, affective, and psychomotor domains of learning.

7010 History of Musical Style—I (3) Prereq: MUS 4751 and 4752; or equivalents. History of music in the western world from pre-Christian Greek and Hebrew roots to about 1700 as seen from the perspective of changing musical styles; emphasis on specific characteristics of the various styles as determined from major compositions and treatises of each period.

7011 History of Musical Style—II (3) Prereq: MUS 4751 and 4752; or equivalents. Changing musical styles from the mature baroque (ca. 1700) to the present; the music and ideas of leading composers of western music.

7124 Seminar in String Literature (2) Methods, solos, and chamber music for strings.

7126, 7127 Seminar in Woodwind Literature—I,II (2,2) Methods, solos, and ensemble literature for woodwinds.

7128 Seminar in Brass Literature (3) Methods, solos, and ensemble literature for brass instruments.

7130 Seminar in Percussion Literature (2) Methods, solos, and ensemble literature for percussion instruments.

7170, 7171 Advanced Vocal Pedagogy (2,2) See EDCI 7170, 7171.

7172 Stringed-Instrument Pedagogy (2) See EDCI 7172.

7173 Woodwind-Instrument Pedagogy (2) See EDCI 7173.

7174 Brass-Instrument Pedagogy (2) See EDCI 7174.

7175 Percussion-Instrument Pedagogy (2) See EDCI 7175.

7221 Solo Literature for the Voice (3) Prereq: MUS 4351 and 4352; or equivalents. Solo vocal literature in German and French; emphasis on styles of performance.

7222 Solo Literature for the Voice (3) Prereq: MUS 4351 and 4352; or equivalents. Solo vocal literature by English, American, Italian, Scandinavian, Eastern European, Russian, Spanish, and Latin American composers; emphasis on styles of performance.

7500 Advanced Teaching Practicum (1-2) Prereq: MUS 4769 and 4770; or equivalents. May be repeated for credit. A total of 3 sem. hrs. is applicable to the M.M. degree. Supervised teaching internship of instrumental and/vocal instruction in private and/or group settings.

7501 Piano Pedagogy and Literature—I (2) Prereq: MUS 4763 and 4764; or equivalents. Piano methods and literature at the elementary and intermediate levels.

7502 Piano Pedagogy and Literature—I (2) Prereq: MUS 4763 and 4764; or equivalents. Piano methods and literature at the intermediate and advanced levels.

7701, 7702 Comparative Practices of Musical Theory (3,3) Courses ordinarily taken in sequence. Important writings dealing with theory.
7703 20th-Century Musical Practices (3) 6 sem. hrs. applicable to the M.M. degree; 6 additional sem. hrs. applicable to the D.M.A. degree. Compositional trends in 20th-century music; discussion of books on composition; analysis of major compositions.

7711 Seminar in 20th-Century Musical Analysis (3) May be taken twice for credit. Analytical study of specific composers, works, or styles.

7749, 7750 Special Studies in Piano Literature (2,2) Each course may be taken twice for credit when piano literature varies. Total amount of credit applicable to M.M. degree limited by student's advisory committee. Works of certain composers for the keyboard as selected concertos.

7751 Ancient and Medieval Music (3) History of music from ancient Greeks and Hebrews through the 14th century.


7753 Music in the Baroque Era (3)

7754 Music in the Classical Era (3)

7755 Music in the Romantic Era (3)

7756 Music in the Modern Era (3)

7757 American Music (3) The most important phases in development of music in the U.S.

7760 Performance Practices (3) Primary and secondary source materials dealing with the performance of music of the 17th and 18th centuries; application of these materials to the interpretation of music.

7762 Measurement and Evaluation in Music (3) Teacher-designed and standardized tests in music; learning theories.

7763, 7764 Comparative Methods in Music Education (3,3) Techniques in teaching music; opportunity for functional projects; important approaches and texts evaluated with emphasis on curriculum construction; 7763 deals with elementary grades, 7764 with secondary.

7766 Supervision of Music Education (3) Aims and functions of supervision in music education; problems of music consultants; in-service procedures; administration of music education programs.

7767 Experimental Research in Music (3) Prereq: EDAF 4006 and MUS 7905. Primarily for doctoral students in music. Systematic investigation of musical behavior and music learning; procedures for the collection, quantification, and treatment of data; current research in music.

7771, 7772 Advanced Choral Conducting (2,2) Prereq: previous study of conducting.

7773, 7774 Advanced Band Conducting (2,2) Prereq: previous study of conducting.

7775, 7776 Advanced Orchestral Conducting (2,2)

7777, 7778 Advanced Keyboard Literature—I,II (3,3) Prereq: MUS 4757, 4758, 4759, and 4760; or equivalents. Genres and styles from earliest examples in the keyboard literature through the most recent trends.

7798 Master's Recital (1-3) Prereq: MUS 4797 or equivalent. May be repeated for credit for a maximum of 3 sem. hrs.

7799 Advanced Coaching in Applied Music (2) Prereq: MUS 7798 or equivalent. May be taken twice for credit.

7800 Introduction to Research (1-2) Required of all doctoral students; recommended for master's students who will write theses. Music education students register for 1 sem. hr. Research, bibliography, and source materials.

7901 Seminar in Musical Composition (1-3) May be repeated for credit for a maximum of 9 sem. hrs. Participation in the Composer's Forum is part of course work.

7903, 7904 Seminar in Music History (2-3,2-3) Each course may be taken 3 times for credit. Only 6 sem. hrs. applicable to the M.A. degree; only 12 additional sem. hrs. applicable to the Ph.D.; maximum for M.A. and Ph.D. combined is 18 sem. hrs.

7905, 7906 Seminar in Music Education (2-6,2-6) Each course may be taken 3 times for credit. Only 6 sem. hrs. applicable to the M.M.Ed. degree; only 12 additional sem. hrs. applicable to the Ph.D.; maximum for M.M.Ed. and Ph.D. combined is 18 sem. hrs.

7921 Seminar in Music Theory (3) Primarily for master's candidates. May be taken twice for degree credit.

7997 Individual Projects in Music (1-3) Prereq: consent of departmental faculty concerned and dean of the School of Music. May be repeated for credit as follows: for master's degree, 3 sem. hrs.; for doctoral degree, 6 sem. hrs. beyond the master's or a total of 9 sem. hrs. if both master's and doctoral totals included.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

9001 First Doctoral Solo Recital (1-3) Pass-fail grading.

9002 Second Doctoral Solo Recital (1-3) Pass-fail grading.

9003 First Doctoral Lecture Recital (1-3) Pass-fail grading.

9004 Second Doctoral Lecture Recital (1-3) Pass-fail grading.

9005 Concerto with Orchestra (1) Pass-fail grading.

9006 Major Solo Part in an Oratorio or a Cantata (1) Pass-fail grading.

9007 Doctor of Musical Arts Major Role in Opera (2) May not be taken concurrently with MUS 4241. Pass-fail grading.

9008 Doctor of Musical Arts Chamber Music Recital (2) Pass-fail grading.

9009 Research and Monograph (1-3) Pass-fail grading.

9021 Seminar in Music Theory (3) For doctoral candidates only. May be taken twice for degree credit.

9758, 9759 Repertoire (3,3) Each course may be taken 3 times; however, amount of credit applicable to a degree is determined by student's advisory committee.

9901 Doctoral Seminar in Musical Composition (1-3) May be repeated for credit; maximum amount of credit applicable to a degree is 12 sem. hrs. Participation in the Composer's Forum is part of course work.

9909 Seminar in Scoring for Various Media (2) Prereq: MUS 3711, 4719, 4730, and 4731; or equivalents. May be repeated for credit with consent of adviser.

9925 to 9937 (Series) Seminar in Literature and Style in Performance (3 each) Historical developments of the various performance areas with concentration on their literature, important pedagogical principles, and stylistic problems related to each medium. To be given as follows:

9925, 9926 Voice
9927, 9928 Piano
9929, 9930 Organ
NUCLEAR SCIENCE (NS)

Students and staff utilizing facilities of the Nuclear Science Center must take, as their initial training, Nuclear Science 2051, 3411, or 4101, or must have equivalent prior training or experience.

2051 Contemporary Radiological Science (3) F,S Prereq: one semester of chemistry or physics. Radioactivity in nature; synthetic radionuclides and radiation sources; radiological applications in industry, chemistry, biomedical sciences, engineering, and energy production; radiological safety.

3411 Nuclear Applications in the Physical Sciences and Engineering (3) F,S Prereq: one semester of chemistry or physics. 2 hrs. lecture; 3 hrs. lab. Nuclear structure, transmutation, decay, and their applications in industry and research.

4101 Tracer Methodology for Biological Sciences (3) F,S 2 hrs. lecture/demonstration; 3 hrs. lab. Specifically for students in the biological sciences. Properties of ionizing radiation, instruments for detecting and measuring radiation, and biological uses of radioisotopes.

4141 Radioecology (3) F Prereq: NS 4101 or equivalent. 2 hrs. lecture; 3 hrs. lab. Also offered as ENV 4141. Radioactively, stable tracers, and radiation effects in both natural and laboratory-contained communities of organisms.

4331 Radiation Hazards and Control (4) F Prereq: NS 3411 or 4101 or equivalent. 3 hrs. lecture; 3 hrs. lab. Consequences of human exposure to high-energy radiation; control of radiation hazards, including exposure limits, detection techniques, shielding, laboratory design, emergency action, and federal and state regulations.

4351 Advanced Radiation Detection and Measurement (3) V Prereq: NS 3411 or 4101 or equivalent. 2 hrs. lecture; 3 hrs. lab. Operation, construction, and application of radiation detection systems; selection, calibration, and electronic matching of systems to counting problems; sophisticated systems for counting and for control of engineering systems.

4425 Computer-Aided Nuclear Design (3) V Prereq: CSC 1241 and NS 4527; or equivalents. Application of available computer programs to a broad spectrum of problems in nuclear science.

4481 Industrial Applications of Radioisotopes (3) S Prereq: NS 2051 or 3411 or equivalent. 2 hrs. lecture; 3 hrs. lab. Radioisotope applications pertinent to industry; measuring wear, mixing efficiency, fluid density, solids density, washing efficiency, flow conditions, radiography, bulk inventory, etc.

4494 Nondestructive Testing (3) F Prereq: credit or registration in EE 3950 or equivalent physics courses; or equivalent. 2 hrs. lecture; 3 hrs. lab. Tests which will not alter serviceability of finished products while testing for discontinuities that might affect end use of the product; experiments require applications of optics, sound, electronic and electronic systems, nuclear radiations, and other natural phenomena.

4527 Nuclear Reactor Theory and Design (3) F,S Prereq: two semesters of physics and an introductory course in computer programming. Characteristics of radioactive materials; neutron interactions; the fission process; static criticality; time-dependent behavior of cores; design of nuclear power reactors.

4566 Nuclear Reactor Systems (3) F Prereq: NS 4527 or equivalent. Engineering aspects of reactor systems; fuel cycle, economics, mechanical and thermal design, selection of materials, and environmental impact of nuclear power plants.

4570 Nuclear Reactor Safety (3) S Prereq: NS 4527 or equivalent. Safety aspects of nuclear reactors; possible accidents, dispersal of radioactivity, and engineered safeguards.

4991, 4992 Special Problems in Nuclear Science (1-4, 1-4) F,S Prereq: a thorough knowledge of mathematics, science, and engineering related to the proposed problem; and consent of instructor and director. Theoretical or experimental problems involving the application of nuclear technology.

7101 Advanced Tracer Methodology for Biological Sciences (3) S Prereq: NS 4101 or equivalent. 2 hrs. lecture; 3 hrs. lab. Qualitative and quantitative aspects of tracer applications in modern biological research; combining tracer techniques with other analytical methods.

7121 Radiobiology (3) S Prereq: NS 4101 or equivalent. 2 hrs. lecture; 3 hrs. lab. Effects of ionizing radiation on biological systems, including machine-made radiation sources such as x-ray and ultra-violet light and their resulting interactions on molecular, cellular, and organ-system levels of biological organization.

7210 Clinical Principles in Radiation Therapy (3) F Prereq: NS 4101 or equivalent. Clinical principles utilized in the treatment of malignant disease with external beam irradiation and sealed source brachytherapy techniques.

7270 Technical Methodology in Radiation Therapy (3) S Prereq: NS 4101 or equivalent. 2 hrs. lecture; 3 hrs. lab. Technical aspects of the treatment of malignant disease; instruments and their limitations; calibration and dosimetry techniques; clinical practice.

7331 Radiation Dosimetry (3) V Prereq: NS 4331 or equivalent. Methods for measuring radiation fields and absorbed radiation doses by ion-collection devices, photographic methods, solid-state systems, chemical systems, and calorimetric methods, as applied to isotopic and machine sources.

7520 Nuclear Reactor Materials (3) V Principles governing structure and properties of materials used in nuclear reactors; radiation effects, problems in selection, fabrication, and use of these materials.

7525 Nuclear Engineering Laboratory (2) S Prereq: credit or registration in NS 7527. 6 hrs. lab. Operation of nuclear counting and spectroscopy systems; measurements of neutron behavior in multiplying and nonmultiplying media; development of design parameters from empirical data.

7527, 7528 Reactor Engineering (3,3) F,S Prereq: consent of department. NS 7527 is prerequisite for 7528. Homogeneous and heterogeneous reactors, diffusion, and transport theories for neutron flux calculations; criticality calculations; two-group and multi-group methods; transient behavior and reactor control; temperature and void effects; perturbation theory.
PETROLEUM ENGINEERING (PETE)

2020 Introduction to Petroleum Engineering (3) Scientific bases of petroleum geology and chemistry, exploration, drilling, production, reservoir engineering, and refining.

3025 Economic Aspects of Petroleum Production (3) Prereq: PETE 2020 and either MATH 1431 or 1550. Mineral ownership and leasing in Louisiana; profitability analysis; risk analysis; evaluation of petroleum properties.

3031 Petrophysics (3) Prereq: EGR 1001, MATH 1552, PETE 2020, and PHYS 2101, 2108. Steady-state flow and fluid distribution in reservoir rock as influenced by porosity, permeability, fluid saturations, and wettability; electrical, elastic, and nuclear properties.

3032 Phase Behavior of Hydrocarbon Systems (3) Prereq: CHEM 2261, EGR 1001, MATH 1552, PETE 2020, and PHYS 2101, 2108. Theory and application of phase behavior and thermodynamics to reservoir and surface systems of complex hydrocarbon mixtures.

3034 Rock and Fluid Properties Laboratory (1) Prereq: PETE 3031 and 3032 and a 2.00 gpa for all PETE courses attempted at LSU. Nonmajors by consent of department only. 3 hrs. lab.

3036 Introductory Well Logging (3) Prereq: EE 2950, PETE 3031, 3034, and PHYS 2102, 2109. Qualitative and quantitative formation evaluation by means of electric, acoustic, and radioactive well logs.

3053 Petroleum Engineering Aspects of Subsurface Geology (3) Prereq: GEOL 1003, GEOL 1601, and PETE 3036; or senior status in geology. Engineering aspects of petroleum geology; interpretation of subsurface data; reservoir mapping; determination of reservoir volume.

3990 Independent Research (1-2) May be repeated for credit for a maximum of 3 sem. hrs. Credit hours, outline of proposed work and name of faculty supervisor must be stated at time of registration. Individual research or engineering studies with faculty supervision.

4045 Drilling Engineering (3) Prereq: CHEM 1212, CE 3400, ME 2833, and PETE 3032, 3034. Rotary drilling equipment; composition and properties of drilling fluids and cements; annular and pipe flow of Newtonian and non-Newtonian fluids; optimization of jet bit hydraulics; blowout prevention.

4046 Well Design—Production (3) Prereq: ME 3133 and PETE 4045. Analysis and design of well production systems; rod pumping, gas lift, hydraulic fracturing, surface separation, and treating equipment.

4051 Reservoir Engineering (3) Prereq: PETE 3031, 3032, and 3034. Quantitative study and behavior prediction of volumetric and water-drive reservoir systems by material balance.

4052 Reservoir Engineering (3) Prereq: PETE 4051. Flow and displacement dynamics of single and multiphase fluid systems in homogeneous and heterogeneous porous media in both steady and unsteady states.

4056 Numerical Methods in Petroleum Engineering (3) Prereq: MATH 2057 and ENGR 2060. Advanced concepts in FORTRAN programming; numerical techniques used in the solution of problems in drilling, production, and reservoir engineering; numerical solutions to the partial differential equations used in reservoir performance calculations.

4057 Petroleum Production Laboratory (1) Prereq: PETE 3032 and 3034. 3 hrs. lab. Instruments, equipment, and systems used in oil and gas production; pollution prevention and safety systems in off-shore production operations.

4058 Reservoir Engineering Laboratory (1) Prereq: credit or registration in PETE 4052. 3 hrs. lab. Accompanies PETE 4052.

4059 Drilling Fluids Laboratory (1) Prereq: credit or registration in PETE 4045. 3 hrs. lab. Accompanies PETE 4045.

4060 Prevention of Oil and Gas Well Blowouts (1) Prereq: credit or registration in PETE 4045. 3 hrs. lab. Causes and detection of well kicks and the proper handling of these kicks to prevent uncontrolled flow (blowout) from the well; methods and techniques currently used in the oil and gas industry.


4085 Advanced Production Engineering (3) Prereq: PETE 3032 and 3034. Operating principles and design criteria for equipment used in field processing of oil and gas, e.g., lean oil gasoline plants, gas dehydration units, gas sweetening units, cryogenic gasoline plants, separators, gas transmission and compression facilities.
4086 Advanced Drilling Engineering (3) Prereq: PETE 4045. Bit selection and evaluation; mathematical modeling of bit wear and penetration rate; optimization of bit weight and rotary speed; determination of formation pore pressure and fracture pressure; selection of well casing and casing setting depths; directional drilling.

4088 Well Logging (3) Prereq: PETE 3036. Quantitative interpretation of electric, sonic, nuclear, and dipmeter logs by overlay, crossplot, and digital evaluation methods; multipletool logging programs that provide comprehensive description of reservoir content productivity.


7201 Advanced Reservoir Engineering (3) Prereq: PETE 4052 and 4036, or equivalents. General hydrodynamic equations for flow of fluids through porous media; two-dimensional flow problems and potential theory methods; gravity flow systems; two-fluid systems; systems of non-uniform permeability; multiple well systems using computerized streamline tracking methods.

7202 Advanced Reservoir Engineering (3) Prereq: PETE 4051 and 4052. Unsteady-state flow of reservoir fluids in porous media; application of theory to pressure buildup analysis, well interference testing, pulse testing, pressure drawdown analysis, drill stem testing, and water influx prediction.

PHILOSOPHY (PHIL)

1000 Introduction to Philosophy (3) Major works on such basic themes as appearance and reality, man and the world, nature of knowledge, relation of mind and body, right and good, existence of God, and freedom and determinism.

1021 Introduction to Philosophy: Elementary Logic (3) No special background presupposed. Formal and informal reasoning; traditional syllogistic logic, modern deductive logic, and scientific method in the natural and social sciences.

1031 Introduction to Philosophy: Nature and Knowledge (3) Origins of natural science, its major philosophical implications, and its effects on modern civilization.

2000 Contemporary Moral Problems (3) Philosophical study of contemporary moral problems such as capital punishment, preferential treatment, sexual equality, sexual liberation, terrorism, war and nuclear arms, animal rights, world hunger, environmental ethics, and the morality of suicide.

2010 Introduction to Logical Theory (3) Primarily for students intending to take additional work in philosophy or logic. Symbolic logic; formal methods of proof, including syllogistics, truth functions, propositional calculus, and elementary predicate calculus; philosophical assumptions underlying logic; relevance of formal logic to philosophic questions.

2018 Professional Ethics (3) Special problems of obligation and valuation related to law, medicine, politics, and education, as well as business, engineering, and architecture; altruism, trust, vocation, codes of honor, professional privilege, and responsibilities for others arising from differential abilities.

2020 Ethics (3) Classical and recent theories of obligation and valuation, including works of Aristotle, Kant, Mill, and Nietzsche; freedom, rights, dignity, and resources for moral judgment.

2023 Philosophy of Art (3) Major aesthetic theories.

2024 Philosophy in Literature (3) Philosophical themes implicit in the writings of eminent novelists, dramatists, and poets.

2025 Bioethics (3) Defining health and disease; deciding on rights, duties, and obligations in the patient-physician relationship; abortion and the concept of a person; defining and determining death; euthanasia and the dignity of death; allocation of medical resources, both large-scale and small-scale; experimentation with fetuses, children, prisoners, and animals; genetic testing, screening, and interference.

2028 Philosophy of Religion (3) Same as REL 2028. Essence and meaning of religion as a pervasive phenomenon in human societies; faith and reason, nature of divinity, arguments for and against God's existence, religious knowledge and experience, morality and cult, the problem of evil.

2033 History of Ancient and Medieval Philosophy (3) An honors course, PHIL 2034, is also available. Introduction to philosophy through a study of some of the main writings of classical and medieval philosophy.

2034 HONORS: Tutorial in Ancient and Medieval Philosophy (1) To be taken concurrently with PHIL 2033. 1 hr. of tutorial instruction per week for honors students.

2035 History of Modern Philosophy (3) An honors course, PHIL 2036, is also available. Introduction to philosophy through a study of some of the main writings of modern philosophy.

2036 HONORS: Tutorial in Modern Philosophy (1) To be taken concurrently with PHIL 2035. 1 hr. of tutorial instruction per week for honors students.

2953 HONORS: Philosophical Colloquium (3) Prereq: a grade of "B" or higher in at least one other philosophy course; or consent of instructor. Subject drawn from prominent philosophical works.
2963, 2964, 2965 HONORS: Independent Work for Honors Students (1,1,1) Prereq: sophomore standing, completion of at least 3 hrs. of philosophy with a grade of "B" or higher, and a GPA of at least 3.00 in all work taken. Readings, conferences, and reports under faculty direction.

3001 Existentialism (3) Basic themes of existentialist philosophy; the works of Kierkegaard, Nietzsche, Jaspers, Heidegger, Camus, Marcel, and Sartre.

3002 Philosophy and Film (3) Films as philosophical texts.

3020 Special Topics in Philosophy (1-3) May be taken twice for credit when topics vary.

3090 Friedrich Nietzsche (3) See GERM 3090.

3901 HONORS: Directed Readings in Philosophy (3) Prereq: PHIL 2033 and 2035; or equivalents.

3902 EXAMINATION: Tutorial (1) Comprehensive exam in the field of problems offered by the department. To be taken during the junior or senior year. Examination is prepared for by means of a structured and supervised tutorial, based on reading lists given students entering the departmental honors program.

4010 Logic (3) Prereq: PHIL 2010 or equivalent. Modern symbolic logic, with emphasis on formal axiomatic method and metatheory of formal calculi.

4011 Advanced Logic (3) Prereq: PHIL 4010 or equivalent. Advanced metatheory and the axiomatic foundations and applications of intensional logics.

4013 Philosophy of Biology (3) Prereq: one course in biology or equivalent. History of biology as it illustrates philosophical issues; structure of evolutionary theory; nature of biological laws and theories; issues relating to teleology and reductionism; status of the science of taxonomy; sociobiology and ethics and the study of culture.

4914 Philosophy of Language (3) Prereq: one logic course or consent of instructor. Various theories of meaning, their implications and presuppositions, and their relevance to issues in such areas as theory of perception, theory of truth, metaphysics, ethics, philosophy of mind and action.

4920 Early Greek Philosophy (3) Prereq: PHIL 2033 or equivalent. Topics from early Greek philosophy beginning with Thales and ending with the Sophists, Socrates, and the early "Socratic" dialogues of Plato; emphasis on Anaximander, Heraclitus, Parmenides, and Socrates.

4922 Plato (3) Prereq: PHIL 2033 or equivalent.

4924 Aristotle (3) Prereq: PHIL 2033 or equivalent. Topics from Aristotle's Metaphysics, Physics, De Anima, and the logical treatises.

4931 Descartes, Spinoza, and Leibniz (3) Prereq: 6 hrs. of philosophy or consent of instructor. 17th-century rationalism, with emphasis on epistemology and metaphysics.

4933 Locke, Berkeley, Hume (3) Language, epistemology, ontology, self, God, causation, realism, and idealism in the writings of these British empiricists.

4936 19th-Century Philosophy (3) Prereq: PHIL 2033 and 2035; or equivalents. 19th-century philosophy, with emphasis on German thought; readings in Fichte, Hegel, Marx, Nietzsche, Bergson, and others.

4938 Philosophical Thought in America (3) Late 19th and early 20th centuries; topics from such philosophers as Peirce, James, Royce, Dewey, Santayana, Ward, and Mead.

4941 Philosophy of Mind (3) Prereq: PHIL 2033 and 2035; or equivalents. Recent philosophical treatments of human nature; the mind-body problem, identity of the person in time, the person as rational and volitional, and relation of the person to the world.

4943 Problems in Ethical Theory (3) Prereq: two courses in philosophy or consent of instructor. Recent developments in ethics, including material from analytic and existential-phenomenological traditions.

4944 Philosophical Theology (3) Prereq: two courses in philosophy or consent of instructor. Same as REL 4944. Major works in philosophical theology by such authors as Hartshorne, Farrer, Tillich.

4945 Political Philosophy (3) Prereq: PHIL 1000 or 2020 or equivalent. Freedom, obligation, authority, justice, law, the state, and revolution.

4948 Phenomenology (3) Prereq: PHIL 2035 or 4936 or equivalent. Contemporary phenomenology; reading in Husserl.

4951 Philosophy of Science (3) Prereq: consent of instructor. Philosophical issues related to concept formation and theory construction in the natural, behavioral, and social sciences.

4953 Contemporary Analytic Philosophy (3) Prereq: one logic course and either PHIL 2035 or 4933. Topics from leading philosophers in such contemporary movements as logical empiricism, formalism, and ordinary language analysis, including Moore, Russell, Wittgenstein, Carnap, Goodman, Ryle, Strawson, and Quine.

4954 Recent Speculative Philosophy (3) Prereq: two other philosophy courses or consent of instructor. Theories of being and knowing in recent absolute idealism, process philosophy, and phenomenological existentialism.

7901 Seminar in Contemporary Analytic Philosophy (3) Philosophy of language, metaphysics, realism, anti-realism, and philosophy of logic and mathematics.

7903 Seminar in Continental Philosophy (3) Major figures and/or movements in continental philosophy.

7905 Seminar in History of Philosophy (3) May be taken 3 times for credit when topics vary. Study of a major philosopher or school of philosophy.

7910, 7911 Seminar (3,3) Prereq: consent of department.

7991 Independent Study (3)

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

PHYSICAL SCIENCE (PHSC)

1001, 1002 Physical Science (3,3) Prereq: MATH 0092 or equivalent or an ACT math score of at least 21. PHSC 1001 and 1002 normally taken in sequence. Not intended for students who plan to study one of the physical sciences; cannot be substituted for the basic course in any of these fields; no student will be allowed to receive credit for PHSC 1001 and any other college-level physics course or for PHSC 1002 and any other college-level astronomy or physics course. Significant developments in astronomy and physics, with introductions to chemistry and geology.
PHYSICS (PHYS)

**Prerequisites:** All prerequisites in physics courses should be rigidly observed.

**Corequisites:** A student may not continue in a course after dropping a corequisite course prior to the last day of the midsemester examination period.

Physics 7223, 7235, 7236, 7260, 7281, 7282, 7343, 7363, 7364, 7373, 7374, 7745, 7753, 7783, 7893, 7895, 7896 are rotated so as to offer a varied curriculum. Only three of the above courses are normally offered in the fall or spring semesters.

1201, 1202 General Physics for Physics Majors (4,4) F,S Prereq. for 1201: credit or registration in MATH 1550. Prereq. for 1202: PHYS 1201 and credit or registration in MATH 1552. 4 hrs. lecture/demonstration. Primarily for students intending to major in physics. Credit will not be given for these courses and PHYS 2001, 2002 or 2101, 2102. Fundamentals of classical physics and some concepts of modern physics; calculus and vector analysis introduced and used in development of subject matter.

1208, 1209 General Physics Laboratory for Physics Majors (1,1) F,S Prereq. for 1208: credit or registration in PHYS 1201. Prereq. for 1209: credit or registration in PHYS 1202. 3 hrs. lab. Credit will not be given for these courses and PHYS 2008, 2009 or 2108, 2109. Labs to accompany PHYS 1201, 1202.

2001, 2002 General Physics (3,3) Prereq: MATH 1022 or 1023. PHYS 2001 is prerequisite for 2002. 3 hrs. lecture/demonstration. Credit will not be given for these courses and PHYS 1201, 1202 or 2101, 2102. Mechanics, heat, sound, light, electricity, and magnetism; topics in modern physics.


2101, 2102 General Physics for Technical Students (3,3) Prereq. for 2101: credit or registration in MATH 1552. Prereq. for 2102: PHYS 2101 and credit in MATH 1552. 3 hrs. lecture/demonstration. For mathematics, chemistry, or engineering majors. Credit will not be given for these courses and PHYS 2101, 2102 or 2001, 2002. Principles and applications of mechanics, heat, sound, light, electricity, and magnetism; modern physics.

2108, 2109 Laboratory Work in Technical Physics (1,1) Prereq. for 2108: credit or registration in PHYS 2101. Prereq. for 2109: credit or registration in PHYS 2102. 3 hrs. lab. Credit will not be given for these courses and PHYS 1208, 1209 or 2008, 2009. Labs to accompany PHYS 2101, 2102.

2111 Elementary Mathematical Physics (3) F Prereq: PHYS 1202 or 2102. Mathematical methods of physics; application to selected problems in physics.

2209 Introductory Modern Physics for Physics Majors (4) F Prereq: PHYS 1202 and 1209. 3 hrs. lecture/demonstration; 2 hrs. lab. Primarily for students planning to major in physics. Elementary modern physics.

2221 Mechanics of Particles and Rigid Bodies (3) S Prereq: PHYS 2111 and credit or registration in MATH 2065; or CHEM 4581 and credit or registration in MATH 2065; or MATH 4037. Single particle dynamics, the harmonic oscillator, Lagrangian mechanics, central force motion, the inertia tensor, and rigid body dynamics.

2231 Electricity and Magnetism (3) S Prereq: PHYS 2111 and credit or registration in MATH 2065; or CHEM 4581 and credit or registration in MATH 2065; or MATH 4037. Electricity and magnetism; static and quasistatic electro-magnetic fields in vacua and in dielectric and magnetic media.

2401 Introduction to Concepts in Physics (3) V Prereq: MATH 1021 or an ACT math score of at least 25. Primarily for students in liberal arts and education. Historical evolution and underlying philosophy of principles of physics; provides appreciation of physics; does not develop technical skill.

2995 Research Internship (1) Prereq: consent of instructor and chairman of department. May be repeated for credit. Individual reading and theoretical and/or experimental research on introductory problems in physics.

4055 Atomic and Nuclear Physics for Engineers (3) V Prereq: PHYS 1202 or 2102, and MATH 2065. Atomic and nuclear physics; emphasis on atomic and nuclear structure, nuclear radiation and energy, and applications.

4112 Intermediate Mathematical Physics (3) V Prereq: PHYS 2111 or CHEM 4581; and credit or registration in MATH 2065. Mathematical methods of physics, with application to selected problems in physics.

4122 Mechanics of Periodic and Cyclic Motions (3) V Prereq: PHYS 2221. Continuation of PHYS 2221; emphasis on oscillatory systems.

4125, 4126 Thermodynamics and Statistical Mechanics (3,3) V Prereq: PHYS 2111 and credit or registration in MATH 2065; or CHEM 4581 and credit or registration in MATH 2065; or MATH 4037. PHYS 4125 is prerequisite for 4126. Basic physical concepts and methods appropriate for description of systems involving many particles; unified viewpoint of thermodynamics, statistical mechanics, and kinetic theory.

4132 Electromagnetism and Electromagnetic Waves (3) F Prereq: PHYS 2221. Continuation of PHYS 2231; emphasis on electromagnetic waves and radiation.

4135 Principles of Optics (3) V Prereq: PHYS 2111 and credit or registration in MATH 2065; or CHEM 4581 and credit or registration in MATH 2065; or MATH 4037. Fundamental principles of physical optics and optical instruments.

4141, 4142 Introduction to Quantum Mechanics (3,3) F,S Prereq: PHYS 2111 and credit or registration in MATH 2065; or CHEM 4581 and credit or registration in MATH 2065; or MATH 4037. PHYS 4141 is prerequisite for 4142. Elementary principles of quantum mechanics.

4198 Advanced Modern Physics Laboratory (3) S Prereq: PHYS 2209 or 4055 or 4141. 1 hr. lecture; 6 hrs. lab/computations. Electricity and magnetism, optics, and atomic, nuclear, and solid state physics.

4201, 4202 Survey of Contemporary Physics (3,3) F,S Prereq: PHYS 4142 or equivalent. Major areas of current research in physics: relativity, atomic physics, solid state physics, nuclear physics, elementary particles, astrophysics.

4251 Atomic Physics (3) V Prereq: PHYS 2221 and 4142 and credit or registration in 4132. Modern theory of atomic structure, radiations, and processes.
4261 Introduction to Solid-State Physics (3) V Prereq: PHYS 2209 or 4055 or 4141 or CHEM 4449. Properties of the crystalline state and the free-electron; band theories of metals, insulators, and semiconductors.

4271 Nuclear Physics (3) V Prereq: PHYS 2209 or 4055 or 4141. Nuclear properties, abundance and stability of nuclei, nuclear instrumentation, particle accelerators and detectors, and nuclear reactions.

439 Research in Experimental Physics (3) F Prereq: PHYS 4198 or consent of instructor and department chairman. Individual research project conducted and reported under supervision of individually selected adviser.

4991 Special Problems in Physics (1-3) Prereq: a thorough knowledge of the fundamentals of physics and mathematics, a demonstrated ability in science, and consent of instructor and department chairman. May be repeated for credit for a maximum of 6 sem. hrs. Individual reading and theoretical and/or experimental work on advanced problems in physics.

6111 Mathematical Physics for Teachers (3) Su only-V Prereq: PHYS 2002 or 2102. Not for degree credit for physics majors. Mathematical structure of physics.

6121 Classical Physics for Teachers (3) Su only-V Prereq: PHYS 2002 or 2102. For high school and junior college teachers; part of the M.N.S. degree program. Application of conservation principles to development of classical physics.

6141 Quantum Physics of Atoms, Molecules, Solids, and Nuclei for Teachers (3) Su only-V Prereq: PHYS 2002 or 2102. For high school and junior college teachers; part of the M.N.S. degree program. Origins of quantum theory; application to atoms, molecules, solids, and nuclei.

6191 Research Participation for Teachers (3) Su only-V Prereq: PHYS 2002 or 2102. May be taken 3 times for credit.

6198 Laboratory Methods for Teachers (3) Su only-V Prereq: PHYS 2002 or 2102. 1 hr. lecture; 6 hrs. lab. For high school and junior college teachers; part of the M.N.S. degree program. May be taken 3 times for credit. Analysis of laboratory experiments in current high school physics curricula; selected experiments in modern physics.

699 Seminar in Current Developments in Physics Curriculum Materials (1-3) Su only-V Prereq: PHYS 2002 or 2102. For high school and junior college teachers; part of the M.N.S. degree program. May be repeated for credit for a maximum of 6 sem. hrs.

7211, 7212 Mathematical Methods of Theoretical Physics (3, 3) F,S Prereq: PHYS 4112 or equivalent. PHYS 7211 is prerequisite for 7212. Advanced topics in mathematical methods of theoretical physics; mathematical foundations of quantum mechanics.

7221 Classical Mechanics (3) Su Study of particle mechanics and rigid body mechanics using the methods of Lagrange's equations, Hamilton's equations, canonical transformations, and Hamilton-Jacobi theory.

7223 Mechanics of Deformable Bodies (3) V Mechanics of incompressible and Newtonian viscous fluids; elasticity of solids.

7225 Statistical Mechanics (3) Su Principles of classical and quantum statistics, with application to special problems.

7231, 7232 Classical Electrodynamics (3, 3) F,S PHYS 7231 is prerequisite for 7232. Problems in electrostatics and magnetostatics; Maxwell's equations, electromagnetic waves, wave guides, and antennas; relativistic electrodynamics and radiation from moving charges.

7235 Special Relativity (3) V Postulates of special relativity, relativistic mechanics, electrodynamics; radiation, radiation reaction, and general classical theory of fields.

7236 General Relativity (3) V General tensor analysis; postulates of general relativity, field equations, equations of motion, interior and exterior Schwarzschild solutions; cosmology.

7241, 7242 Quantum Mechanics (3, 3) F,S Prereq: PHYS 4142 or equivalent. PHYS 7241 is prerequisite for 7242. Basic concepts of nonrelativistic quantum mechanics, operators and matrices, intrinsic and orbital angular momenta, perturbation theory, atomic structure, second quantization, and scattering theory.

7260 Low-Temperature Physics (3) V Properties of matter at temperatures near absolute zero; methods of producing low temperatures; superfluidity of liquid helium, superconductivity, magnetic effects, and adiabatic demagnetization.

7281 High Energy Particle Physics and Cosmic Rays (3) V Prereq: PHYS 4271. Experiments in high energy particle physics and cosmic rays; theory of electromagnetic interactions, experimental methods, interactions of high energy particles, galactic fields, and solar and galactic cosmic rays.

7282 Cosmic Rays and Meson Physics (3) V

7343 Advanced Quantum Mechanics (3) V Prereq: PHYS 7242. The Lorentz group, relativistic wave equations, introduction to quantum field theory.

7363, 7364 Theory of Solids (3, 3) V Prereq: PHYS 7242. PHYS 7363 is prerequisite for 7364. Application of quantum mechanics to solids; lattice vibrations, crystal field theory, energy bands, transport properties, ferromagnetism, and superconductivity.

7373, 7374 Nuclear Physics (3, 3) V Prereq: PHYS 4271 and 7241. PHYS 7373 is prerequisite for 7374. Applications of quantum mechanics to the two-nucleon system, to a system of many nucleons, and to nuclear reactions, with comparisons between theory and experimental results.

7745 Advanced Quantum Theory of Particles and Fields (3) V May be taken 3 times for credit.

7753 Atomic Scattering (3) V May be taken twice for credit.

7783 Topics in Astrophysics (3) V May be taken twice for credit.

7857 Seminar in Scattering Theory (1) Pass-fail grading. May be repeated for credit.

7867 Seminar in Experimental Solid State Physics (1) Pass-fail grading. May be repeated for credit.


7895 Selected Topics in Advanced Physics (3) V Pass-fail grading. May be repeated for credit.

7896 Current Developments (3) V Pass-fail grading. May be repeated for credit.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.
PLANT PATHOLOGY (PLPA)

3900 Undergraduate Research in Plant Pathology (1-3) V Prereq: PLPA 4000 or equivalent and consent of instructor. May not be repeated for credit. Research experience for students contemplating graduate study in plant pathology.

4000 General Plant Pathology (3) F,S Prereq: BOTY 1001 and 1002; or equivalents. 2 hrs. lecture; 3 hrs. lab. Nature and cause of disease in plants; relation of environment and host-parasite interactions to development of disease symptoms caused by plant pathogenic fungi, bacteria, viruses, mycoplasmas, and nematodes; abiotic causes of disease; concepts and methods of disease control using examples of diseases affecting Louisiana crops and ornamentals.

4001 Plant Disease Management and Control (3) F Prereq: PLPA 4000 and either CHEM 2060 or 2261. 2 hrs. lecture; 2 hrs. demonstration/lab. Plant disease management and control using cultural practices, disease resistance, biological control, legislation, therapy, pesticides; identity, properties, chemistry, mode of action, toxicity, and application of fungicides, bactericides, and nematicides; evaluation of chemicals for plant disease control.

4011 Forest Pathology (3) F 2 hrs. lecture; 2 hrs. lab. Major forest-plant diseases and biological deterioration of forest products; nature, etiology, diagnosis, epiphytology, and control measures.

4012 Diseases of Fruit, Ornamental, and Vegetable Crops (3) F-O Prereq: PLPA 4000. 2 hrs. lecture; 3 hrs. lab. Diseases affecting fruit, ornamental, and vegetable crops; their identification, economic importance, and control.

4013 Diseases of Cereal, Forage, and Sugar Crops (3) S-E Prereq: PLPA 4000. 2 hrs. lecture; 3 hrs. lab. Diseases affecting cereal, forage, and sugar crops; their identification, economic importance, and control.

4020 Phytonematology (4) S Prereq: PLPA 4000. 2 hrs. lecture; 4 hrs. lab. Taxonomy, identification, and control of plant parasitic nematodes.

4054 Introductory Mycology (4) 3 hrs. lecture; 3 hrs. lab. Same as BOTY 4054. Field service fee. Developmental morphology, taxonomy, and adaptive strategies of fungi; interactions of fungi with plants and animals.

7002 Methods in Plant Pathology (3) S-O Prereq: PLPA 4000 or equivalent. 1 hr. lecture; 4 hrs. lab. Techniques and instrumentation used in research on diseases caused by fungi, bacteria, and viruses.

7003 Disease Diagnosis and Control Practices (3) Su only Prereq: consent of instructor. 3 hrs. lecture; 6 hrs. lab. Primarily for Ph.D. students majoring or minorin in plant pathology or M.S. students majoring in plant pathology. Practical experience in the diagnosis and control of plant diseases utilizing specimens submitted to the LSU Plant Disease Clinic.

7020 Ecology and Control of Plant Nematodes (3) F-O Prereq: PLPA 4000 and 4020; or equivalents. 2 hrs. lecture; 2 hrs. lab. Ecology and economic control of plant nematodes attacking crop plants of greatest importance; practical control measures in Louisiana crop, garden, and turf plants.

7032 Advanced Mycology: Ascomycetes and Deuteromycetes (4) S-O Prereq: PLPA 4054 or equivalent. 3 hrs. lecture; 3 hrs. lab. Also offered as BOTY 7032. Taxonomy, biology and ecology of ascomycetes and deuteromycetes; collection, isolation, and identification of fungi.

7040 Plant Virology (4) F-E Prereq: PLPA 4000 and CPWS 7063; or equivalents. 2 hrs. lecture; 4 hrs. lab. Viruses as causal agents of plant diseases; biological, chemical, and physiological properties of plant viruses; methods of transmission; host-virus and vector-virus relationship.

7051 Advanced Topics in Plant Pathology (1-4) V Prereq: consent of instructor. May be repeated for credit for a maximum of 8 sem. hrs. Topics not covered in other courses.

7052 Seminar (1) S May be taken 3 times for credit for each graduate degree. Topics announced prior to registration.

7056 Advanced Mycology: Lower Fungi (4) Prereq: BOTY 1001 and 1002; or equivalents. 3 hrs. lecture; 3 hrs. lab. Same as BOTY 7056. Taxonomy, biology, and ecology of flagellated fungi and zygomycetes; ultrastructural morphology, genetics, and pathogenicity; collection, isolation, and identification of fungi from a variety of substrates and habitats.

7080 Host-Parasite Interaction and Disease Resistance (3) S-O Prereq: PLPA 4000 and CPWS 7063; or equivalents. 2 hrs. lecture; 2 hrs. lab. Genetics, physiology, and biochemistry of disease development and disease resistance in plants; mechanisms of pathogenicity and infectivity, tumorigenesis, metabolic consequences of infection, nature of disease resistance, and parasitism.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Special Research Problems (1-5) Prereq: consent of instructor. May be repeated for credit for a maximum of 9 sem. hrs. Pass-fail grading. Faculty-supervised, independent research other than thesis or dissertation.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

POLITICAL SCIENCE (POLI)

1001 Fundamental Issues of Politics (3) F,S,Su Central questions at issue in politics; their significance.

1050 Campaigns and Elections (3) V Role and significance of campaigns and elections, using current elections as case studies; campaign strategies, finances, and media techniques; voter participation and characteristics.


2051 American Government (3) F,S,Su Required of all undergraduate majors. An honors course, POLI 2052, is also available. Principles, structures, processes, and functions; emphasis on national government.

2052 HONORS: American Government (3) V Same as POLI 2051, with special honors emphasis for qualified students.

2053 Introduction to Comparative Politics (3) F,S,Su Concepts, methods, and problems of comparative political analysis; modern and developing political systems, with emphasis on theoretical and substantive concerns.

2056 Government of Louisiana (3) F,S,Su Prereq: POLI 2051 or equivalent. State and local government and politics in Louisiana.
2057 Introduction to International Politics (3) F,S Basic principles, problems, and concepts of international politics; evolution and nature of the nation-state; concepts of sovereignty, power, and national interest; patterns of conflict and cooperation among nations; foreign policies of the major powers.

2060 Introduction to Political Theory (3) F,S Basic concepts and principles of analysis of normative and empirical political thought.

2070 Public Policy Making: An Introduction (3) S Sequential process by which policy is made from problem identification through policy formulation, adoption, implementation, and evaluation of impact; policy process as applied in such substantive areas as civil rights, welfare policy, urban affairs, taxation, and government spending.

3000 HONORS: Thesis (3) Culmination of political science honors program; details available from department.

3060 Politics of the Future (3) F,S Probable political orders of the future; effects of resource availability, scientific and technological advancement, and changing human values on mankind’s ability to govern; goals of developed and underdeveloped countries; political freedom versus economic security.

3100 Criminal and Related Law (3) See CJ 3100.

3897 HONORS: Readings Course (1-3,1-3) Same as POLI 4996, 4997, with special honors emphasis for qualified students.

3901 Undergraduate Internship in Political Science (1-6) F,S Open to undergraduate students nominated by the Department of Political Science. May be counted toward the total number of hours required for a major in political science but not toward fulfilling field requirements. A program of study, research, and work in governmental or private agencies concerned with public policy.

3909 Contemporary Political Issues (3) V For undergraduate political science or other social sciences majors having a 2.70 overall average; also open to well-qualified students in other fields, by consent of department. May be repeated for credit when topics vary. Course content depends on interests of instructor and class; topic announced.

4010 Principles and Practices of Public Administration (3) F Prereq: POLI 2051. Structure, organization, and administrative processes of public bureaucracies; political role of agencies as they make and carry out public policies; characteristics of bureaucratic policy making.

4011 Bureaucracy, Politics, and Public Policy (3) S Prereq: POLI 2051 or 4010. Interrelationships between bureaucracy and politics in formulation of public policy and its execution; forces and forms affecting these relationships and their subsequent consequences.

4012 Public Personnel Administration (3) V Prereq: POLI 2051. Development, administration, and politics of the civil service in the United States; the merit system; collective bargaining in the public sector and constitutional rights of public employees; comparisons with European civil services.

4013 Ethics and Public Policy (3) V Ethical questions confronting the formulation and implementation of public policy from the perspectives of the practitioner and the citizen; political corruption and citizen control and compliance; ethical implications of current policy in selected areas, such as civil rights, health care, education, energy, and national defense.


4016 Local Government (3) V Prereq: POLI 2051 or equivalent. Form, structure, function, and problems of county, municipal, and district governments in the U.S.; emphasis on practical aspects.

4018 Urban Politics and Policy Making (3) F Prereq: POLI 2051 or equivalent. Political problems and forces in urban governance: the political environment of American cities, private sources of power, political machines and reform, crime and violence, service delivery, metropolitan fragmentation, and the consequences of growth and decay; development of national and state public policy approaches to complex urban problems.

4019 Intergovernmental Relations and Policy Making (3) V Relationships among national, state, and local governments; grants-in-aid, revenue sharing, governmental lobbying, intergovernmental cooperation and competition; evolution of constitutional federalism; the expanding role of the national government.

4020 American Constitutional Law (3) F Prereq: POLI 2051 or equivalent. Law of the Constitution and place of the Supreme Court in the American political system; separation of powers, judicial review, federalism, and federal powers.

4021 The American Constitution and Civil Liberties (3) S Prereq: POLI 2051 or equivalent. Political relevance of major federal constitutional limitations; property rights; First Amendment freedoms; rights of criminal defendants and ethnic minorities.

4022 Jurisprudence (3) S Prereq: POLI 2051 or equivalent. Legal philosophies of natural law, positivism, idealism, sociological jurisprudence, and legal realism; relationships of law, morals, and political order.

4023 Judicial Politics (3) F Prereq: POLI 2051. Political role of U.S. state and federal courts from a comparative perspective; organization, staffing, financing; judicial policy making; public perception of the judicial process.

4030 Political Attitudes and Public Opinion (3) Distribution of beliefs and attitudes among the mass public; emphasis on attitude formation and change.

4031 Political Parties in the United States (3) F Structure and function of political parties at local, state, and national levels; voting studies of presidential elections.

4032 Pressure Groups and Public Policy (3) V Interest group politics; effect of voluntary organizations on political behavior.

4033 Religion in Politics (3) V Comparative analysis of religion as a political force; evaluation of religion as a shaper of political culture, a force for stability and change, and a determinant of political behavior and public policy.

4034 Political Participation (3) Voting behavior, other conventional participation, and political protest and violence; link between political behavior and public policy.

4035 The Legislative Process (3) F Prereq: POLI 2051 or equivalent. Legislative politics, particularly in the U.S. Congress; role of party, constituency, and legislative institutions as they affect legislative behavior and public policy; place of Congress in the larger American political system.
4036 The American Presidency (3) V Prereq: POLI 2051 or equivalent. Place of the presidency in the American political system; emphasis on process of presidential selection, evolving role of the president in the system, politics of the executive apparatus of the presidency, and presidential interaction with other political institutions and actors.

4037 Political Decision Making (3) V Decision-making processes at the subnational, national, and international levels; study and evaluation of decisions; role of situation and context.

4041 International Law (3) V Prereq: POLI 2057 or equivalent. Development and theoretical foundations of international law; law of peace, war, and neutrality; treaty law; recognition, war crimes, law enforcement, state responsibility, and diplomatic immunities under the United Nations.


4043 American Foreign Policy (3) F "National interest" as guiding consideration in development of American foreign policy from the beginning to the present; importance of the constitutional framework; presidential and congressional leadership; pressure groups and public opinion; changing world environment and American response, particularly in recent years.

4044 The Contemporary International System (3) V Prereq: POLI 2057 or equivalent. Significant developments, problems, and emerging trends in the international system since World War II; classical and modern versions of the balance of power; bipolarity, multipolarity, and other elements of systems theory; concept of deterrence and game theory; decision-making theory; integration theory; conflict and conflict-resolution theory.

4045 American National Security (3) F Prereq: POLI 2057 or equivalent. National security and its role in the implementation of American foreign policy: national security issues such as the evolution of U.S. strategic doctrine, the national security establishment, NATO, counter-insurgency strategies, and nonmilitary components of security; crisis simulation exercise.

4060 British Government and Politics (3) F Political institutions, philosophy, and behavior of contemporary Great Britain; relationship between British politics and culture.

4061 French Government and Politics (3) S Political institutions, philosophy, and behavior of contemporary France; relationship between French politics and culture.

4062 Western European Governments and Politics (3) V Analysis of political institutions and culture; behavior of West Germany, Italy, Spain, the Low Countries, and Scandinavia; does not include Great Britain and France.

4064 Comparative Politics of Developing Areas (3) V Problems of development confronted by contemporary states and societies of the Third World; emphasis on role of ethnic pluralism, political parties, bureaucracies, and the military in promoting political development and social change.

4065 Latin American Governments and Politics (3) F Governmental and political processes of Latin America; their contributions to modern government.

4066 Inter-American Relations (3) S U.S.-Latin American relations; political, economic, and cultural relations among the Latin American states.

4067 The Politics of Asia (3) F Governments and politics of modern Asia, with a focus on China; contemporary nationalism, political development, revolution, and the impact of communism, democracy, and capitalism on Asian states.

4070 Russia and the Soviet Empire (3) F Contemporary Soviet political, social, and economic institutions and processes; Marxist-Leninist heritage, role of the Communist Party in Soviet politics; Soviet policy process and its outputs; rights of the Soviet citizen.

4071 Soviet Foreign Policy (3) S Foreign policy of the Soviet Union in terms of communist ideology, traditional Russian national interest, and Russia's interests as a world power.

4072 Government and Politics of East Central Europe (3) V Political systems of East Europe under Communist regimes; comparison of their common problems and methods; role of these party-states within the Communist system.

4073 Contemporary Communist Movements (3) V Ideologies and operations of modern major socialist and communist movements; variation from traditional Marxist themes and the established Soviet model, particularly in left-wing movements of the non-Western world; polycentrism, Maoism, Castroism, African Socialism, and national-liberation movements.

4077 The Middle East (3) S Governments and politics; modern Arab nationalism, major political trends since independence, the Arab-Israeli dispute, intra-Arab relations, and the role of the region in global affairs.

4080 American Political Thought (3) V Development of the American liberal-democratic tradition, and dissent to that tradition.

4081 History of Political Theory from Plato to Aquinas (3) F Prereq: POLI 2051 or equivalent. Ancient and medieval political thought.

4082 History of Political Theory from Machiavelli to Burke (3) S Prereq: POLI 2051 or equivalent. Early modern European political thought.

4095 Contemporary Political Theory (3) F Political thought of the 19th century; liberalism, idealism, socialism, anarchism, and Marxism.

4096 Contemporary Political Theory (3) S Political thought of the 20th century; liberalism, modern totalitarianism, conservatism, Freudianism, existentialism, and democracy.

4996, 4997 Readings Course (1-3,1-3) Prereq: consent of department. Honors courses, POLI 3896 and 3897, are also available. For junior, senior, and graduate students in the social sciences with a 3.00 average. Individual reading in a specified field of government.

7010 Decision Models for Public Administration (3) See QBA 7010.

7900 Seminar in American Politics (3) V May be taken twice for credit if content varies.

7901 Graduate Internship in Political Science (1-6) F, S Open only to graduate students nominated by the Department of Political Science and accepted by a recognized internship program. May be counted toward total number of hours required in the M.A. program but not toward field requirements. Study, research, and work in governmental or private agencies concerned with public policy.

7910 Seminar in Public Administration (3) F May be taken twice for credit if content varies.

7912 Seminar in Public Personnel Administration (3)

7915 Seminar in State and Local Government (3) V May be taken twice for credit if content varies.
7920 Seminar in Public Law (3) V May be taken twice for credit if content varies.
7931 Seminar in Political Parties (3) V May be taken twice for credit if content varies.
7935 Seminar in Legislative Politics (3) V May be taken twice for credit if content varies.
7940 Seminar in International Politics (3) V May be taken twice for credit if content varies.
7960 Seminar in Comparative Government (3) V May be taken twice for credit if content varies.
7961 Approaches to the Study of Politics (3) F
7962 Seminar in Research Design and Quantitative Techniques (3) S
7965 Seminar in Latin-American Government and Politics (3) V May be taken twice for credit if content varies.

PORTUGUESE (PORT)

1001 Elementary Portuguese (5) Oral approach, with a minimum of formal grammar; emphasis on conversation, supplemented by aural-oral drill in the language laboratory.
2051 Intermediate Portuguese (5) Oral approach, supplemented by aural-oral drill in the language laboratory; reading material of moderate difficulty.
2053 Intermediate Portuguese (3) Continued oral practice, reading, vocabulary building, and review of the basic principles of grammar.
2055 Readings in Portuguese and Brazilian Literature (3) Readings in contemporary Luso-Brazilian prose; emphasis on comprehension and oral and written expression in the language.
4001, 4002 Portuguese Language and Literature (3,3) 3 hrs. lecture; 2 hrs. lab. For advanced students who have attained competence in at least one other romance language. Phone- mics, morphemics, syntax, and lexicology of Portuguese; readings from Luso-Brazilian writers.
4021 Portuguese Literature of the 19th and 20th Centuries (3) Portuguese literature from the romantic period to the present.
4022 Brazilian Literature of the 19th and 20th Centuries (3) Brazilian literature from the romantic period to the present.
4915 Independent Research in Luso-Brazilian Literature (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings directed by a faculty member.
4917 Independent Research in Luso-Brazilian Linguistics (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings in Luso-Brazilian linguistics.
7973 Brazilian Prose Fiction (3)

POULTRY SCIENCE (PLSC)

1049 Poultry Production (3) F,S 2 hrs. lecture; 2 hrs. lab. Fundamental principles and practices of poultry production under Louisiana conditions.
2040 Techniques of Judging and Evaluating Poultry and Poultry Products (2) F,S 4 hrs. lab. May be taken twice for credit when content varies. Basic principles and techniques involved in evaluation of poultry and poultry products.
3001 Apprenticeship in the Poultry Industry (3-6) V Prereq: junior standing with an overall gpa of 2.50 on all work taken at LSU; consent of department head and industry cooperators. May be repeated for credit for a maximum of 12 sem. hrs. Pass-fail grading. Supervised work in egg processing, broiler processing, feed manufacturing, hatchery management, or flock supervision for a period of not less than two months.
3900 Poultry Research (1-3) F,S,Su Prereq: consent of department. May be repeated for credit for a maximum of 6 sem. hrs. Pass-fail grading. Feeding, breeding, management, and marketing problems.
4004 Market Poultry Products (3) S 2 hrs. lecture; 2 hrs. lab. Preparation of eggs and poultry for market; methods of grading, packing, processing, and storing eggs and poultry.
4031 Incubation and Hatchery Management (2) F-O Prereq: 6 sem. hrs. of biological science or equivalent. 1 hr. lecture; 2 hrs. lab. Chik development and embryology; incubation principles and practices; hatchery equipment and design; hatchery management.
4040 Quality Assurance in the Food Industry (4) See DARY 4040.
4051 Poultry Biology (3) F 2 hrs. lecture; 2 hrs. lab. Structure, conformation, and selection of the fowl; special consideration to egg formation and oviposition; other physiological factors of economic importance.
4052 Poultry Management (3) S-E Prereq: 6 sem. hrs. of biological science or equivalent. 2 hrs. lecture; 2 hrs. lab. Growth and development of the U.S. commercial egg and broiler industries; application of principles of nutrition, genetics, housing, management, and marketing; various types of integrated operations and contract production.
7003 Vitamins in Nutrition (2) F Prereq: credit or registration in BCH 4084. History, chemistry, function, and evaluation of nutritional status, requirements for various species, assay methods, and interrelationships of vitamins.
7008 Advanced Poultry Physiology (3) S Prereq: consent of instructor.
7016 Advanced Poultry Nutrition (3) S Prereq: DARY 4010 or equivalent. Applications of current nutritional concepts to the scientific feeding of poultry.
7090 Advanced Laboratory Techniques in Animal Research (4) Su-E Prereq: BCH 4084 or equivalent. 2 hrs. lecture; 4 hrs. lab. Chemical and physicochemical methods and techniques; modern laboratory materials and equipment.

7091 Poultry Seminar (1) F,S May be taken 4 times for credit during period of graduate study. Graduate students in poultry science must participate in a report and discussion group on current literature in their fields.

7094 Seminar in Nutrition (1) S Same as ANSC 7094, DARY 7094, FDSC 7094, HEC 7094. May be taken twice for credit.

7095 Seminar in Applied Genetics (1) F,S Prereq: consent of instructor. May be taken 3 times for credit. Special topics in advanced breeding and genetics.

7900 Advanced Poultry Research (1-5) F,S,Su Prereq: consent of department. May be repeated for credit for a maximum of 9 sem. hrs. Research in poultry nutrition, breeding, production, and market products.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading. 9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

PSYCHOLOGY (PSYC)

2000 Introduction to Psychology (3) An honors course, PSYC 2001, is also available. Understanding, prediction, and control of human behavior.

2001 HONORS: Introduction to Psychology (3) Same as PSYC 2000, with special honors emphasis for qualified students.

2004 Psychology of Adjustment (3) Adjustment mechanisms in normal adults; broad areas of abnormal behavior and major personality theories.

2011 General Statistics (3) Prereq: eligibility for MATH 1021. 3 hrs. lecture/recitation. Machine computation and elementary theory relating to basic statistical techniques; normal distribution, descriptive statistics, statistical inference, product moment correlation, simple rank order correlation, t test, and simple analysis of variance.

2017 Elementary Experimental Psychology (3) Prereq: PSYC 2011 or equivalent. 2 hrs. lecture; 2 hrs. lab. Senior college standing required. Classical topics in general experimental psychology; sensation, perception, learning, and motivation.

2040 Social Psychology (3) Prereq: 3 sem. hrs. of psychology or sociology. Cultural forces affecting attitudes, social learning, perception, and communication of individuals and groups.

2060 Educational Psychology (3) Principles of learning, motivation, development, and evaluation as related to the educative process.

2076 Child Psychology (3) Prereq: PSYC 2000 or 2060 or equivalent. Psychological and social development of the child.

2078 Adolescent Psychology (3) Prereq: PSYC 2000 or 2060 or equivalent. Adolescent behavior considered in terms of psychological, social, and physical development.

2676 Field Experience in Developmental Psychology (1) Prereq: concurrent registration in a PSYC 2076 or 2078 section designated as a "practicum section." 2 hrs. per week. Supervised practicum experience in child or adolescent psychology in an approved community setting synthesized with material covered in the concurrent lecture course.

2999 Undergraduate Practicum in Psychology (1-3) Prereq: PSYC 2000 or 2060, and consent of instructor. May be repeated for credit for a maximum of 3 sem. hrs. Student responsible for registering with a faculty member. Individually supervised experience in psychological laboratories and community agencies.

3018 Advanced Experimental Psychology (3) Prereq: PSYC 2017 or equivalent. 2 hrs. lecture; 2 hrs. lab. Supervised research in general experimental psychology; selection, design, execution, analysis, and reporting of the psychological experiment.

3020 Psychological Tests and Measurements (3) Prereq: a first course in statistics. Test construction, standardization, validation; intelligence, clerical, mechanical, spatial aptitude tests; interest and personality tests; test batteries.

3033 Evolutionary Psychology (3) Prereq: ANTH 1001 or PSYC 2000 or SOCI 2001; and one year of a biological science. Evolutionary, ecological, and genetic factors in the explanation of human behavior.

3050 Introduction to Personnel and Industrial Psychology (3) Organizational psychology, leadership, job satisfaction, motivation; human relations psychology; human engineering psychology; personnel psychology; industrial, military, and governmental selection, testing, and interviewing; consumer psychology.

3081 Personality (3) Prereq: PSYC 2000 or 2060 or equivalent. Determinants and dynamics of personality; theory and research.

3082 Introduction to Abnormal Psychology (3) Prereq: PSYC 2000 or 2060 or equivalent. Abnormal personality and behavior disorders.


3140 Advanced Social Psychology (3) Prereq: PSYC 2040 or equivalent. Current theories of socialization; existing methodologies and interdisciplinary influences.

3201 Psychological Theories of Religion (3) See REL 3201.

4008 History of Modern Psychology (3) Prereq: 9 hrs. of psychology. Historical survey of psychology, with reference to schools of psychology.

4017 Intermediate Research Methods (3) See SOCI 4211.

4030 Psychology of Thinking and Decision Making (3) Prereq: PSYC 2000 or 2060. Experimental methods and research findings on human thinking, decision making, comprehension, choice behavior, and problem solving.

4031 Sensory and Perceptual Processes (3) Prereq: PSYC 2000 and 2017; or equivalents. Theories, data, and procedures in sensation and perception.

4032 Psychology of Learning (3) Behavior from the standpoint of learning; recent experimental literature in the learning area; major theories of learning.

4033 Psychology of Memory and Forgetting (3) Major theoretical concepts; review of experimental literature in the field of memory and forgetting.
4034 Physiological Psychology (3) Prereq: PSYC 2011 and either PSYC 2000 or 2060; or equivalents. Functioning of the nervous system with respect to sensation, perception, learning, and motivation.

4036 Comparative Psychology (3) Behavioral development across and within species; contributions, techniques, and objectives of behavioral scientists.

4038 Emotion and Motivation (3) Prereq: PSYC 2000 or equivalent. Experimental procedures, data, and theories in emotion and motivation; physiological relationships.

4070 Developmental Psychology (3) Theories of development, contemporary issues, and research findings at successive ages of human development; psychological changes throughout the life span.

4072 Developmental Psychology of Adulthood and Aging (3) Prereq: PSYC 2000 or 2060. Theories, contemporary issues, and research findings on the psychological changes occurring throughout adulthood and later life.

4111 Intermediate Statistics (3) Preparatory for graduate study in statistics and research design in psychology. Computation procedures and elementary theory in statistics; analysis of variance, correlation (product moment, partial, multiple, and other methods), and nonparametric statistics.

4160 Advanced Educational Psychology (3) Prereq: 6 hrs. of psychology or consent of instructor. Psychological theory and research as applied to the teaching-learning process.

4176 Advanced Child Psychology (3) Prereq: 6 hrs. of psychology or consent of instructor. Psychological theories of child development, child behavior, and research methodology.

4178 Advanced Adolescent Psychology (3) Prereq: 6 hrs. of psychology or consent of instructor. Psychological theories of adolescent behavior and problems.

4999 Independent Reading and Research in Psychology (1-6) May be repeated for credit for a maximum of 6 sem. hrs. Open to seniors and graduate students. Student responsible for registering with a faculty member and selecting area of reading or research.

7000 Proseminar in General Psychology (1) Required of all graduate psychology majors during each semester of full-time residence. Pass-fail grading. Central problems of various fields of psychology; critical evaluation of the research methodology employed.

7020 Measurement of Behavior (3) Techniques and theories of behavior measurement; problems of data collection.

7060 Professional School Psychology (3) Prereq: graduate standing in psychology or consent of instructor. Roles and functions of the school psychologist.

7111 Advanced Statistics (3) Machine calculation, coding, measures of centrality and variation, regression, correlation, prediction, probability, statistical inference, chi-square, t and F distributions, simple analysis of variance, multiple regression, reliability, and validity of measurements.

7117 Methodology and Research Design (3) Prereq: PSYC 4111 or 7111. Scientific approach to psychological questions, research, design, and methodology; logic and philosophy underlying psychological theory and research; social psychology of the psychological experiment; experimental and quasi-experimental designs; problems in observation and measurement of behavioral variables; methodological and philosophical considerations in analysis of data.

7125 Psychological Assessment—I (3) Prereq: consent of instructor. Clinical assessment techniques including individual tests of intelligence, mental status examination, interviewing, and behavioral assessment; procedures for both children and adults.

7165 Psychoeducational Assessment (3) Prereq: graduate standing in psychology or consent of instructor. Instruction and practicum in administration and interpretation of individually-administered intellectual assessment measures and diagnostic achievement techniques.

7166 Nonbiased Assessment in the Schools (3) Prereq: PSYC 7165 or equivalent or consent of instructor. Methods of and problems in psychological assessment including theory and research on test bias; alternatives to standardized tests.

7171 Developmental Disorders and Psychopathology of Children (3) Theories, research, and contemporary issues related to normal and problem behaviors of children.

7185 Behavior Therapy (3) Modern treatment and assessment procedures based on learning theories; behavioral analysis and theoretical orientations as applied to a wide variety of clinical disorders.

7640, 7641 Practicum in Social-Industrial Psychology (1-6) Prereq: consent of instructor. May be repeated for credit; maximum of 9 sem. hrs. may be earned in this series. Supervised experience in social-industrial psychology.

7660 School Psychological Consultation (3) Prereq: graduate standing in psychology or consent of instructor. Instruction and practicum which provide psychological consultation on short-term behavior and academic problems for teachers and other school personnel.

7668, 7669 Practicum in School Psychology (1-6, 1-6) Prereq: admission to doctoral program in school psychology. Each course may be repeated for credit for a maximum of 6 sem. hrs. Pass-fail grading. Closely supervised experience in schools in which students perform psychoeducational assessments, consult with teachers, and function as members of multidisciplinary teams; cases include children with specific learning disabilities, behavior disorders, and mental retardation.

7670, 7671 Practicum in Developmental Psychology (1-6) Prereq: consent of instructor. May be repeated for credit; maximum of 9 sem. hrs. may be earned in this series. Supervised experience in developmental psychology.

7688, 7689 Practicum in Clinical Psychology (1-3, 1-3) Prereq: consent of instructor and enrollment in clinical psychology training program. A maximum of 18 sem. hrs. may be earned in this series; 12 sem. hrs. are required. Supervised experience in the application of clinical psychological assessment and intervention techniques with behaviorally disordered populations (adult, child, medical).

7925 Psychological Assessment—II (3) Prereq: PSYC 7125 or equivalent. Administration and interpretation of objective and projective tests of personality and psychopathology; neuropsychological assessment techniques.

7927 Psychotherapy and Behavior Change (3) Prereq: consent of instructor. Theoretical and empirical considerations relevant to psychoanalytic, humanistic, behavioral, and cognitive-behavioral approaches for treating disordered behavior.

7928 Advanced Techniques in Adult Clinical Psychology (3) Prereq: PSYC 7125, 7185, 7927, and 7982; or equivalents. Integration of common assessment methods and empirically supported treatment procedures for the major adult behavior disorders.
7936 Seminar in Psychopharmacology (3) Prereq: consent of instructor. Neurotransmitters, drugs affecting behavior, addiction, and pharmacotherapy of behavior disorders.

7937 Seminar in Behavioral Neurology (3) Prereq: consent of instructor. Neuroanatomy of central nervous system and behavioral assessment techniques; neuropathology and diagnostic criteria.

7938, 7939 Seminar in Experimental Psychology (3,3) Each course may be taken twice for credit when topics vary.

7948, 7949 Current Problems in Social Psychology (3,3) Prereq: consent of instructor. Each course may be taken twice for credit when topics vary. Research and methodological issues.

7958, 7959 Current Problems in Industrial Psychology (3,3) Prereq: consent of instructor. Each course may be taken twice for credit when topics vary. Research and methodological issues.

7968 Current Problems in School Psychology (3) Prereq: graduate standing in school psychology program or consent of instructor. Research and methodological issues in school psychology; topics vary.

7969 Internship in School Psychology (1-6) Prereq: satisfactory completion of the general and language examinations and faculty approval. May be repeated for credit for a maximum of 12 sem. hrs. One full academic year of supervised internship that is no less than 1200 hours, half of which must be in a school setting; internship requirement may be fulfilled by completing one full academic year or two years of one-half time internship experience; at least one hour per week is devoted to direct supervision of each intern. Pass-fail grading.

7971 Advanced Techniques in Clinical Child Psychology (3) Prereq: PSYC7125, 7171, and 7925; or equivalents. Theory, methods, and principles of assessment and intervention in childhood psychopathology.


7978, 7979 Current Problems in Developmental Psychology (3,3) Prereq: consent of instructor. Each course may be taken twice for credit when topics vary. Research and methodological issues.

7982 Advanced Psychopathology (3) Prereq: PSYC 3082 or equivalent. Theories of psychopathology, specific etiological hypotheses, and pertinent research evidence.

7983 Biological Variables in Psychopathology (3) Prereq: PSYC 4034 or equivalent. Biological variables in major mental disorders; psychological variables in physical disorders.

7984 Advanced Techniques in Behavioral Medicine (3) Prereq: PSYC 7185. Current assessment and treatment procedures used by behavioral clinicians in medical settings; issues in medical consultation and liaison.

7985 Current Problems in Personality Psychology (3) Prereq: consent of instructor. May be taken twice for credit when topics vary. Research and methodological issues.

7988, 7989 Current Problems in Clinical Psychology (3,3) Prereq: consent of instructor. Each course may be taken twice for credit when topics vary. Research and methodological issues.

7990 Teaching of Psychology (3) Required of graduate teaching assistants. Seminar and supervised teaching experience; philosophy, theory, and practice in higher education with application to undergraduate instruction in psychology.

7997 Clinical Psychology Internship (3 or 6) Prereq: completion of course work and general examination. Open only to graduate students nominated by the Department of Psychology and accepted by an approved internship program. May be repeated for credit for a maximum of 15 sem. hrs. Supervised evaluation and treatment of individuals manifesting mental disorders.

7999 Professional Considerations in Psychology (3) Required of all doctoral candidates. Professional ethics, practice, and responsibility.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8939 to 8999 Independent Research (1-6 each) Prereq: consent of instructor. Each course may be repeated for credit; maximum of 15 sem. hrs. in this series allowed toward doctoral requirements. Pass-fail grading. Depending on the area of independent research, students register for research in:

8939 Experimental Psychology
8949 Social Psychology
8959 Industrial Psychology
8979 Developmental Psychology
8989 Clinical Psychology
8999 Personality Psychology

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

QUANTITATIVE BUSINESS ANALYSIS (QBA)

2000 Statistical Methods and Models— I (3) Prereq: MATH 1431. Working knowledge of computer programming, and concurrent enrollment in MATH 1435. Statistical description and inference; data distributions, descriptive measures, index numbers, time series analysis; review and extension of probability theory; probability distributions; standard distributions, including normal and binomial; sampling distributions.

2001 Introduction to Management Science (3) Prereq: MATH 1435 and QBA 2000. Methods of operations research; decision theory, elementary classical optimization techniques, linear programming, critical path models, and other relevant topics.

2100 Introduction to Management Information Systems (3) Prereq: ACCT 2001 or equivalent. Integrated treatment of management of information, computers, and systems; utilization of management information systems to improve managerial decision making.

3000 Statistical Methods and Models—II (3) Prereq: MATH 1435 and QBA 2000. Continuation of QBA 2000; statistical inference; additional applications of sampling distribution; the chi-square, student's t, and F distributions; estimation; hypothesis testing; survey sampling; linear regression; simple correlation; analysis of variance; nonparametric tests.

3002 Conceptual Foundations for Operations Research (3) Prereq: MATH 1021 or equivalent. Not open to undergraduate students in the College of Business Administration. Foundations for work in operations research; fundamentals
of analysis, systems of linear equations, selected topics from matrix algebra.

3070 Independent Reading and Research in Statistics and Operations Research (1-2) Prereq: senior standing and consent of instructor. May be repeated for credit for a maximum of 4 sem. hrs. Student is responsible for registering with a faculty member and selecting an area of reading and/or research.

3115 Operations and Information Systems (3) Prereq: ACCT 2001 and QBA 2001. Also offered as MGT 3115. Systems analysis, design, implementation, and dynamics; management information systems; fundamental characteristics and problems associated with operations of any organization, such as facilities location, aggregate output planning, inventory control, scheduling, and quality control.

4000 Introduction to Statistical Theory (3) Prereq: proficiency in basic statistical methods and MATH 1552; or consent of instructor. Concepts of probability distribution and statistical inference; theoretical foundations for estimating and testing hypotheses about means, proportions, and variances; chi-square and F tests.

4010 Basic Forecasting Models (3) Prereq: QBA 3000 or equivalent. Single-equation multiple regression and time series modeling procedures for business and economic forecasting; problems of using time series data in regression models; time series modeling, including classical decomposition procedures and exponential smoothing; extensive use of computer programs for regression and time series modeling and forecasting.

4011 Sample Survey Methods (3) Prereq: QBA 3000 or equivalent. Methodology of designing sampling systems; alternative sample designs; problems of bias; techniques of inference from alternative designs; criteria for selecting optimal sampling plans; methods and applications of sample surveys.

4012 Applied Nonparametric Statistics (3) Prereq: QBA 3000 or equivalent. Applied nonparametric statistics including techniques for one-sample problems, comparison of two treatments, paired comparisons, randomized complete blocks, comparison of more than two treatments, tests of randomness and independence, and measures of correlation.

4013 Bayesian Probability and Statistical Methods (3) Prereq: QBA 3000 or equivalent. Decisions under uncertainty; formulation of subjective probability distributions; use of sampling information in decision making; introduction to Bayesian inference.


4021 Foundations of Mathematical Programming (3) Prereq: credit or registration in QBA 4020. Theoretical foundations of linear programming in single and multiple objectives; classical nonlinear optimization of unconstrained and constrained functions; Kuhn-Tucker conditions and quadratic programming.

4031 Applied Linear Models (3) Prereq: QBA 3000 or equivalent. Development of a unified approach to estimation and hypothesis testing in linear statistical models; emphasis on appropriate specification and interpretation of models and statistical hypothesis; use of available computer routines and interpretation of results; unbalanced analysis of variance models, linear regression models, and analysis of covariance models.

4167 Operations Planning and Control (3) Prereq: QBA 3115 or equivalent. Planning and control of operations in manufacturing and service organizations; aggregate planning, master scheduling, requirements planning, and activity control; emphasis on developing skills through case studies and computer models.

4168 Management and Operation of Inventory Systems (3) Prereq: QBA 3115. Management and operation of independent demand inventory systems; short-term demand forecasting, fixed-order size systems, fixed-order interval systems, single-period order systems, and inventory control systems.

5010 Statistical Methods for Public Administration (3) Prereq: college algebra. 2 hrs. lecture; 2 hrs. lab. Open only to students in the M.P.A. program. Descriptive measures for populations and samples; basic probability theory; distributions of discrete and continuous random variables; hypothesis testing and estimation for means, variances, and proportions; measures of association; regression analysis; index numbers; applications in public administration.

5014 Managerial Statistics (3) Prereq: QBA 3002 or equivalent, and knowledge of a programming language. Open only to students in the M.B.A. program. Statistical description and inference; data distributions, descriptive measures, index numbers, time series analysis; review and extension of probability theory; probability distributions; standard distributions, including normal, binomial, poisson, and hypergeometric; sampling distributions; estimation of means, proportions, and totals; applications in management.

7000 Statistical Theory (3) Prereq: QBA 4000 or equivalent; and consent of instructor. Continuation of QBA 4000; theoretical basis for topics in statistical inference including tests of hypotheses, experimental design, regression analysis, general linear models, nonparametric statistics, sequential tests of hypotheses, and complex sample designs.

7009 Simulation of Stochastic Processes (3) Prereq: fundamental knowledge of computer programming, statistics, and operations research; and consent of instructor. Simulation models, methodologies, and languages; development of complex models; validation of results; completion of several large-scale projects involving extensive use of digital computer required.

7010 Decision Models for Public Administration (3) Prereq: QBA 5010. 2 hrs. lecture; 2 hrs. lab. Open only to students in the M.P.A. program. Also offered as POLI 7010. Models for decision making under conditions of certainty, risk, and uncertainty; statistical decision making with and without sample information; linear programming using graphical and simplex methods; transportation and assignment problems; project management using PERT and CPM; forecasting models; cost benefit analysis; current topics in public administration.


7021 Sample Design and Analysis (3) Prereq: QBA 7024 or equivalent. Theoretical aspects of designing sampling systems; alternative sample designs; relative efficiency of sampling systems; problems of bias; techniques of estimation; criteria for selecting optimal sampling plans; emphasis on applications with theoretical foundations.

7022 Multivariate Data Analysis (3) Prereq: QBA 7024 or equivalent. Multivariate methods, including principal com-
ponents, canonical correlation, factor analysis, discriminant analysis, classification procedures.

7024 Advanced Statistical Analysis for Research—II (3) Prereq: proficiency in calculus, linear algebra, basic statistical methods, and computer programming. Methods of statistical inference; statistical estimation; testing hypotheses about single and multiple means and proportions; simple and multiple linear regression; design of simple random, stratified, and cluster samples; extensive use of statistical computer programs.

7025 Advanced Statistical Analysis for Research—III (3) Prereq: QBA 7024 or equivalent. Continuation of QBA 7024; advanced regression analysis; experimental design and analysis of variance; nonparametric methods; multivariate techniques; extensive use of statistical computer programs.

7027 Advanced Forecasting Models (3) Prereq: QBA 4010 or 7024 or equivalent background in regression analysis. Advanced topics in forecasting; time-series analysis; emphasis on stochastic parameter models and autocorrelated error structures; univariate autoregressive integrated moving average (ARIMA) models; multivariate models and transfer functions; extensive use of computer programs.

7070 Seminar in Advanced Business Problems (3) May be taken twice for credit when topics vary. Special topics in statistics and quantitative methods.

7101 Introduction to Operations Research Methods (3) Prereq: proficiency in basic statistical methods, calculus, linear algebra, and computer programming. Nature of operations research; general decision models, classical optimization, linear programming, duality and sensitivity analysis, parametric programming, multiple objective programming, network analysis, and simulation; computer used to solve large-scale problems; primary emphasis on applications of most widely used techniques.

7102 Survey of Operations Research—Deterministic Models (3) Prereq: QBA 7101. Integer and mixed-integer programming, extensions of classical optimization, quadratic programming, separable programming, and dynamic programming; applications of more advanced mathematical programming; techniques, with some theory.

7103 Survey of Operations Research—Stochastic Methods (3) Prereq: QBA 7101. Extensions of decision theory, game theory, dynamic programming, Markovian decision processes, reliability models, and queuing models; applications of probabilistic methods in operations research, with some theory.

7105 Digital Methods (3) Prereq: QBA 7102 and working knowledge of FORTRAN. Numerical problem solving in operations research and statistics; Monte Carlo methods, numerical solution of systems of equations, search techniques, and heuristics.

7106 Multiple Criteria Decision Making (3) Prereq: QBA 7103. Theory of the displaced ideal, linear multi-objective programming, goal programming, compromise programming, and multi-attribute utility measurement; theoretical and applied research.

7107 Dynamic Programming (3) Prereq: QBA 7102. Basic theory and computational techniques of dynamic programming; single and multidimensional problems; relationship to classical optimization techniques.


7268 Operations Management (3) Prereq: QBA 5014 and 7101. Also offered as MGT 7268. Analysis of major problems and decision processes of operations management; operations design, resource allocation, activity planning, systems control, process and facility planning, quality control, scheduling, production, and inventory control, and planning and control of aggregate output.

7272 Operations Strategy (3) Prereq: QBA 7268. Selection of capabilities, characteristics, and configuration of facilities, process/technologies, aggregate capacity, vertical integration, operations infrastructure, organizational structure, and jobs; case analyses drawn from service and manufacturing industries.

7275 Advanced Operations Management (3) Prereq: QBA 7268. Operations management topic(s) such as material requirements planning, inventory control, scheduling, facilities location and layout, quality control, job design, industrial design, network analysis; emphasis on application of techniques.


8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Predissertation Research (1-9) May be repeated for credit.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

RELIGIOUS STUDIES (REL)

1003 Introduction to Religion (3) Important and typical ways of being religious; exploring such questions as the nature of religious experience, the nature and function of religious scripture, stories, beliefs, and rituals, and the role of religions in social and individual life.

1004 Old Testament (3) A scholarly study of the Hebrew Bible (Old Testament) against the background of the history and religious life of ancient Israel.


2001 Faith and Doubt (3) Intellectual sources of religious doubt; alternatives to traditional Judeo-Christian religion, including existentialism, Freudianism, and psychological behaviorism.

2005 Jesus in History and Tradition (3) Search for the historical Jesus; Biblical and non-Biblical sources and influential theories about Jesus.

2027 Eastern Religions (3) Doctrines, practices, and philosophical import of the major religions of Southern and Eastern Asia.

2028 Philosophy of Religion (3) Same as PHIL 2028. Essence and meaning of religion as a pervasive phenomenon in human societies; faith and reason, nature of divinity, arguments for and against God's existence, religious knowledge and experience, morality and cult, the problem of evil.
2029 Judaism, Christianity, and Islam (3) Doctrines and practices of the three major religions of the Western world; attention to the teachings of the Old Testament, New Testament, and Koran.

2101 Judaism (3) Jewish history, faith, and worship, including Judaism's past and present relations with Christianity and Islam.

2130 The Religion of Islam (3) Islam and the various communities and beliefs of Muslims; the prophet Muhammad, the Quran (Koran), excerpts from the leading Islamic theologians, Islamic theories of law and politics, relations to other religions, and the modern impact of Islam.

2925 Independent Study/Tutorial (1) Prereq: 3 sem. hrs. of religious studies courses and at least a 2.50 gpa. May be taken 3 times for credit when subjects vary. Readings, conferences, and reports under faculty direction.

3004 Archaeology and the Bible (3) Prereq: REL 1004 or 1005 or equivalent. Also offered as ANTH 3004. Major figures and discoveries influencing the historical study of the Bible; emphasis on results of excavations and discovery of written documents and inscriptions.

3005 Paul and Early Christianity (3) Paul's writings in their historical context; assessment of his place in the development of the church; significant themes in his theology.

3010 Special Topics in Religious Studies (3) May be taken twice for credit when topics vary.

3101 American Judaism (3) American Jewish history; Judaism as a cultural entity and religious faith.

RUSSIAN (RUSS)

1001 Elementary Russian (5) Pronunciation, oral-aural practice, elementary grammar, translation.

1020 Russian for Reading Knowledge (5) A specialized course intended to satisfy departmental foreign language reading requirement for graduate students, but carrying no graduate credit. Undergraduates may enroll on pass-fail basis only. Does not count toward satisfying foreign language requirement for undergraduates, although hours may count toward baccalaureate. Credit will not be given for both this course and introductory Russian courses.

2051 Intermediate Russian (5) Pronunciation, oral-aural practice, completion of elementary grammar, translation.

2053 Intermediate Russian (3) Continued oral-aural practice; readings and translation of Russian texts; vocabulary building.

2055 Readings in Russian Literature (3) Russian literature and culture; readings in contemporary Russian materials.

2061 Advanced Russian Grammar (3) Vocabulary building, dictation, and readings of modern Russian prose.

2062 Advanced Russian Composition (3) Drill in oral and written original composition; attention to style, syntax, idioms, and inflections.

2071 Survey of Russian Literature (3) Russian literature from the beginning to the late 19th century.

2072 Survey of Russian Literature (3) Continuation of RUSS 2071; principal authors and genres of Russian literature from late 19th century to the present.

2075 Introduction to Russian Culture and Civilization (3) Credit not applicable toward a major in Russian. Taught in English; knowledge of Russian not required. Also offered as

3104 Ancient Hebrew Prophets (3) Prophetic movement in ancient Israel; different modern interpretations of prophecy.

3201 Psychological Theories of Religion (3) Also offered as PSYC 3201. Use of various psychological theories to explain religious belief and practice, conversion experiences, ritual acts, and altered states of mind.

4001 History of Early Christian Thought (3) Prereq: one religious studies course. Christian thought from the New Testament period to the split between the eastern and western church.

4003 History of Modern Christian Thought (3) Prereq: one religious studies course. Major figures in the history of Christian thought from the Reformation to the 20th century; the conflict of religion and science, 18th century rationalism and pietism, and 19th century roots of modern theology.

4031 Comparative Religions (3) See ANTH 4031.

4161 History of Religion in the United States (3) See HIST 4161.

4191 Religions of China and Japan (3) See HIST 4191.

4500 Seminar in Biblical Studies (3) Prereq: one course in Biblical studies. May be taken twice for credit when topics vary.

4944 Philosophical Theology (3) Prereq: two courses in philosophy or consent of instructor. Same as PHIL 4944. Major works in philosophical theology by such authors as Hartshorne, Farrer, Tillich.

4990 Independent Reading and Research (3)
4082 Russian Literature in Translation: 20th Century (3) Credit not applicable toward a major in Russian; knowledge of Russian not required. Masterpieces of 20th-century Russian literature, pre- and post-Revolution, including the works of four Nobel Prize winners of literature: Bunin, Pasternak, Sholokhov, and Solzhenisyn.

4915 Independent Work (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings in Russian literature directed by a senior faculty member.

7001 Slavonic Linguistics (3) Outstanding Slavists and their work; relation of Slavonic to Indo-European; comparative study of phonetics and morphology of Proto-slavic, Old Church Slavonic, and modern Slavic languages.

7951, 7952 Seminar in Russian Literature (3 each) 7951 Literature of Old Russia 7952 Soviet Writers

7971, 7972 Seminar in Slavonic Linguistics (3 each) 7971 Old Church Slavonic 7972 History of the Russian Language

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

SOCIAL WORK (SW)

The following courses are designed primarily for students in other colleges or schools of the University and for persons employed in social work, teaching, and related positions. Full information concerning the School of Social Work, along with a complete listing of courses, is given in the School of Social Work Bulletin.

2000 Introduction to Social Work (3) Social welfare and the profession of social work; historical survey, description of social welfare programs in contemporary American society; role of the social worker in meeting social needs.

3000 Perspectives in Contemporary Social Welfare (3) Prereq: SW 2000 or equivalent. Changing concepts of social welfare; analysis of issues, policies, and proposals relating to meeting economic and developmental needs.

3002 The Child and the Community (3) Common and particular needs of children in the community; social welfare agencies and services developed by communities for care and training of children.

3003 Skills in Working with People (3) Basic skills in working with people, understanding attitudes, use of community resources.

3007 Juvenile Delinquency (3) Nature and extent; sociological and psychological factors in causation and in successful treatment of delinquent children; how communities are organized and mobilized to give competent help to troubled youth and to prevent start and spread of juvenile problems.

3008 Workshop: Services to Families and Children in Trouble (3) Helping families and children meet needs and problems; meaning and effects of limited income, separation, unmarried parenthood, mental or physical illness, delinquency, and disturbed family relationships; methods and resources for strengthening family life and helping family members to help themselves.

3011 Community Services and the Aged (3) The aged population; their service needs; available resources and services in the community; assisting the aged in obtaining services; implications for the future; the social welfare system.

4003 Penology (3) Development and operation of the penitentiary in society; dilemma of punishment versus rehabilitation; problems inherent in the operation of adult prison units.

4004 International Perspectives on Social Welfare (2) Comparative and international perspectives of various social welfare systems.

SOCIOCITY (SOCL)

In this department, the second digit of the course number denotes the subject area of the course as follows: 0—general courses; 1—theory; 2—methods and statistics; 3—social organization; 4—social institutions; 5—social issues; 6—social interaction; 7—population and ecology; 8—not used; and 9—reading and research (except for thesis research and dissertation research which are numbered 8000 and 9000, respectively).

1005 Social Life in the United States (3) Open only to international students. An orientation course on people, culture, social institutions, and processes.

2001 Introductory Sociology (3) Major subject areas and principles of sociology.

2091 Selected Topics in Sociology (3) May be taken twice for credit when topics vary.

2201 Introduction to Statistical Analysis (4) 3 hrs. lecture; 2 hrs. lab. Completion of MATH 1015 or 1021 is strongly recommended before taking this course. Same as EXST 2201. Variables used in sociological research, level of measurement, distributions, measures of association and correlation, simple linear regression, probability, sampling distributions, interval estimation and tests of hypotheses, and simple analysis of variance.

2211 Methods of Sociological Research (3) S Prereq: SOCL 2001 and 2201; or equivalents. Scientific methods and their application in sociological research, including problem selection, research design, measurement, data sources, and evaluation of data.

2351 Rural Sociology (3) Primarily for students in the College of Agriculture; may not be taken by students who have credit for or are enrolled in SOCL 4351. Principles of sociology and their application to rural life.

2411 Industrial Sociology (3) Social organization in industry; relation of industry to community and society.

2501 Current Social Problems (3) Sociological analysis of major social problems in contemporary society; focus on both the institutional and personal causes and consequences.

2505 Marriage and Family Relationships (3) May not count toward satisfying the 31-hour requirement for a major in sociology. Current issues and trends in marriage and family relationships.

2721 The City (3) Comparative study of urban communities and their problems.
2741 Sociological Perspectives on the South (3) Prereq: SOCL 2001 or equivalent. Society and culture in the South; the region's uniqueness, diversity, and ordeal of change.

3101 Sociological Theory (3) Prereq: SOCL 2001 or equivalent. Dominant theorists and schools of thought in sociology.

3501 Sociology of Deviance (3) Prereq: SOCL 2001 or equivalent. Sociological theories of deviant behavior; supporting research on mental illness, crime, sexual deviance, drug abuse, and suicide.

3505 Poverty in the United States (3) Prereq: SOCL 2001 or 2501 or equivalent. Definition of poverty, its meaning, measurement, causes, correlates, and consequences; strategies for its amelioration and elimination.

3601 Social Interaction (3) Prereq: SOCL 2001 or PSYC 2000 or equivalent. Human behavior as social interaction.

3605 Collective Behavior (3) Prereq: SOCL 2001 or equivalent. Sociological analysis of noninstitutionalized group behaviors; crowds, publics, panic, fads, hostile outbursts, and social movements.

3901 Directed Reading and Research in Sociology (1-3) Prereq: SOCL 2001 or equivalent. May be repeated for credit for a maximum of 3 sem. hrs. Student registers with a faculty member before formal registration to select the area of reading or research. Topic must not substitute for regularly offered courses unless reading goes beyond a standard course's offerings.

3905 HONORS: Senior Thesis Research (3) Prereq: SOCL 3901; open to seniors who are candidates for a bachelor's degree with honors in sociology. Supervised research and preparation of a senior thesis.

3911 Research Practicum in Rural Sociology (1-3) Prereq: SOCL 2211, 2351, and 3101. May be repeated for credit for a maximum of 3 sem. hrs. Student registers with a faculty member and in consultation selects a research problem. Supervised research experience in rural sociology, including design, execution, and reporting.

4091 Selected Topics in Sociology (1-3) Prereq: SOCL 2001 or equivalent. May be repeated for credit for a maximum of 3 sem. hrs. when topics vary.

4111 Development of Social Thought (3) Prereq: SOCL 2001 or equivalent. Early social thought contributing to classical and contemporary sociology.

4211 Intermediate Research Methods (3) Prereq: SOCL 2211 or equivalent. Also offered as PSYC 4017. Selected techniques and procedures in sociological research; alternative research designs, measurement, sampling procedures, techniques of observation, data collection procedures, coding, data processing, and analysis procedures.

4301 Social Organization (3) Prereq: SOCL 2001 or equivalent. Structure and function of social systems and institutions.

4311 Complex Organizations (3) Prereq: SOCL 2001 or equivalent. Bureaucracies and complex formal organizations; theories, goals, structure, processes, organizational behavior, and interaction of organizations with their environment.

4321 The Community (3) Prereq: SOCL 2001 or equivalent. Classical and contemporary perspectives on the community; theoretical and methodological issues associated with community studies.

4331 Social Stratification (3) Prereq: SOCL 2001 or equivalent. Class and rank structure in society; determinants of social class, mobility, and changes in class position of both individuals and groups; attitudinal and behavioral consequences of class position.

4341 Social Change (3) Prereq: SOCL 2001, and HIST 1003 or 2021; or equivalents. Major theoretical and empirical problems in the study of social change.

4351 Rural Social Organizations (3) Prereq: SOCL 2001 or 2351 or equivalent. Social organization in rural societies: groups, organizations, institutions, and communities.

4361 Latin American Societies (3) Prereq: SOCL 2001 or equivalent. Social structure, change, and development.

4401 The Family (3) Prereq: SOCL 2001 or equivalent. The family as a social institution.

4411 Sociology of Work (3) Prereq: SOCL 2001 or equivalent. Work and the division of labor in industrial society; sociology of occupations and professions.

4421 Political Sociology (3) Prereq: SOCL 2001 or equivalent. Comparison of social movements and political parties.

4431 Sociology of Education (3) Prereq: SOCL 2001 or equivalent. Education as an institution of society; the school as a social system and socialization within schools.

4441 Sociology of Religion (3) Prereq: SOCL 2001 or equivalent. Nature of religion; societal and cultural factors in religion; role of religion in social change; religion in contemporary society.

4451 Sociology of Medicine (3) Prereq: SOCL 2001 or equivalent. Sociological analysis of the structure and function of health agencies and occupations; social and cultural factors in the cause and treatment of illness.

4461 Criminology (3) Prereq: SOCL 2001 or equivalent. Crime, the criminal justice system, and penology.

4471 Sociology of Law (3) Prereq: SOCL 2001 or equivalent. Law and social change, the evolution of legal institutions, group conflict and law, and the influence of legal controls and sanctions on human behavior.

4481 Science, Technology, and Society (3) Prereq: SOCL 2001 or equivalent. Scientific institutions and development; nature of technological decision making; reciprocal effects of scientific and societal change.

4501 Social Trends and Social Problems (3) Prereq: SOCL 2001 or equivalent. Contemporary social trends; social problems such as deviance, crime, ethnic relations, poverty, inequality, urbanization, and technology.

4511 Minority Peoples in the United States (3) Prereq: SOCL 2001 or equivalent. Analysis of past and present contributions of ethnic and racial minority groups in the U.S.

4521 Sex Roles in Contemporary Society (3) Prereq: SOCL 2001 or equivalent. Changes in sex roles and sex-related behavior of males and females, including institutional and structural changes.

4531 The Aged in Contemporary Society (3) Prereq: SOCL 2001 or equivalent. Social, demographic, psychological, cultural, and health factors related to the aging process in contemporary society.

4551 Sociology of Development (3) Prereq: SOCL 2001 or equivalent. Central concepts, perspectives, and research themes in sociocultural developmental change.

4601 Personality and Social Structure (3) Prereq: SOCL 3601 or PSYC 3140 or equivalent. Interaction of social structures, such as the family, peer group, and school, with the personalities of individuals; processes by which each affects the other.
4611 Attitudes and Attitude Change (3) Prereq: SOCL 3601 or PSYC 3140 or equivalent. Analysis of attitudes; social factors in their formation and change.

4621 Small Groups (3) Prereq: SOCL 3601 or PSYC 3140 or equivalent. Analysis of groups, their structure and functions.

4701 Population (3) Prereq: SOCL 2001 or equivalent. Processes that influence size and composition of human populations; determinants and consequences of demographic trends.

4711 Human Ecology (3) Prereq: SOCL 2001 or equivalent. Exposition and evaluation of theory of social organization; emphasis on interdependence of population, technology, and organization in adaptation of a population to its environment.

7121 Seminar: Classical Sociological Theory (3) Prereq: consent of instructor. Historical survey of sociology with primary emphasis on European (especially Marx, Weber, and Durkheim) and early American (e.g., Mead and Park) sociologists.

7131 Seminar: Contemporary Sociological Theory (3) Prereq: SOCL 7121 or equivalent. Current theoretical perspectives in sociology ranging from structural-functionalism to ethnomethodology.

7211 Seminar: Methods of Social Investigation (3) Prereq: EXST 7003 or equivalent. Research methods in the social sciences, including interplay of theory and methods of research, formulation of research problems, research design, measurement and scaling, sampling, ethics in research, and critiques of social science research.

7221 Seminar: Methodological Issues in Sociology (1) Prereq: SOCL 7211 or equivalent. Assumptions central to scientific study of society; sociology and language, meaning and objectivity in sociology, technical and philosophic orientations in sociology.

7231 Seminar: Measurement Issues in Sociology (1) Prereq: SOCL 7211 or equivalent. Measurement issues in sociological research; levels, basic approaches, sources of invalidity and error.

7241 Seminar: Topics in Research Design (1) Prereq: SOCL 7211 or equivalent. May be repeated for credit for a maximum of 4 sem. hrs. if content varies. Specialized areas in sociological research design.

7251 Seminar: Topics in Research Techniques (1) Prereq: SOCL 7211 or equivalent. May be repeated for credit for a maximum of 4 sem. hrs. if content varies. Specialized areas in sociological research techniques.

7351 Seminar: Topics in Rural Sociology (3) Prereq: consent of instructor. May be repeated for credit for a maximum of 9 sem. hrs. if content varies. Specialized areas in rural sociology.

7391 Seminar: Topics in Social Organization (3) Prereq: consent of instructor. May be repeated for credit for a maximum of 12 sem. hrs. if content varies. Specialized areas in social organization.

7491 Seminar: Topics in Social Institutions (3) Prereq: consent of instructor. May be repeated for credit for a maximum of 9 sem. hrs. if content varies. Specialized areas in social institutions.

7591 Seminar: Topics in Social Issues (3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. if content varies. Specialized areas in population and ecology.

7901, 7902 Independent Reading and Research (3,3) Prereq: successful completion of at least one year of graduate work.

7903 Proseminar in Sociology (1) Required twice of both master's and Ph.D. candidates. Pass-fail grading. Contemporary research and critical issues in sociology.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Research in Sociology (1-6) Open only to students engaged in a specific, organized research project under faculty supervision. Student must be engaged in design and implementation of research and analysis and interpretation of data.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

**SPANISH (SPAN)**

1001 Elementary Spanish (5) For students with no preparation in Spanish. Oral approach, with a minimum of formal grammar; emphasis on conversation, supplemented by aural-orinal drill in the language laboratory.

1020 Spanish for Reading Knowledge (5) S A specialized course intended to satisfy departmental foreign language reading requirement for graduate students, but carrying no graduate credit. Undergraduates may enroll on a pass-fail basis only. Does not count toward satisfying foreign language requirement for undergraduates, although hours may count toward baccalaureate. Credit will not be given for both this course and introductory Spanish courses.

2051 Intermediate Spanish (5) An honors course, SPAN 2052, is also available. Oral approach to the language, supplemented by aural-orinal drill in the language laboratory; reading material of moderate difficulty.

2052 HONORS: Intermediate Spanish (5) Same as SPAN 2051, with special honors emphasis for qualified students.

2053 Intermediate Spanish (3) An honors course, SPAN 2054, is also available. Continued reading and oral work, vocabulary building, review of the basic principles of grammar.

2054 HONORS: Intermediate Spanish (3) Same as SPAN 2053, with special honors emphasis for qualified students.

2055 Readings in Spanish Literature (3) An honors course, SPAN 2056, is also available. Readings in contemporary Spanish prose; emphasis on comprehension and oral and written expression in the language.

2056 HONORS: Readings in Spanish Literature (3) Same as SPAN 2055, with special honors emphasis for qualified students.

2058 Spanish Conversation for Non-native Speakers (3) Prereq: SPAN 2053. Does not count toward satisfying the foreign language requirement. Language practice to develop fluency and conversational skills.
2061 Advanced Spanish Grammar (3) F Spanish grammar and syntax.

2062 Advanced Spanish Composition and Syntax (3) S Prereq: SPAN 2061. Drill in original descriptive and narrative composition; emphasis on style, syntax, idioms, and verb forms.

3041 Introduction to Spanish-American Literature (3) Reading and analysis of representative selections from the principal Spanish American writers.

3071 Survey of Spanish Literature (3) F Spanish literature from its beginning to the 18th century.

3072 Survey of Spanish Literature (3) S The main authors and literary movements from the 18th century to the present.

3073 Advanced Readings on Spanish Civilization (3) F Ethnological, geographical, historical, political, economic, and sociological factors necessary for understanding Spanish literature.

3074 Advanced Readings on Hispanic-American Civilization (3) S Parallels SPAN 3073, but focuses on the Hispanic-American countries.

3980 Special Topics in Spanish (3) Prereq: either SPAN 3041 or 3071 and 3072. May be taken twice for credit.

4005 Structure of the Spanish Language (3) Spanish morphology and syntax; structuralist, sociolinguistic, and generative-transformational analyses and applications.

4007 Spanish Medieval Literature (3) Spanish literature from its beginnings to the end of the 14th century; emphasis on the mester de juglaria, mester de clerecta, and masterpieces of prose and poetry of the 14th century.

4020 Spanish Poetry of the Golden Age (3) Spanish poetry from the mid-16th century to the close of the Golden Age; the mystics, the culteranistas and conceptistas and other satiric, epic, and lyric poets of the Siglo de Oro.

4021 Spanish Lyric Poetry of the 18th and 19th Centuries (3)

4033 Spanish Literature of the 18th and 19th Centuries (3) Literature and thought of the 18th and 19th centuries; neoclassicism, romanticism, and realism; drama, poetry, essay, and novel.

4051 Spanish Prose of the Golden Age (3) Prose fiction of the Siglo de Oro—picar.esque, pastoral, and historical, culminating in Cervantes; mystic prose and the early historians of the Indies.

4052 Dramatic Literature of the Golden Age (3) The Spanish comedia; readings from the works of Lope de Vega, Calderón de la Barca, Rojas Zorrilla, Tirso de Molina, and Ruiz de Alarcón.

4061 The Generation of 1898 (3) Principal writers of the Generación del 98 in the fields of poetry, the novel, the stage, and criticism.

4062 Spanish Literature of the 20th Century (3) Poetry, drama, and prose fiction in Spain from the Generation of 1898 through the contemporary period.

4081 Modern Spanish Prose Fiction in Translation (3) Credit not applicable toward a major in Spanish. Taught in English; knowledge of Spanish not required. Selected outstanding Spanish-American prose works by García Márquez, Cortázar, Fuentes, Carpentier, and Borges.

4141 Spanish-American Literature: Colonial to the Romantic Period (3) Prereq: SPAN 3041 or equivalent. Spanish-American literature from the early chronicles to the romantic period.

4142 Spanish-American Literature: Romantic Period to 1930 (3) Prereq: SPAN 3041 or equivalent. Spanish-American literature from the romantic period to 1930.

4143 Spanish-American Literature: 1930 to the Present (3) Prereq: SPAN 3041 or equivalent. Spanish-American literature from 1930 to the present.

4602 Spanish Phonetics (3) Spanish phonetic systems; corrective and fluency drills in the language laboratory; attention to problems of teaching Spanish pronunciation to English-speaking students.


4915 Independent Research in Spanish or Spanish-American Literature (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings in Spanish or Spanish-American literature directed by a senior faculty member.

4917 Independent Research in Spanish or Spanish-American Linguistics (1-3) May be repeated for credit for a maximum of 3 sem. hrs. Readings in Spanish or Spanish-American linguistics.

7003 Readings in Old Spanish Literature (3) Spanish literature of the 13th, 14th, and 15th centuries.

7941 to 7945 Seminar in Spanish-American Literature (3 each)

7941 Colonial Literature

7942 Romanticism and Realism-Naturalism

7943 Modernism

7944 Poetry of the 20th Century

7945 20th-century Prose

7952 to 7955 Seminar in Golden Age Drama (3 each)

7952 Spanish Dramatists before Lope de Vega

7953 Lope de Vega

7954 Tirso de Molina, Alarcón, and other Contemporaries of Lope

7955 Calderón and his Contemporaries.

7960 Special Topics in Language and Peninsular and Spanish-American Literature (3) When topics vary, may be repeated for credit for a maximum of 6 sem. hrs. for the master's degree and 9 sem. hrs. for the doctorate. Topics to be announced.

7962 to 7964 Seminar in Spanish (Peninsular) Literature of the 20th Century (3 each)

7962 Drama

7963 Nondramatic Prose

7964 Poetry

7971 to 7974 Seminar in Spanish Novel (3 each)

7971 Cervantes

7972 Idealistic Prose of the 16th and 17th Centuries

7973 Realistic Prose of the 16th and 17th Centuries

7974 19th-century Realism and the Generation of 1898

7980 Special Topics in Hispanic Linguistics (3) When topics vary, may be taken twice for credit for the master's degree and 3 times for the doctorate. Topics to be announced.
8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

SPEECH (SPCH)

GENERAL COURSES

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.
9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

SPEECH COMMUNICATION

1061 Speech Fundamentals (3) An honors course, SPCH 1062, is also available. Selection of subjects; gathering materials; structure, style, and vocal and physical attributes of delivery; practice in communicative speaking.

1062 HONORS: Speech Fundamentals (3) Same as SPCH 1061, with special honors emphasis for qualified students (students with ACT scores which qualify for ENGL 1003 and students with 3.00 cumulative gpa).

2010 Interpersonal Communication (3) Theories and research in human communication; one-to-one interactions.

2012 Introduction to Film (3) Nature and function of film as a mode of communication; film theory and criticism; historical and technological development of the film industry; selected films screened and studied on a regular basis.

2040 Interpretative Reading (3) Reading literature aloud intelligently, with naturalness and individuality.

2060 Public Speaking (3) Theory and skills needed by the effective communicator and critical consumer of speech in contemporary society; analysis of other speakers and practice in speaking.

2061 Speech Communication for Business and the Professions (3) For students in the professional colleges, particularly the College of Business Administration. Theory and practice of speech communication used in business and professional organizations; proposal presentations, group decision making, parliamentary procedure, and interviewing.

2063 Argumentation and Debate (3) Prereq: SPCH 1061 or 2060. Principles of argumentation and debate, including analysis, briefing, evidence, reasoning, and refutation; debating on vital questions.

2064 Discussion and Conference Speaking (3) Aspects and problems of group leadership; group discussion and the problems of communication in human relations.

2065 Parliamentary Law (1) Intensive drill in standard parliamentary practices by which self-governing groups determine their course of action; basic philosophy underlying parliamentary procedures.

2200 Practicum in Speech Communication (1) Prereq: consent of instructor. May be repeated for credit for a maximum of 3 sem. hrs.; however, no more than a total of 3 sem. hrs. in SPCH 2200 and 4200 may be taken for undergraduate credit. May not be used to satisfy an area requirement for majors. Pass-fail grading. Practical experience in major departmental activities outside the classroom under direct faculty supervision.

2862 HONORS: Contemporary Public Address (3) Uses, types, and effectiveness of public address in contemporary society; limitations on free speech, influence of mass communications on public address, and contemporary rhetorical practices in politics, education, religion, business, and minority and pressure groups.

3012 History of Film (3) Development of film as a mode of communication and an artistic form from 1895 to the present; classic films screened and studied.

3040 Advanced Interpretation of Literature (3) Prereq: SPCH 2040. Analysis and performance of selected short stories and poems.

3900 Selected Topics in Speech (3) Prereq: consent of instructor. May be taken twice for credit. Topics will vary; consult Schedule of Classes for current offering.

4012 Problems in the Use of Language: Symbolic and Communicative Behavior (3) Misunderstandings in interpersonal relationships; more effective communication.

4100 Political Communication (3) Analysis of factors and strategies in contemporary political communication in the U.S.; emphasis on electronic communication, candidates and images, campaign management, speechmaking, and advertising; application of theory through study of recent and current elections.

4101 Communication in Organizations (3) Not a performance course. Speech communication theory and practice in organizations; research in speech used to identify and solve communication problems; analyses of organizational communication.

4113 Advanced Discussion (3) For teachers and directors of discussion, people in industry, and other advanced students.

4114 Contemporary Theories of Communication (3) Current methods and theories of human communication; research literature; behavioral antecedents and consequences of messages and their variations; how messages interact with communicators to produce behavioral outcomes.

4140 Interpretation of Literature (3) Poetic theory applied to oral presentation of poetry.

4141 Interpretation of Literature (3) Oral presentation of narrative and dramatic forms; techniques of adaptation and oral book reviewing.

4142 Oral Interpretation of Special Literary Texts (3) May be taken twice for credit when topics vary. Oral presentation of specific literary styles or periods.

4145 Readers' Theatre (3) Prereq: SPCH 4140 and 4141; or equivalents. Exploration of literature through group performance; theory and techniques for performing prose fiction, nonfiction, poetry, drama; script creation; staging techniques; performance design; directing the production.

4160 Persuasive Communication (3) Prereq: SPCH 1061, 2060, 2063, or equivalent. Persuasive speaking; nature of persuasion in its many forms as it occurs in our society.

4164 Advanced Argumentation (3) Prereq: SPCH 2063 or 4160 or equivalent. Theory and application of argumentation in different types of speaking situations; recent trends in argumentation theory; argumentation in practice.

4165 History and Criticism of American Public Address (3) Prereq: SPCH 2060 or 2063 or 4160. American public address from colonial times to the present; speeches of outstanding American statesmen, lawyers, and clergymen, considering especially sources of their effectiveness.

4166 History and Criticism of British Public Address (3) Prereq: SPCH 1061, 2060, 2063, or 4160. British public address
from the 18th century to the present; speeches and speaking careers of outstanding British statesmen and lawyers from Pitt to Churchill.

4167 Contemporary Rhetorical Theory (3) Prereq: SPCH 1061 or 2060 or 4160 or equivalent. Current developments in rhetoric from contemporary theoretical and critical perspectives; key concepts in the philosophy of rhetoric.

4200 Practicum in Speech Communication (1) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. for advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

4202 Independent Research: Speech Education (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. for advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7965 Independent Research: Rhetoric and Public Address (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. for advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7966 Problems in Rhetorical Theory, Criticism, and History (3) Prereq: at least 12 hours (four courses) in public address. May be repeated for credit for a maximum of 6 sem. hrs. Selected problem which goes beyond present advanced course offerings in public address; topic to be announced.

THEATRE

1020 Introduction to Theatre (3) The arts of the theatre and its artists; acting, directing, costume and scenic design, playwriting, architecture.

1025 Acting: Improvisation (3) Exploration, through theatre games and movement training, of the actor’s problems of intention, listening, physical expression of emotion, concentration, and mime.

2022 Introduction to Play Production (3) Prereq: concurrent registration in SPCH 2026. Acting, directing, staging, lighting, costume, and other aspects of producing a play.

2023 Stage Makeup (1) Fundamentals of straight and character makeup; application of laws governing line, color, light, and shade to makeup problems; opportunity for practical experience in makeup through various productions.

2024 Introduction to Stagecraft and Stage Lighting (3) Prereq: SPCH 2022 or equivalent; and concurrent registration in SPCH 2026. Methods and procedures in planning, constructing, and rigging stage scenery; designing and rigging stage lighting and control equipment; analysis of technical production organization.

2025 Fundamentals of Acting (3) Principles involved in forming a workable theory of acting; application of these principles through development of technical skill.

2026 Theatre Practicum—I (1) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs.; however, no more than a total of 3 sem. hrs. of SPCH 2026 and 4136 may be taken for undergraduate credit. Participation in performance or production of a play produced by the University Theatre.

2027 Stage Speech: Basic Techniques (3) Development and refinement of voice, breath control, phonation, resonance, and articulation to meet theatre performance standards.

2028 Introduction to Dramatic Form (3) Comedy, tragedy, and melodrama through a study of representative modern plays.

3025 Advanced Acting (3) Prereq: SPCH 2025. Characterization and scene work.

3027 Stage Speech: Dialects (3) Prereq: SPCH 2027. Continued development of the actor’s vocal craft; foreign and American dialects.

4024 Directing—I (3) Prereq: SPCH 2022, 2025, and 2028; or equivalents. The director’s problems of script analysis, characterization, and scene visualization.

4025 Acting: Scene Study (3) Prereq: SPCH 3025 and consent of instructor. Exploration, through extensive analysis and scene work, of the technique of developing an actor's score for a role.
COMMUNICATION DISORDERS

1050 Speech Fundamentals: Voice and Articulation (3) Not a remedial course. Recommended for those interested in the study or teaching of language. Voice and speech production, emphasizing development of student's vocal skills; the speech sciences.

1051 Spoken American English (3) Prereq: consent of instructor or international student adviser. Weekly individual work in the Speech Laboratory. Graduate students graded pass-no credit. Theoretical and practical treatment of pronunciation of American English for students of other languages; phonology, stress, intonation, and rhythm through drills, exercises, public speaking.

2050 Introduction to Language (3) Linguistic study of the principal interrelated levels of language structure: phonetics, phonology, morphology, syntax, and semantics; related applied language topics such as writing systems and dialects.

2081 Overview of Speech Pathology and Audiology (3) Prereq: SPCH 1050. Required initial course for undergraduates concentrating in speech pathology and audiology. Observations in the Speech and Hearing Clinic required. Processes involved in speech production; definition, description, and incidence of speech and hearing disorders; overview of the profession, including agencies, related professionals, job opportunities, publications, professional associations, and certification.

4079 Introduction to Communicative Disorders (3) Prereq: SPCH 2081 or equivalent. Basic theoretical, evaluative, and remedial procedures in communicative disorders for those concentrating in the area.

4080 Disorders of Articulation (3) Prereq: SPCH 4079, 4150, 4152, and 4153; or equivalents. Must be taken concurrently with SPCH 4683. Grade of "B" or better in this course required for admission to advanced courses in speech pathology and audiology. Articulatory development; etiology, evaluation, and treatment of articulatory disorders.

4150 Phonetics (3) Prereq: consent of instructor. Articulatory phonetics; description and classification of sounds; transcription at different levels of detail; principles of phonemics.

4152 Physiological Basis of Speech and Hearing (3) Structure, action, and control features of the speech and hearing mechanism.

4153 Acoustics of Speech and Hearing (3) Production, transmission, and perception of acoustics signals in speech communication; acoustic phonetics and psycho-acoustics.

4181 Introduction to Audiology (3) Prereq: SPCH 4079, 4150, 4152, and 4153; or equivalents. For clinic practicum, take SPCH 4683, 4684, or 4685. Elementary acoustics of hearing; anatomy of the ear; causes and detection of hearing impairment; hearing testing and conservation as related to the speech and hearing therapist.

4183 Hearing Rehabilitation (3) Prereq: SPCH 4181 or equivalent. For clinic practicum, take SPCH 4683, 4684, or 4685. Rehabilitative principles and procedures for the hearing-impaired child and adult; speech reading and auditory training; practical application of theories.

4184 Speech and Language Development (3) For clinic practicum, take SPCH 4683, 4684, or 4685. Language acquisition and behavior, language and cognitive development, verbal learning, and structural properties of speech; theories of language development in the "normal" child including sensory, motor, mental, social, emotional, speech, and language skills.
4185 Stuttering and Allied Disorders (3) Prereq: SPCH 4000 or equivalent. For clinic practicum, take SPCH 4683, 4684, or 4685. Stuttering and allied disorders; symptomatology, testing, rehabilitation, and prevention.

4187 Hearing Testing (3) Prereq: SPCH 4183 or equivalent. For clinic practicum, take SPCH 4683, 4684, or 4685. Special problems in hearing testing.

4188 Language Disorders of Children (3) Prereq: SPCH 4184 or equivalent course with consent of instructor. For clinic practicum, take SPCH 4683, 4684, or 4685. Methods of differential diagnosis and remediation of the major language disorders of children; differentiating deafness from mental retardation, aphasia, and emotional disorders.

4683, 4684, 4685 Clinical Practice—Therapeutic Techniques (1-4 each) Prereq: credit or enrollment in the course dealing with the specific disorder in which practicum is to be taken. May be repeated for a maximum of 8 sem. hrs. credit each. On- and off-campus practicum in specific disorders (articulation, language, fluency, voice, hearing, etc.).

4694 Clinical Practicum in a Medical Environment (1-4) Prereq: consent of instructor. Speech and/or audiology practicum in a hospital or medical practitioner’s office.

6051 Spoken English Workshop (3) Prereq: SPCH 1051 or equivalent. For non-native speakers of English; open only to participants in Summer Institutes in English. Speaking, reading, and dramatic exercises to develop fluency and communicative competence; some attention to the phonological system of English, including suprasegmentals.

6155 Current Trends in English as a Second Language (3) Open only to participants in Summer Institutes in English. Contemporary theory and research in second language acquisition and teaching; English as a second language in native and foreign environments; issues in teaching strategies, bilingual education, testing, materials preparation, culture, and English as a second dialect.

7180 Management of Communicative Disorders in the Young Multiply Impaired Child (3) Prereq: SPCH 4188 or equivalent. For clinical practicum, take SPCH 7683, 7684, or 7685. Human development from birth to five years of age; the “high risk” population; developmental disabilities; prevention, diagnosis, and intervention; parent-infant stimulation; community information and education.

7683, 7684, 7685 Graduate Clinical Practice—Therapeutic Techniques (1-4 each) Prereq: credit or enrollment in the course dealing with the specific disorder in which practicum is to be taken. May be repeated for credit in order to obtain the clock hours necessary for certification by the American Speech-Language-Hearing Association. However, only 6 sem. hrs. of academic credit may be counted toward the degree, although all practicum hours count for professional certification. On- and off-campus graduate practicum in specific areas (articulation, language, fluency, voice, aural rehabilitation, early intervention, diagnostic audiology, oral-facial anomalies, neurological disorders, etc.).

7881 Diagnosis and Appraisal of Communicative Disorders (3) Prereq: consent of instructor. For clinic practicum, take SPCH 7683, 7684, or 7685. Instruments and procedures used in diagnosing speech and language disorders.

7953 Instrumental Research in Speech Science (3) Prereq: SPCH 4153 or equivalent.

7954 Experimental Phonetics (3) Prereq: SPCH 7953 or equivalent. Motor and articulatory phonetics, including palatography, acoustic phonetics, and certain aspects of signal detection and perception.

7955 English for Speakers of Other Languages: Methods and Materials (3) Special problems of teaching English to speakers of other languages, both overseas and in the U.S.; contrastive analysis, preparation of materials, oral-aural training, information sources, etc.; work with international students.

7956 Independent Research: Phonetics and Linguistics (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. For advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7957 Independent Research: Speech Science (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. For advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7958 Special Topics in Speech Science (3) May be taken twice for credit when topics vary. Topics to be announced.

7980 Speech and Language Disorders of Neurological Origin (3) Prereq: SPCH 4080 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. Fundamentals of neurology; major neuropathologies of speech and language, with emphasis on their symptoms, associated problems, and management.

7981 Cerebral Palsy (3) Prereq: SPCH 7980 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. Speech, language, and associated problems in children having central nervous system disorders; diagnosis and therapy.

7982 Advanced Diagnosis and Appraisal of Communicative Disorders (3) Prereq: SPCH 7881 and consent of instructor. For clinic practicum, take SPCH 7683, 7684, or 7685. Continuation of SPCH 7881; emphasis on organic disorders.

7983 Seminar in Communicative Disorders: Diagnosis (3) Prereq: consent of instructor. May be repeated for credit. Selected topics pertaining to diagnosis of communicative disorders.

7984 Seminar in Communicative Disorders: Management (3) Prereq: consent of instructor. May be repeated for credit. Selected topics pertaining to management of communicative disorders.

7985 Adult Audiology (3) Prereq: SPCH 4187 or equivalent. Auditory disorders of adults, their medical management and rehabilitation; assessment and maximization of communicative ability in the hearing-impaired adult.

7986 Independent Research: Speech Pathology (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. For advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7987 Independent Research: Audiology (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. For advanced graduate students who wish to pursue research on special problems exclusive of thesis or dissertation.

7988 Advanced Hearing Measurement (3) Prereq: SPCH 4187 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. Special audiological testing procedures, including Central Lesion Test, Impedance Audiomety,

7989 Voice Disorders (3) Prereq: SPCH 4080 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. Diagnosis and treatment of various voice disorders including aphonias, dysphonias, and laryngectomy speech.

7990 Orofacial Anomalies (3) Prereq: SPCH 4080 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. Orofacial anatomy, physiology, and embryology; etiology and classification of orofacial cleft; surgical, dental, speech, hearing, and psychosocial concomitants and their management.

7991 Hearing Aids and Hearing-Aid Evaluation (3) Prereq: SPCH 4187 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. The development of hearing aids; their use in rehabilitation of hearing-impaired children and adults.

7992 Rehabilitation of the Adult Aphasis (3) Prereq: SPCH 7900 or equivalent. For clinic practicum, take SPCH 7683, 7684, or 7685. Neurological bases of aphasia and related disorders; appropriate therapeutic methodologies.

7993 Hearing Science (3) Prereq: SPCH 7953 or equivalent. Fundamentals of auditory transmission and processing from the outer ear to the cortical area; psychophysical phenomena germane to human audition.

7994 Industrial Audiology (3) Theory and practice of industrial and military hearing conservation programs; noise-induced hearing loss, noise measurement and analysis, establishment of damage-risk criteria, and federal guidelines for minimal standards; community noise problems.

7995 Educational Audiology (3) Prereq: SPCH 4183. Core course in the preparation of the educational audiologist; research and clinical literature regarding the educational, social, and psychological concomitants of auditory disorders found among children in the public schools.

7996 Pediatric Audiology (3) Prereq: SPCH 4183 or equivalent. Identification, measurement, and management of hearing impairment in infants and young children; childhood deafness, its causes, its audiological diagnosis, relationship of auditory manifestations to pathology, and relationship of audiological data to expectations for habilitation.

UNIVERSITY (UNIV)

Special courses of timely and general interest are offered as “University” courses. These courses are interdisciplinary, broad in scope, and centered on topics of current concern. “University” courses have been offered on such topics as “Developing Student Leadership” (1982), “Work in Multiple Perspectives” (1983), and “Water and Louisiana” (1983). Each course carries undergraduate credit of one to three semester hours; acceptance of such credit toward fulfillment of degree requirements is decided by the faculty of each college or school within the University.

Specific “University” courses are not offered more than twice and may be taken on a pass-fail basis, subject to the usual guidelines for pass-fail work. The topic, credit, and class time of each University course are announced by the Office of Academic Affairs prior to the beginning of the semester in which the course is to be taught.

VETERINARY ANATOMY (VAN)

7105 Ultrastructural Cytology (3) S Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Fine structure of animal cells and cell products; possible relationships of ultrastructure to function; diverse interpretation of chemical-physical reaction.

7106 Electron Microscopy—Veterinary Medical Applications (3) Su Prereq: credit or registration in ZOOL 7701 or consent of instructor. 1 hr. lecture; 6 hrs. lab. Preparation of companion, food, laboratory, and exotic animal tissues including biopsies for transmission and scanning electron microscopy; operation of S-150 SEM, EM-10, and EM-109 TEM’s and ancillary equipment.

7107 Macroscopic Anatomy of the Dog (6) F Prereq: consent of instructor. 3 hrs. lecture; 9 hrs. lab. May not be taken by students who have credit for VMED 5131. Systematic dissection (accompanied by lectures) of the dog.

7108 Comparative Macroscopic Anatomy of Domestic Animals (4) S Prereq: VAN 7107. 2 hrs. lecture; 6 hrs. lab. May not be taken by students who have credit for VMED 5141. Systematic dissection (accompanied by lectures) of the horse, ruminants, laboratory species, and chicken.

7109 Advanced Macroscopic Anatomy (1-3) Prereq: VAN 7107 or consent of instructor. May be repeated for credit when topics vary. Specialized dissection of one or more of the following: dog, horse, ruminants, laboratory, exotic, or avian species.

7110 Developmental and Microscopic Anatomy—I (4) F Prereq: consent of instructor. 3 hrs. lecture; 4 hrs. lab. May not be taken by students who have credit for VMED 5132. Developmental and microscopic organology of the pulmonary, musculoskeletal, cardiovascular, integumentary, and urinary systems.

7111 Developmental and Microscopic Anatomy—II (3) S Prereq: VAN 7110. 2 hrs. lecture; 3 hrs. lab. May not be taken by students who have credit for VMED 5142. Developmental and microscopic organology of the digestive, lymphatic, endocrine, and reproductive systems.

7112 Advanced Microscopic Anatomy (1-3) Prereq: VAN 7110 and 7111; or consent of instructor. May be repeated for credit when topics vary. Comparative or systemic microscopic anatomy of selected organs or organ systems of domestic, laboratory, or exotic species.

7114 Corelative Neuroanatomy (2) S Prereq: VAN 7107, 7110, and consent of instructor. May not be taken by students who have credit for VMED 5145. Neuroanatomy of selected domestic and laboratory species.
VETERINARY MEDICINE (VMED)

Courses in the professional curriculum are designated as “Veterinary Medicine” (VMED) courses rather than departmental courses because of the integration of the disciplines. These courses, all at the 5000 level, are described in the School of Veterinary Medicine Bulletin. Prerequisite for enrollment in these courses is formal admission to the professional curriculum in the School of Veterinary Medicine. All courses must be taken in the proper sequence, as each is a prerequisite for the succeeding course.

The following courses at the 7000 level and above are utilized by all options in the veterinary medical sciences graduate program.

7001 Seminar: Veterinary Medical Sciences (1) May be taken 8 times for credit. Reports and discussions on topics of current interest in various disciplines of veterinary medicine.

7002 Veterinary Medical Research Techniques (1-4) May be repeated for credit for a maximum of 6 sem. hrs. Specialized research techniques related to a specific discipline of veterinary medicine.

7003 Special Topics in Veterinary Medicine (1-4) Prereq: consent of instructor. May be repeated for credit for a maximum of 8 sem. hrs. Specialized coverage of a variety of topics of current interest in veterinary medicine.

8000 Thesis Research (1-12 per sem.) “S”/“U” grading.

8900 Predissertation Research (1-9) May be repeated for credit for a maximum of 9 sem. hrs.

9000 Dissertation Research (1-12 per sem.) “S”/“U” grading.

VETERINARY MICROBIOLOGY AND PARASITOLOGY (VMP)

7410 Mechanisms in Cytocidal Viral Infections (3) Prereq: introductory virology and immunology or consent of instructor. Mechanisms of disease induction by viruses which cause lethal changes in infected host cells; effects of infecting viruses and host responses to them.

7411 Pathogenesis of Persistent Viral Infections (3) F Prereq: introductory virology and immunology or consent of instructor. Mechanisms of disease induction by viruses which persist in the host in spite of host responses.

7412 Cellular Immunology (2) V Prereq: introductory course in immunology or consent of instructor. Mechanisms of cell-mediated immunity; interactions between the cells of the immune system and effect of humoral factors on their function.

7413 Cellular Immunology Laboratory (1-3) V Prereq: credit or registration in VMP 7412 or equivalent. 2-6 hrs. lab. Laboratory techniques for isolation, identification, and functional testing of cells of the immune system.

7414 Veterinary Mycology (4) V Prereq: consent of instructor. 2 hrs. lecture; 4 hrs. lab. Fungal agents causing cutaneous, subcutaneous, intermediate, and systemic mycoses of domestic animals.

7416 Veterinary Helminthology (4) V Prereq: consent of instructor. 3 hrs. lecture; 3 hrs. lab. Taxonomy, morphology, physiology, and the immunological, pathological, physiological, and ecological aspects of the host-parasite relationships of helminth parasites of animals.

7418 Veterinary Protozoology (3) V Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Taxonomy, morphology, physiology, and immunological, pathological, physiological, and ecological aspects of the host-parasite relationships of protozoan parasites of animals.

7420 Chemotherapy and Control of Animal Parasites (3) V Prereq: consent of instructor. 2 hrs. lecture; 2 hrs. lab. Properties, administration, clinical effects, and government regulation pertaining to drugs, vaccines, and management procedures used for the control of protozoan, helminth, and arthropod parasites of animals.

7422 Pathogenic Veterinary Bacteriology (4) V Prereq: introductory bacteriology and basic immunology. 3 hrs. lecture; 2 hrs. lab. Bacteria affecting animals and related host responses.

7424 Diseases of Aquatic Animals (3) Prereq: consent of instructor. Basic microbiology and/or parasitology strongly recommended. 2 hrs. lecture; 2 hrs. lab. Same as FISH 7424. Identification, pathogenesis, and control of viral, bacterial, and parasitic agents causing diseases in marine and aquatic animals; emphasis on those affecting aquacultural species.

7426 Antimicrobial and Chemotherapeutic Agents (3) V Prereq: introductory microbiology and biochemistry. 2 hrs. lecture; 2 hrs. lab. Mechanism of action; structure/function of antimicrobial and chemotherapeutic agents.

7428 Molecular Immunology (2) V Prereq: introductory course in immunology or consent of instructor. Humoral factors of immune reactions; their origin, species variation, functions, interactions with the antigens and cellular elements of immune response.

7429 Molecular Immunology Laboratory (1-3) V Prereq: credit or registration in VMP 7428 or equivalent. 2-6 hrs. lab. Laboratory techniques for studying humoral factors of immune reactions, their quantitation, identification, purification, and other in vitro testing.

7430 Veterinary Clinical Immunology (3) V Prereq: D.V.M. degree and a course in immunology, or consent of instructor. 2 hrs. lecture; 3 hrs. lab. For graduate students and residents. Clinical and laboratory diagnosis and treatment of immunologically mediated and selected infectious diseases; laboratory tests of clinical immunology and serology.

7432 Cell and Organ Culture Techniques in Biomedical Research (3) S Prereq: MBIO 4180 or consent of instructor. 1 hr. lecture; 4 hrs. lab. Application of cell and organ culture techniques to current research problems.
VETERINARY PATHOLOGY (VP)

The D.V.M. degree is a prerequisite for the following courses.

7501 Cellular Pathology (3) V Prereq: consent of instructor. Basic mechanisms of disease; pathogenesis and etiology of lesions and how they are expressed microscopically, histologically, biochemically, and electron microscopically.

7502 Advanced Veterinary Pathology (5) V Prereq: consent of instructor. 2 hrs. lecture; 6 hrs. lab. Study of digestive, integument, urinary, and hepatic mechanisms of disease using electron and light microscopy; pathogenesis of specific diseases stressed.

7504 Necropsy Techniques (1-4) F,S,Su Prereq: consent of instructor. Necropsy of animals submitted to the department; case work-up includes light microscopy of animal tissues, biochemical and hematological evaluations necessary for an accurate diagnosis, and completion of gross and microscopic descriptions.

7505 Advanced Clinical Pathology (4) V Prereq: consent of instructor. 2 hrs. lecture; 4 hrs. lab. Hematology, urinalysis, serum biochemic data, cytology; advanced evaluation of body fluids with emphasis on diagnosis; techniques of histology, urinalysis, serum profile testing, exfoliative cytology, and genetic analysis.

VETERINARY PHYSIOLOGY, PHARMACOLOGY, AND TOXICOLOGY (VPT)

2001 Introduction to Pharmacology (3) F,S Prereq: CHEM 1201 and 1202; and either BIOL 1001 or ZOOL 1001. Basic concepts; absorption, distribution, mechanism of action, and excretion of drugs; classification of therapeutic compounds based on their mechanisms and sites of action in mammalian hosts; classical therapeutic applications.

3001 Fundamentals of Toxicology (3) F Prereq: senior standing with 8 hrs. of chemistry and 8 hrs. of biological sciences. Fundamental principles of toxicology related to mammalian systems; major groups of toxic agents, the pathophysiology they elicit, and applications of toxicology.

7602 Comparative Pharmacology (4) F Prereq: vertebrate physiology, biochemistry, and consent of instructor. 3 hrs. lecture; 4 hrs. lab. Comparative medical study of pharmacology; mechanism of action of drugs, pharmacodynamic principles, and therapeutic utility of major classes of drugs.

7603 Clinical Toxicology (3) S Prereq: VPT 4001 and consent of instructor. Pathophysiology of various clinically important toxicants; prevention, diagnosis, and treatment of common intoxications in domestic animals.

7604 Xenobiotic Disposition and Activation (3) S-E Prereq: VPT 7613. Principles covering the pharmacodynamics of drugs and other xenobiotic chemicals; comparative aspects of disposition and activation of chemicals to toxic agents.

7605 Circulatory Transport and Control (3) V Prereq: ZOOL 4160 or equivalent. 3 hrs. lecture/demonstration. Biophysical approach to structure and function of the circulatory system in health and disease; fluid dynamics, solute transport, regional hemodynamics, neurohumoral controls, and analysis of circulatory function in specific cardiovascular disease conditions.

7606 Principles of Electrophysiology (3) V Prereq: MATH 1550; ZOOL 1001 or equivalent; and consent of instructor. 2 hrs. lecture; 3 hrs. lab. Circuit analysis of electrical analogues of biological systems, linear cable properties of cylindrical and spherical cells, excitation and conduction in excitable cells; transport across excitable and natural membranes.

7607 Advanced Respiratory Physiology (3) V Prereq: ZOOL 4160 or equivalent. 2 hrs. lecture; 3 hrs. lab. Biophysical phenomena of pulmonary functions and structure; gas transport and exchange; neurohumoral, chemical states; special consideration to experimental procedures and techniques.

7608 Environmental Reproductive Physiology in Farm Animals (2) V Prereq: ANSC 4018 or DARY 4044 or equivalent. 2 hrs. lecture/demonstration. Effects of climate, nutrition, social environment, and production demands on reproductive performance; techniques for evaluation of environmental effects through use of a climate chamber.

7609 Biomedical Instrumentation and Physiological Control Systems (3) V Prereq: ZOOL 4160 or equivalent. 2 hrs. lecture; 2 hrs. lab. Quantitation of physiological systems using current engineering techniques for physiological data acquisition and systems analysis; techniques for transducing physiological data with demonstrations.

7610 Advanced Veterinary Physiology of Special Homeostatic Mechanisms (5) F Prereq: consent of instructor. 4 hrs. lecture; 3 hrs. lab. Physiological mechanisms underlying the cardiovascular, pulmonary, renal, and reticuloendothelial systems; emphasis on system control.

7611 Advanced Veterinary Physiology of Digestive, Endocrine, and Reproductive Systems (6) S 5 hrs. lecture; 3 hrs. lab. Physiological mechanisms underlying the digestive, endocrine, and reproductive systems; system control.

7612 Advanced Veterinary Neurophysiology (2) S Prereq: VPT 7610 or equivalent. 1 hr. lecture; 3 hrs. lab. The nervous system; physiological mechanisms of the neuron, muscle, peripheral, autonomic, and central nervous systems; progression from simple to complex systems, with emphasis on integration of various components and systems.
7613 Metabolic Processes in Pharmacology and Toxicology (2) F-O Prereq: BCH 4087 and VPT 4001; or equivalents. Biochemical concepts applied to toxicology and pharmacology of the enzyme systems that modify xenobiotics either for activation or elimination.

7614 Central Nervous System Physiology (3) V Prereq: VPT 7612 or equivalent. Neurotransmitter mechanisms, chemistry, and distribution; synaptic physiology of selected brain regions.

7615 Pulmonary Pharmacology (3) V Prereq: VPT 7602. Mechanisms of action and applications of various drugs used in respiratory disorders.

7616 Methods in Neuroscience Research (2) V Prereq: VPT 7612 or consent of instructor. 1 hr. lecture; 3 hrs. lab. Theory and practice of electroencephalography, electromyography, averaged evoked potentials, electrode construction, stereotoxic surgery, lesioning, intracerebral stimulation and infusion, and other current techniques in neuroscience research.

7618 Organ System Toxicology (3) F-E Prereq: VPT 7604 or consent of instructor. Toxicology of major organs and systems including the neurologic, hepatic, renal, pulmonary, and reproductive; concept of target organ toxicology with mechanistic study of the pathophysiology of classic toxins.

7619 Principles of Safety Evaluation (2) S-O Prereq: EXST 7004, VPT 4001, and consent of instructor. Theory of safety evaluation procedures employed by industry, government, and academia; practical application, utility, and limitations of common protocols for assessing the adverse effects of chemicals on living systems.

VETERINARY SCIENCE (VETS)

3001 Herd Health and Disease Management of Domestic Farm Animals (3) S Herd health program of preventive medicine for farm livestock; disease processes, specific diseases, epidemiology, and rational approaches to therapeutic principles and control of diseases.

3002 Practical Work with Livestock (1) F,S 3 hrs. lab. Dehorning, castration, branding, methods of restraint, and methods for control of parasites.

4004 Poultry Sanitation, Diseases, and Parasites (3) S Prereq: MBIO 2051. Poultry diseases and parasites of greatest economic importance.

4023 Diseases of Game and Fur-Bearing Animals and Birds (3) S Characteristics of important diseases and parasites of game animals and birds.

4041 Animal Physiology (3) F Physiology of farm animals.

VOCATIONAL AGRICULTURAL EDUCATION (VAED)

2070 Introduction to Agricultural Education (1) F Field visits required. History, objectives, and organization of vocational agriculture in secondary schools.

3017 Methods of Teaching Vocational Agriculture/Agribusiness (3) F Fundamental principles underlying vocational instruction and vocational classroom/laboratory management including provisions for multicultural and special-needs students; problems of vocational instruction; emphasis on vocational agriculture/agribusiness programs.

3018 The All-Day Class Program (3) S Selection and organization of vocational agriculture/agribusiness teaching units; procedures in building the school phase of a total vocational agriculture/agribusiness program; training of contest teams; reporting procedures required by local, state, and federal governmental agencies; requirements of multicultural and other special-needs students.

3019 Out-of-School Youth and Adult Classes in Vocational Agriculture (2) F Field experience required. Organization, subject matter, and methods in youth and adult classes in vocational agriculture/agribusiness; considerations necessary for planning these programs for multicultural and other special-needs students.

3020 Observation and Student Teaching (9) Prereq: senior standing, VAED 3017, 3018, 3095, and at least a 2.50 gpa. Field fee. Each student is required to spend 9 full weeks in the field at an approved department of vocational agriculture in the state. Student teaching centers with multicultural and other special-needs students will be used.

3095 Supervised Occupational Experience Programs (4) 2 hrs. lecture; 4 hrs. per week in an approved nonfarm agricultural business and/or high school vocational agriculture department for a minimum of 15 weeks. Planning, implementing, and supervising occupational experience programs.

4016 Organization and Management of Agricultural Mechanics Programs (2) S,Su-E Prereq. (for vocational agricultural education majors): AGM 2059; nonmajors by consent of instructor. 4 hrs. lab. Teaching methods, planning, organizing, and managing the agricultural mechanics portion of the high school vocational agriculture program.

7002 Foundations of Vocational Teaching Techniques (3) S,Su Principles underlying the vocational teaching/learning process; use of varied and effective vocational teaching methods and strategies; methods and strategies for working with multicultural and other special-needs students.

7007 State Organization and Administration of Vocational Agriculture/Agribusiness (3) V Theory and practices of organization, leadership, and administration for effective vocational agriculture leadership.

7008 State Supervision of Vocational Agriculture/Agribusiness (3) V Principles and problems of supervision of vocational teaching from the state level; development of techniques and strategies for the improvement of instruction.

7012 Teacher Education in Vocational Agriculture/Agribusiness (3) Su-O Development and functions of the comprehensive vocational agriculture/agribusiness teacher education program; needs of multicultural and other special-needs students.

7017, 7018 Advanced Agricultural Education (3, 3)

7019 Principles and Practices in Training for Nonfarm Agriculture and Agribusiness (3) Su Principles and applied practices of conducting the adult education component of the total vocational agriculture/agribusiness program; special practices used in working with multicultural and other special-needs students.
VOCATIONAL EDUCATION (VED)

2000 Beginning Typewriting (3) 2 hrs. lecture; 3 hrs. lab.
2001 Intermediate Typewriting (3) 2 hrs. lecture; 3 hrs. lab.
2100 Beginning Shorthand (3) 2 hrs. lecture; 3 hrs. lab. Basic principles of reading and writing shorthand; dictation of practiced material.
2101 Intermediate Shorthand (3) 2 hrs. lecture; 3 hrs. lab. Building dictation speed with unpracticed material; shorthand principles.
2620 Practicum in Business and Office Education (2) One-hour weekly conference with instructor to discuss problems relative to student's job. Actual office experience of at least 10 hrs. per week providing on-the-job training in a clerical, secretarial, or bookkeeping position.
2621 Practicum in Distributive Education (2) One-hour weekly conference with instructor to discuss problems relative to student's job. Students work at least 10 hrs. per week in a selling position in an approved retail selling establishment.
3100 Advanced Shorthand (3) 2 hrs. lecture; 3 hrs. lab. Continuation of VED 2101; emphasis on development of speed in dictation and transcription.
3140 Materials and Methods in Secondary Business and Office Occupations Education (3) Prereq: EDCI 2040 and credit for or registration in 25 of the 28 sem. hrs. required for a teaching minor in typing and bookkeeping or 27 of the 30 sem. hrs. required for a teaching minor in typing and shorthand. 2 hrs. lecture, 2 hrs. lab/field experience in multicultival settings.
3141 Materials and Methods in Secondary School Distributive Education (3) Prereq: EDCI 2040 and credit for or registration in 27 of the 30 sem. hrs. required for a teaching minor in secondary school distributive education, 2 hrs. lecture, 2 hrs. lab/field experience in multicultural settings.
4140 Teaching Cooperative Education (3) Prereq: consent of instructor.
4540 Youth Leadership Development (3) F,Su Principles and practices of leadership development in youth organizations; analysis of youth organizations; planning and conducting such programs; organization, implementation, and evaluation of individual and group leadership development.
4700 History of Vocational Education (3) F,Su-E Review and synthesis of events and organizations which contributed to the development of vocational education.
7000 Scientific Methods in Vocational Education (3) F Basic principles involved in formulating educational problems, stating hypotheses, designing research strategies, and reporting findings utilizing the historical, descriptive, experimental, and related research methodologies; emphasis on development of research competencies of persons involved in vocational education and related areas.
7040 Foundations of Business Education (3) Prereq: specialization in business education or consent of instructor.
7145 Improvement of Instruction in Typewriting, Shorthand, and General Business (3)
7146 Improvement of Instruction in Bookkeeping and Clerical Office Practice (3)
7200 Principles of Practical Arts and Vocational Education (3) F,Su-O Practical arts and vocational education in programs below the baccalaureate level; relationships of these programs to career education, general education, and society.
7300 Current Problems and Issues in Vocational Education (1-3) F,S,Su May be repeated for credit for a maximum of 6 sem. hrs. Current problems and issues affecting all aspects of vocational education; organizing instruction to meet vocational needs of individuals, including gifted and disadvantaged; class organization, program coordination, cooperative education, supervised work experiences, shop organization, scheduling, current research, state and national legislation, trends, and curriculum development.
7301 Orientation to the World of Work (3) Su See EDAF 7301.
7332 Educational and Occupational Information (3) F,Su Also offered as EDAF 7332. Sources, classification, and analysis of educational, occupational, and social information; occupational trends, local occupational surveys, and use of occupational information by teachers, guidance counselors, and others.
7334 Vocational Counseling (3) S,Su-E See EDAF 7334.
VOCATIONAL HOME ECONOMICS EDUCATION (VHEE)

2001 Introduction to Home Economics Education (3) 2 hrs. lecture; 2 hrs. lab. History, philosophy, and purposes of home economics education; formal and informal multicultural home economics programs explored through interviews, observations, and participation.

2008 Individual Field Experience in Occupational Home Economics (1-3) Prereq: consent of instructor. Maximum of 3 sem. hrs. of credit may be earned in each occupational area. Pass-fail grading. Individual, supervised, field-based study in selected businesses and industries to learn business practices, procedures, standards, and regulations in a specific occupational home economics area.

3001 Methods in Home Economics Education (3) Prereq: 2.20 gpa. 2 hrs. lecture; 2 hrs. lab. Open only to junior and senior vocational home economics education majors. Instructional methods and organization of educational programs in home economics; emphasis on secondary school programs in home economics with students from varied economic and cultural backgrounds.

3003 Student Teaching in Home Economics Education (9) Prereq: VHEE 3001 or 4004. Transfer students must have attended LSU one semester before enrolling. Transfer credit for student teaching is not accepted. 2.20 gpa required before registering. Participation for 12-15 weeks in secondary school programs in a selected home economics department composed of students of multicultural and varied socioeconomic levels.

4001 Curriculum and Evaluation in Home Economics (3) Prereq: VHEE 3001 or 4004. Curriculum development and evaluation processes; construction and use of teaching-learning aids, media, home economics youth organizations, and purposes and techniques of evaluation as related to varied cultural and socioeconomic levels.

4002 Adult and Nonformal Home Economics Education (3) 2 hrs. lecture; 2 hrs. lab. Working with adults and youth in community agencies and other programs with varied clientele outside the formal school system.

4003 Independent Reading and Research in Vocational Home Economics Education (1-3) Prereq: consent of director and instructor. May be repeated for credit for a maximum of 3 sem. hrs. Students are responsible for registering with a faculty member with whom they will select the area of reading and research. Faculty-directed individual study.

4004 Methods in Home Economics Education for Noneducation Majors (3) 2 hrs. lecture; 2 hrs. lab. Open to senior and graduate home economics majors. Methods and organization of home economics educational programs outside the secondary school which incorporate various socioeconomic levels.

4007 Organization and Administration of Home Economics Occupational Programs (3) Prereq: VHEE 2001 or equivalent. Principles of organizing and operating Home Economics Related Occupational (HERO) programs; emphasis on developing student employability in wage earning areas of home economics; includes program standards, requirements, and procedures, curriculum, public relations, methods, teaching materials, and evaluation of preparatory (in-school laboratory) and cooperative home economics programs.

4008 Advanced Individual Field Experience in Occupational Home Economics (1-3) Prereq: consent of instructor. Maximum of 3 sem. hrs. of credit may be earned in each occupational area. Pass-fail grading. Advanced individual, supervised, field-based study in selected businesses and industries to learn management strategies, personnel supervision, promotion techniques, and executive planning in a specified occupational home economics area.

4009 Special Topics in Vocational Home Economics Education (1-3) Prereq: consent of instructor. May be repeated for credit for a maximum of 6 sem. hrs. Current practices and technological advances in vocational home economics; topics to be announced.

7001 Curriculum Study (3) Curriculum development in home and family life education for multicultural groups.

7002 Evaluation (3) Principles and procedures of evaluation in developing, directing, and appraising effective home economics programs for diverse groups.

7003 Supervision in Home Economics Education (3) Open to experienced teachers in home economics. Philosophy, principles, and procedures in supervision of student teaching and home economics programs.

7004 Home Economics in Higher Education (3) Open to graduate students in home economics education, home economics, and related areas who are preparing for college teaching, research, and service.

7005 Current Problems in Home Economics Education (1-4) Prereq: professional experience following the B.S. degree. May be repeated for credit for a maximum of 6 sem. hrs. Current professional educational problems in the field of home economics.
vocational home economics education selected from one or more of the following areas: curriculum, evaluation, philosophy, supervision, instruction, equipment, departmental planning, occupational programs in home economics.

VOCATIONAL TRADE AND INDUSTRIAL EDUCATION (VTIE)

Approved trade experience is prerequisite to registration for all courses in vocational trade and industrial education. The courses will be offered as demand justifies.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2070</td>
<td>Introduction to Vocational Trade and Industrial Education (3)</td>
<td>V</td>
</tr>
<tr>
<td>2071</td>
<td>Safety Practices and Industrial Hygiene (3)</td>
<td>V</td>
</tr>
<tr>
<td>2072</td>
<td>Principles of Teaching Vocational Trade and Industrial Education (3)</td>
<td>V</td>
</tr>
<tr>
<td>2073</td>
<td>Preparation of Instructional Materials (3)</td>
<td>V</td>
</tr>
<tr>
<td>2074</td>
<td>Vocational Selection and Placement (3)</td>
<td>V</td>
</tr>
<tr>
<td>2075</td>
<td>Occupational Analysis (3)</td>
<td>V</td>
</tr>
<tr>
<td>2076</td>
<td>Management of Vocational Industrial Shops (3)</td>
<td>V</td>
</tr>
<tr>
<td>2077</td>
<td>Testing in Vocational Trade and Industrial Education (3)</td>
<td>V</td>
</tr>
<tr>
<td>3079</td>
<td>Apprentice Teaching in Vocational Trade and Industrial Education (8)</td>
<td>V</td>
</tr>
</tbody>
</table>

WILDLIFE (WILD)

2031 Principles of Wildlife Management (2) F Wildlife conservation and management; ecology and management of wildlife in relation to the objectives of consumptive and non-consumptive interest groups.

4010 Ecology and Management of Fur Animals (2) S Ecology, management, life history, and anatomy of fur animals; fur marketing.

4011 Wildlife Management Techniques (3) S 2 hrs. lecture; 3 hrs. lab. Transportation fee. Wildlife literature; age and sex determination; habitat mapping, analysis, and evaluation; wildlife capture and marking techniques; population density, analysis, and evaluation.

4020 Taxonomy and Ecology of Aquatic Plants (3) See BOTY 4020.

4035 Forest Game and Range Management (3) See FOR 4035.

4061 Selected or Assigned Wildlife Problem (1-4) F,S,Su May be repeated for credit for a maximum of 6 sem. hrs.

7001 Research Methodology (3) F See FOR 7001.

7010 Ecology and Management of Birds and Small Mammals (3) F 2 hrs. lecture; 3 hrs. lab. Transportation fee. Ecology and management of birds and small mammals of North America; upland game species indigenous to the southeastern U.S.

7011 Ecology and Management of Large Mammals (3) S 2 hrs. lecture; 3 hrs. lab. Transportation fee. Management and ecology of large mammals of North America; game species indigenous to the southeastern U.S.

7012 Ecology and Management of Waterfowl (3) F 2 hrs. lecture; 3 hrs. lab. Transportation fee. Waterfowl behavior: descriptions of breeding and wintering habitat; habitat and population management; descriptions of associate game species.

7013 Wildlife Population Dynamics (3) S 2 hrs. lecture; 2 hrs. lab. Theories of population growth and regulation, population interaction, life tables, mortality rate calculation; band data analysis; population modeling.

7018 Habitat Management Principles (3) S-E Principles of management applied to habitats, communities, populations, and species; habitat evaluation; endangered species; mitigation; global trends of habitat quality and change.

7070 Seminar (1) F,S,Su May be repeated for credit. Also offered as FISH 7070. Current topics in wildlife management and fisheries biology.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Research Problems in Wildlife (1-3) May be repeated for credit. Pass-fail grading.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.

ZOOLOGY (ZOOL)

1001 Introductory Zoology (4) 3 hrs. lecture; 3 hrs. lab. Credit will not be given for both this course and BIOL 1001 and 1003. Zoology majors must take ZOOL 1001 and 1002, not BIOL 1001, 1002, 1003, 1004.

1002 Introductory Zoology (4) 3 hrs. lecture; 3 hrs. lab. Credit will not be given for both this course and BIOL 1001 and 1003. An honors course, ZOOL 1003, is also available.

1003 HONORS: Introductory Zoology (4) Same as ZOOL 1002, with special honors emphasis for qualified students.

2015 Genetics and Society (3) See BOTY 2015.

2152 Comparative Anatomy of the Vertebrates (4) Prereq: 8 sem. hrs. of introductory zoology. 2 hrs. lecture; 6 hrs. lab.

2153 Principles of Genetics (3) Prereq: 6 sem. hrs. of biology or equivalent. For students majoring in science. Fundamental laws of heredity as applied to both plants and animals.

2154 Principles of Genetics Laboratory (2) Prereq: credit or registration in ZOOL 2153. 1 hr. lecture; 3 hrs. lab. Lab to accompany ZOOL 2153.

2160 Human Physiology (3) May not be taken for credit by zoology majors or premedical students. Elements of human physiology; controls and functions of the various organ systems.
2161 Human Physiology Laboratory (1) Prereq: credit or concurrent enrollment in ZOOL 2160 and one year of chemistry. 3 hrs. lab.

3090 Cell Biology (3) Prereq: 12 sem. hrs. of zoology and one year of chemistry.

3156 Vertebrate Embryology (4) Prereq: 11 sem. hrs. of zoology. 3 hrs. lecture; 3 hrs. lab.

3950, 3951 HONORS: Research for Honor Students in Zoology (2-4, 2-4) Prereq: 15 hrs. of zoology with a 3.00 gpa. 1 hr. conference; 3, 6, or 9 hrs. lab. May not be counted as a 3000-level course with laboratory.

4095 Marine Field Ecology (4) See MRSC 4095.

4104 Histology (4) Prereq: 12 sem. hrs. of zoology or equivalent. 2 hrs. lecture; 6 hrs. lab.

4105 Parasitology (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab. Field service fee.

4121 Physiological Genetics (4) Prereq: ZOOL 2153 and 2154; or equivalents. 2 hrs. lecture; 6 hrs. lab. Laboratory based primarily on Drosophila and Neurospora.

4132 Eukaryotic Molecular Genetics (3) Prereq: ZOOL 2153; BCH 4084 recommended. Same as BOTY 4132 and MBIO 4132. Molecular genetics, primarily in higher eukaryotes; gene structure and packaging in chromosomes; gene transcription and mRNA processing; translation; gene regulation; genetics in development; genetics of cancer; immunogenetics; genetic engineering in eukaryotes.

4140 Animal Evolution (3) Prereq: ZOOL 2153. Principles and processes in evolution of species and higher categories; emphasis on vertebrates.

4141 Mammalogy (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab. Field service fee. Biology of mammals; origins, adaptive radiations, and ecology.

4142 Ornithology (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab and field work. Field service fee.

4145 Ichthyology (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab and field work. Field service fee. Also offered as FISH 4145. Biology of fishes; evolution, classification, and ecology.

4146 Herpetology (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab and field work. Field service fee. Taxonomy and natural history of amphibians and reptiles.

4149 Aquatic Invertebrate Zoology (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab. Field service fee. Aquatic invertebrates; identification, distribution, and ecology.

4152 Protozoology (4) Prereq: 12 sem. hrs. of zoology or equivalent. 2 hrs. lecture; 6 hrs. lab. Cytological, ecological, and physiological phenomena of the protozoa.

4153 Principles of Ecology (3) Prereq: 8 sem. hrs. of introductory zoology, botany, or biology with lab. Also offered as BOTY 4153. Fundamental ecological principles governing the structure and function of populations, communities, and ecosystems; comparative habitat ecology.

4154 Invertebrate Zoology (4) Prereq: 8 sem. hrs. of introductory zoology or biology with laboratory; zoology recommended. 2 hrs. lecture; 6 hrs. lab. Field service fee.

4155 Environmental Physiology (4) Prereq: 12 sem. hrs. of zoology. 3 hrs. lecture; 3 hrs. lab. Physiological adaptations of animals to physical and chemical parameters of the environment.

4157 Cellular Physiology (4) Prereq: 12 sem. hrs. of zoology; and organic chemistry. 3 hrs. lecture; 3 hrs. lab. Physiological systems in cells and tissues.

4158 Endocrinology (3) Prereq: 12 sem. hrs. of zoology.

4160 Mammalian Physiology (4) Prereq: 12 sem. hrs. of zoology; and organic chemistry. 3 hrs. lecture; 3 hrs. lab. Principles of mammalian systems physiology; emphasis on the human.

4162 Marine Communities (4) Prereq: ZOOL 4145 or 4154 or equivalent. 3 hrs. lecture; 3 hrs. lab and field work.

4190 History of Biology (2) Prereq: senior standing or consent of instructor.

4253 Principles of Ecology Laboratory (2) Prereq: credit or registration in ZOOL 4153/BOTY 4153 or equivalent. 1 hr. lecture; 3 hrs. lab. Also offered as BOTY 4253. Field and laboratory methods in general ecology; techniques and concepts of ecology.

4299 Genetics of the Evolutionary Process (3) See BOTY 4299.

4647 Marine Vertebrate Zoology (6) Su only Prereq: 16 sem. hrs. of zoology including comparative anatomy. Six weeks at Gulf Coast Research Laboratory, Ocean Springs, Mississippi.

4673 Marine Invertebrate Zoology (6) Su only Prereq: 16 sem. hrs. of zoology. Six weeks at Gulf Coast Research Laboratory, Ocean Springs, Mississippi. Biology of the marine representatives of all phyla from Protozoa through the protostomes.

7083 Population and Community Ecology (3) See BOTY 7083.

7118 Ethology (4) Prereq: consent of instructor. 2 hrs. lecture; 6 hrs. lab and field work. Evolutionary basis of animal behavior.

7120 Marine Ecology (3) Prereq: consent of instructor. 2 hrs. lecture; 3 hrs. lab. and field work. Also offered as MRSC 7317. Physical, chemical, and biological environmental factors affecting distribution of marine fauna; communities representative of each of the ecological subdivisions of the world's oceans treated with respect to species composition, food webs, and seasonal changes; human impact on the marine environment.

7130 Environmental Physiology of Estuarine Animals (4) Prereq: consent of instructor. 3 hrs. lecture; 3 hrs. lab. Effects of salinity, temperature, and dissolved oxygen on the physiology of estuarine fauna.

7147 Selected Topics in General Zoology (3) Prereq: consent of instructor. May be taken twice for credit when topics vary. Detailed treatment of special areas of zoology.

7148 Selected Topics in Animal Ecology (3) Prereq: consent of instructor. May be taken twice for credit when topics vary. Detailed treatment of special areas of ecology.

7152 Advanced Vertebrate Anatomy (4) Prereq: ZOOL 2152. 2 hrs. lecture; 6 hrs. lab.

7153 Mutagenesis (3) Prereq: ZOOL 2153 and consent of instructor. Mechanisms of mutation; methods of detecting mutations; comparisons of effect of mutagenic agents among various test organisms.
7154 Advanced Genetics Laboratory (3) Prereq: ZOOL 2154 and consent of instructor. 1 hr. lecture; 6 hrs. lab. Experiments with Drosophila melanogaster to study genetic and cytological variations due to deficiencies, duplications, inversions, rings, translocations, transpositions, compound chromosomes, and Y derivatives; both classical genetic loci and loci controlling electrophoretic mobility of enzymes and other proteins used; synthesis designed to meet specific requirements for mutational and biochemical research.

7156 Experimental Embryology (4) Prereq: ZOOL 3156 or equivalent. 3 hrs. lecture; 3 hrs. lab.

7158 Selected Topics in Comparative Physiology (3) Prereq: consent of instructor. May be taken twice for credit when topics vary. Special areas of physiology.

7160 Histochemistry and Cytchemistry (4) Prereq: 3 sem. hrs. of biochemistry or equivalent. 2 hrs. lecture; 6 hrs. lab.

7171 Physiological Rhythms (3) Prereq: consent of instructor. 1 hr. lecture; 4 hrs. lab. Role of exogenous and endogenous rhythms in regulation of physiological systems.

7177 Neurosensory Physiology (4) Prereq: ZOOL 4155 or 4157 or 4160. 2 hrs. lecture; 6 hrs. lab. Physiology of nerve and sensory receptors; vertebrate systems and independent laboratory investigation.

7253 Population Genetics (3) Prereq: ZOOL 2153 or equivalent, and one semester of calculus or statistics. Genetic variation in natural populations; application of Hardy-Weinberg law; effects of selection, inbreeding, random drift, migration, and mutation on gene frequencies.

7648 Museum Field Expedition (6) Prereq: consent of instructor. One semester in the field under direction of the Museum of Natural Science staff.

7701 Electron Microscopy (2) Same as BOTY 7701. ME 7701, GEOL 7701, MBIO 7701. Transmission and scanning electron microscopy and x-ray analysis of biological and non-biological materials; theory, operation, and application of the instruments.

7702 Transmission Electron Microscopy Laboratory: Biological Materials (3) S Prereq: credit or registration in ZOOL 7701 or equivalent. 9 hrs. lab. Same as BOTY 7702 and MBIO 7702. Preparation of biological specimens for transmission electron microscopy; use of the electron microscope.

7703 Scanning Electron Microscopy Laboratory: Biological Materials (2) S,Su Prereq: credit or registration in ZOOL 7701 or equivalent. 6 hrs. lab. Same as BOTY 7703 and MBIO 7703. Preparation of biological specimens for scanning electron microscopy; use of the S-500 SEM.

7921 Seminar in General Zoology (1) May be repeated for credit.

7924 Seminar in Vertebrate Zoology (1) May be repeated for credit.

7926 Seminar in Invertebrate Zoology (1) May be repeated for credit.

7928 Seminar in Embryology and Developmental Biology (1) May be repeated for credit.

7931, 7932 Seminar in Physiology (1,1) Each course may be repeated for credit.

7934, 7935 Seminar in Genetics (1,1) Each course may be repeated for credit.

7936, 7937 Seminar in Ecology (1,1) Each course may be repeated for credit.

7938, 7939 Seminar in Systematics, Evolution, and Zoogeography (1,1) Each course may be repeated for credit.

7940, 7941 Seminar in Parasitology (1,1) Each course may be repeated for credit.

7942 Seminar in Morphology (1) May be repeated for credit.

7944, 7945 Seminar in Cell Biology (1,1) Each course may be repeated for credit.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.

8900 Research (2-8) Prereq: consent of instructor. 1 hr. conference; 3 hrs. lab. per sem. hour. May be repeated for credit for a maximum of 8 sem. hrs.

9000 Dissertation Research (1-12 per sem.) "S"/"U" grading.
BOARD OF SUPERVISORS

TERM EXPIRES ON JUNE 1*

Officers

JOHN H. CADE, JR., Alexandria, Chairman 1986
HELEN G. CRAWFORD, New Orleans, Vice-Chairman 1988

Members

JACK A. ANDONIE, Metairie, 1990
SHELDON D. BEYCHOK, Baton Rouge 1990
SIMONE CHARBONNET, New Orleans 1988
CHARLES V. CUSIMANO, Metairie 1988
GORDON E. DORE, Crowley 1986
NORRIS V. FITZMORRIS, New Orleans 1988
SAM J. FRIEDMAN, Natchitoches 1990
CAMILLE F. GRAVEL, JR., Alexandria 1990
JOHN J. MCKEITHEN, Columbia 1990
RUTH L. MILLER, Jennings 1988
KEVIN R. MOLLOY, Shreveport (student member) 1985
JAMES R. PELTIER, Thibodaux 1986
LOUIS C. PENDLETON, Shreveport 1986
PATRICK F. TAYLOR, New Orleans 1986
BERT S. TURNER, Baton Rouge 1988
DALTON J. WOODS, Shreveport 1988

ALLEN A. COPPING, President of the LSU System; Secretary to the Board
KATHY E. MASCARO, Assistant Administrative Secretary

*Under the Constitution of the State of Louisiana, 17 members are appointed to the Board of Supervisors by the Governor; Act 2 of the 1975 extraordinary session of the Louisiana Legislature authorized the appointment of one student member. The term of appointment of new members may not exceed six years; the student member serves a one-year term. This list reflects Board membership at the time of publication of this catalog. Officers of the Board serve a one-year term beginning in July.
ADMINISTRATION OF THE UNIVERSITY SYSTEM

ALLEN A. COPPING, D.D.S., President
DUDLEY B. FRICKE, M.S., Executive Assistant to the President
W. W. McDOUGALL, B.S., Vice-President for Administration
JOHN J. FARRELL, JR., B.S., Assistant Vice-President for Budget and Finance
CHARLES L. MARTIN, B.Arch., Assistant Vice-President for Facility Planning
JOSEPH M. REYNOLDS, Ph.D., Vice-President for Academic Affairs
JOHN R. WALKER, Ph.D., Assistant Vice-President for Academic Affairs

LSU ADMINISTRATIVE OFFICES

JAMES H. WHARTON, Ph.D., Chancellor
Office of Budget and Planning and Comptroller—JERRY J. BAUDIN, Ph.D., Director and Comptroller
Athletic Department—ROBERT E. BRODHEAD, A.B., Athletic Director

Office of Academic Affairs

CAROLYN H. HARGRAVE, Ph.D., Vice-Chancellor and Provost
A. ROLAND DOMMERT, D.V.M., Ph.D., Associate Vice-Chancellor
HUEL D. PERKINS, Ph.D., Assistant Vice-Chancellor
Division of Academic Services—ALBERT L. CLARY, M.A., Director
College of Agriculture—PRENTISS E. SCHILLING, Ph.D., Dean
College of Arts and Sciences—HENRY L. SNYDER, Ph.D., Dean
College of Basic Sciences—RONALD J. W. HENRY, Ph.D., Dean
College of Business Administration—JAMES B. HENRY, Ph.D., Dean
Division of Continuing Education—FRITZ A. McCAMERON, Ph.D., Dean
College of Design—JERRY L. NIELSON, B.A., Dean
College of Education—CHARLES W. SMITH, Ph.D., Dean
College of Engineering—RICHARD A. MATULA, Ph.D., Dean
General College—JACK B. PARKER, Ed.D., Dean
Junior Division—LAURA F. LEMOINE, Ph.D., Dean
Middleton Library—SHARON A. HOGAN, M.A.L.S., Director
School of Music—DANIEL P. SHER, Ed.D., Acting Dean
LSU Press—LESLIE E. PHILLABAUM, M.A., Director
School of Veterinary Medicine—EVERETT D. BESCH, D.V.M., Ph.D., Dean

Office of Administrative Services

JAMES W. REDDOCH, Ph.D., Vice-Chancellor
DEE L. GLUECK, B.Arch., Assistant Vice-Chancellor
RONALD D. HAY, M.S., Assistant Vice-Chancellor for Administrative Information Systems
JOHN M. TYLER, Ph.D., Assistant Vice-Chancellor for Computing Services

Campus Mail Service—LOUIS E. BURIEGE, Head
Office of Campus Safety—EUGENE F. EARP, B.S., C.S.P., Safety Officer
Office of Equal Opportunity Programs—RANDY LOPEZ, B.A., Director
Office of Parking, Traffic, and Transportation—GARY S. GRAHAM, B.A., Director
Office of Personnel Services—EVANS L. ROBERTS, JR., B.S., Director
LSU Police Department—GARY T. DURHAM, B.A., Chief
System Network Computer Center—JOHN M. TYLER, Ph.D., Director
Telephone Exchange—GEORGE W. ELLIS, B.S., Coordinator
Office of Business Affairs

ODRIE ORTEGO, B.S., Vice-Chancellor
PATRICK R. LANDRY, B.S., Associate Vice-Chancellor
RALPH E. GOSSARD, JR., M.B.A., M.A.J., Assistant Vice-Chancellor
KENNETH A. LAVESPERE, M.A., Assistant Vice-Chancellor

Office of Accounting Services—PATRICK R. LANDRY, B.S., Director
Assembly Center—JEFF G. ELLIOTT, JR., M.B.A., Director
Golf Course—ANTHONY A. MICHAEL, B.S., Manager
Graphic Services—CURTIS J. SIMMONS, B.S., Director
Office of Housing—J. BERT DAIGLE, B.S., Acting Director
Office of Physical Plant—ROBERT L. MARTIN, M.S., Director
Office of Purchasing—GRAHAM O. PEAZY, B.S., Director
Office of Residence Food Services—IRENE F. GARDEMAL, M.S., Director
Office of the Treasurer—DONNIE G. COPeland, B.S., Acting Treasurer
University Stores—DElWIN P. LACROIX, B.S., Acting Director

Office of Research

SEAN P. McGlynn, Ph.D., Vice-Chancellor
RALPH W. PIKE, JR., Ph.D., Associate Vice-Chancellor

Audubon Sugar Institute—JOSEPH A. POLACK, Sc.D., Director
Center for Energy Studies—GEORGE R. NEWKOME, Ph.D., Executive Director
Graduate School—WILLIAM J. COOPER, JR., Ph.D., Dean
Center for Latin American Affairs—RODOLFO J. AGUILAR, Ph.D., Director
School of Library and Information Science—KATHLEEN M. HEIM, Ph.D., Dean
Louisiana Geological Survey—CHARLES G. GROAT, Ph.D., State Geologist
Museum Complex—H. PARROTT BACOT, M.A., Executive Director
Division of Research Services—
School of Social Work—BRIJ MOHAN, Ph.D., Dean
Southern Review—JAMES OLNEY, Ph.D., Coeditor;
LEWIS P. SIMPSON, Ph.D., Coeditor
Center for Wetland Resources—JACK R. VAN LOPIK, Ph.D., Dean

Office of Student Affairs

LYNN L. PESSON, Ph.D., Vice-Chancellor
DAVID F. HULL, JR., Ed.D., Assistant Vice-Chancellor
M. MARGARET JAMESON, M.A., Assistant Vice-Chancellor

Office of the Dean of Students—JOHN R. BAKER, Ph.D., Dean
Office of International Students—ERIN L. SCHMIDT, M.A., Director
Division of Leisure Sports—JOHN V. REZNIK, Ph.D., Director
Office of Residence Life—RENEE J. NESBITT, M.Ed., Director
Student Health Center—BARRELLE N. ADDIS, M.D., Chief of Staff;
ARTHUR A. GOULAS, B.A., Director
Office of Student Media—JON E. FISHER, M.A.J., Director
LSU Union—THOMAS C. LILE, M.S., Director

Office of University Relations and Development

CHARLIE W. ROBERTS, JR., Ed.D., Vice-Chancellor
DAN E. BIVINS, III, B.A., Assistant Vice-Chancellor

Office of Alumni Relations—TONY GUSTWICK, B.B.A., Director
Office of Development—LLOYD N. MOON, JR., B.S., Director
Faculty Club—ROBERT C. LONG, Director
Office of Public Relations—DEAN M. LANDECHE, B.A.J., Acting Director
The faculty of the University is defined as full-time members of the academic staff having the rank of instructor or higher (or equivalent ranks).* The faculty, through the Faculty Council, shall establish curricula, fix standards of instruction, determine requirements for degrees, and generally determine educational policy, subject to the authority of the Board of Supervisors. The authorities and responsibilities of the Faculty Council have been delegated to the elected Faculty Senate.

DISTINGUISHED PROFESSORSHIPS

Alumni Professors

Selection as an Alumni Professor is based on reputation for excellence in instruction, especially in undergraduate teaching; record of active and continuing interest and participation in areas of professor-student relations; dedication to an academic field; and outstanding professional relationships with other faculty and staff members. Faculty members currently holding the title of Alumni Professors at LSU are as follows.

SAM ADAMS
HUBERT S. BUTTS
JESSE COATES (retired)
ARTHUR R. COLMER (retired)
BEVERLY J. COVINGTON (retired)
HERMAN E. DALY
JOHN L. DAVIDSON
GRESDNA A. DOTY
WILLIAM G. HAAG, JR. (retired)
ROBERT W. HECK

MERLIN T. HENDERSON (retired)
SAM B. HILLIARD
GEORGE G. KENT, JR. (retired)
JOHN L. LOOS
JAMES P. PAYNE, JR. (retired)
ROBERT S. REICH (retired)
CLAUDE L. SHAVER (retired)
DONALD E. STANFORD (retired)
EDWIN O. TIMMONS (retired)

*Section 1-2.2.a., Bylaws and Regulations of the Board of Supervisors.
Boyd Professors

Faculty members who are designated as Boyd Professors have attained national or international distinction for outstanding teaching, research, or other creative achievement. The Boyd Professorship is the highest professorial rank awarded by the University. Faculty members currently designated as Boyd Professor at LSU are as follows.

RICHARD D. ANDERSON (retired)  L. DALE NEWSOM (retired)
ALVIN L. BERTRAND (retired)    WILLIAM H. PATRICK, JR.
JOSEPH CALLAWAY                  WILLIAM A. PRYOR
JAMES M. COLEMAN                 JOSEPH M. REYNOLDS
MARY L. GOOD (retired)           ARTHUR J. RIOPELLE
RUDOLF HEBERLE (retired)         LEWIS P. SIMPSON
FRED B. KNIFFEN (retired)        SHIRLEY C. TUCKER (retired)
WEX S. MALONE (retired)          H. JESSE WALKER (retired)
WAYNE L. MATTICE                 PHILIP W. WEST (retired)
SEAN P. McGlynn                  ROBERT C. WEST (retired)

Other Distinguished Professorships

The William A. Read Professorship of English Literature and the Nicholson Professorship of Mathematics are comparable to the Boyd Professorship. The following faculty members currently hold these professorships.

Nicholson Professor of Mathematics—PIERRE E. CONNER, JR.
William A. Read Professor of English Literature—LEWIS P. SIMPSON

In addition to the above, the University’s other distinguished professorships and the faculty members who hold them are as follows:

LSU Foundation James C. Bolton Professor of Ports and Waterways—ANATOLY B. HOCHSTEIN
LSU Foundation Hopkins P. Breazeale Professor of Petroleum Engineering—ROBERT DESBRANDES
Campanile Charities Professor of Offshore Mining and Petroleum Engineering—ADAM T. BOURGOYNE, JR.
LSU Foundation Murphy J. Foster Professor of Computer Science—PETER P. CHEN
LSU Foundation Henry J. Voorhies Professor of English—JAMES OLNEY
Louisiana Bankers Association Chair of Banking—WILLIAM F. STAATS
Pan-American Life Insurance Company Professorship—ROBERT S. FELTON
Louisiana Real Estate Commission Chair of Real Estate—CLEMON F. SIRMANS, JR.

FACULTY*

DENNIS G. ABBEY, Associate Professor of Landscape Architecture. M.L.A., Harvard University.

JANE M. ABBOTT, Instructor in English. M.A., LSU.

YAHYA Z. ABDELBAKI, Professor of Veterinary Anatomy and Fine Structure. B.V.S., Cairo University Veterinary College (Egypt); Ph.D., Michigan State University.

PAUL L. ABEL, Professor of Music. M.M., Eastman School of Music (University of Rochester).

PATRICK A. ACAMPORA, Assistant Professor of Speech (Theatre). M.F.A., Purdue University.

YALCIN ACAR, Assistant Professor of Civil Engineering. Ph.D., Bogazici University (Turkey).

ANTONIO S. ACHACOSO, Associate Professor of Dairy Science. Ph.D., LSU.

SUMANTA ACHARYA, Assistant Professor of Mechanical Engineering. Ph.D., University of Minnesota.

ERIC A. ACHBERGER, Assistant Professor of Microbiology. Ph.D., Pennsylvania State University.

BARBARA F. ACKER, Instructor in Speech (Theatre). M.A., Case Western Reserve University.

ALAN C. ACOCK, Professor of Sociology; Professor of Rural Sociology. Ph.D., Washington State University.

CHARLES E. ADAMS, JR., Associate Professor of Marine Sciences; Associate Professor in Coastal Studies Institute. Ph.D., Florida State University.

*This listing was up-to-date and as nearly correct as possible at the time of publication of this catalog.
G. Michael W. Adams, Assistant Professor of Botany. Ph.D., Duke University.

Sam Adams, Alumni Professor of Education (Department of Administrative and Foundational Services). Ph.D., LSU.

Willie V. Adams, Jr., Instructor in Veterinary Science. M.S., LSU.

William A. Adkins, Associate Professor of Mathematics. Ph.D., University of Oregon.

Robert W. Adkinson, Associate Professor of Dairy Science; Acting Head, Department of Dairy Science. Ph.D., University of Florida.

Fereydoun Aghazadeh, Assistant Professor of Industrial Engineering. Ph.D., Texas Tech University.

Rodolfo J. Aguilera, Professor of Architecture; Professor of Finance; Director, Center for Latin American Affairs. Ph.D., North Carolina State University.

Paul Aharon, Assistant Professor of Geology. Ph.D., Australian National University (Australia).

Pratul K. Ajmera, Associate Professor of Electrical and Computer Engineering. Ph.D., North Carolina State University.

Ahmet E. Aktan, Associate Professor of Civil Engineering. Ph.D., University of Illinois at Urbana-Champaign.

Mohamed A. Alawady, Associate Professor of Civil Engineering. Ph.D., University of Oklahoma.

F. Kareem Al-Bagdadi, Associate Professor of Veterinary Anatomy and Fine Structure. B.V.M.S., University of Bagdad (Iraq); Ph.D., University of Illinois.

Sandra B. Alcosser, Instructor in English. M.F.A., University of Montana.


Nigel J. R. Allan, Assistant Professor of Geography and Anthropology. Ph.D., Syracuse University.

Paul R. Allen, Assistant Professor of Finance. Ph.D., University of Washington.

Mieczyslaw Altmann, Professor of Mathematics. Ph.D., Tashkent University (USSR).

Michael C. Amacker, Assistant Professor of Agronomy. Ph.D., Pennsylvania State University.

Grace F. Amborski, Professor of Veterinary Microbiology (Department of Veterinary Microbiology and Parasitology); Professor of Veterinary Science. Ph.D., Ohio State University.

David M. Anderson, Instructor in Accounting. M.B.A., LSU.

F. Nels Anderson, Assistant Professor of Speech (Theatre). M.F.A., Goodman School of Drama.

John H. Anderson, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Head Athletic Trainer. M.S., Troy State University.

Patrick R. Anderson, Assistant Professor of Criminal Justice. Ph.D., Florida State University.

Vera K. Andreassen, Associate Professor of Sociology. Ph.D., University of Missouri—Columbia.

Louis AnzanoLe, Jr., Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., LSU.

E. Ramon Arango, Professor of Political Science. Ph.D., University of Florida.

Jorge L. Aravena, Associate Professor of Electrical and Computer Engineering. Ph.D., University of Michigan.

Benjamin Arazi, Associate Professor of Electrical and Computer Engineering. Ph.D., University of Witwatersrand (South Africa).

William G. Archambault, Associate Professor of Criminal Justice. Ph.D., Florida State University.

Charles S. Arendall, Assistant Professor of Management. Ph.D., University of Tennessee.

Ara Arman, Professor of Civil Engineering; Associate Dean for Instruction and Undergraduate Activities, College of Engineering. M.S., University of Texas at Austin.

Jesse Armentor, Instructor in Accounting. M.S., LSU.

Ozer A. Arnas, Professor of Mechanical Engineering. Ph.D., North Carolina State University.

Kimberly P. Arp, Associate Professor of Art (Printmaking). M.F.A., Indiana University.

Sadiq C. Artunc, Assistant Professor of Landscape Architecture. M.L.A., University of Michigan.

Richard Aslanian, Associate Professor of Music. B.Mus., New England Conservatory of Music; advanced studies at Mannes College of Music and Cologne Conservatory.

Corbelita J. Astraquillo, Associate Professor of Music. Mus.D., Indiana University.

Gayle M. Ater, Instructor in Education (University Lab School). M.Ed., LSU.

Winton G. Aubert, Instructor in Petroleum Engineering. M.S., LSU.

James W. Ault, Jr., Professor of Fisheries (School of Forestry, Wildlife, and Fisheries). Ph.D., Auburn University.

R. Richard Avent, Professor of Civil Engineering. Ph.D., North Carolina State University.

Lucia M. Babcock, Assistant Professor of Chemistry. Ph.D., City University of New York.

Edith H. Babin, Instructor in English; Coordinator of Developmental English. M.A., Duke University.

James L. Babin, Assistant Professor of English. Ph.D., Duke University.

H. Parrott Bicot, Executive Director, LSU Museum Complex; Director and Curator, Anglo-American Art Museum; Adjunct Assistant Professor of Art History (School of Art). M.A., State University of New York at Oneonta.

William H. Baddley, Professor of Chemistry. Ph.D., Northwestern University.

Charlene B. Badeaux, Instructor in Quantitative Business Analysis. M.S., University of Southwestern Louisiana.

Giuseppe D. Baglivi, Assistant Professor of French and Italian. Ph.D., Indiana University.

Arnold Baham, Associate Professor of Dairy Science. Ph.D., Auburn University.

Kathleen M. Bailey, Instructor in Marketing. M.S., LSU.
DALE C. BAKER, Assistant Professor of Veterinary Clinical Pathology (Department of Veterinary Pathology). D.V.M., Colorado State University; Ph.D., Texas A&M University.

DAVID W. BAKER, Associate Professor of Art (Art Education). Ph.D., Pennsylvania State University.

JOHN B. BAKER, Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Wisconsin—Madison.

JOHN R. BAKER, Associate Professor of Philosophy; Dean of Students. Ph.D., Vanderbilt University.

AJoy K. BAISKI, Associate Professor of Geology. Ph.D., University of Toronto (Canada).

JOHN D. C. BALDWIN, Associate Professor of Agricultural Engineering. Ph.D., Virginia Polytechnic Institute.

MARY L. BALTHAZAR, Associate Professor of Social Work. D.S.W., Tulane University.

GILBERT W. BANE, Professor of Marine Sciences: Director, Coastal Ecology and Fisheries Institute. Ph.D., Cornell University.

AVIJIT BANERJEE, Assistant Professor of Quantitative Business Analysis. Ph.D., Ohio State University.

DOROTHY H. BANKSTON, Assistant Professor of English; Director of Freshman English. M.A., University of Southwestern Louisiana.

WILLIAM B. BANKSTON, Associate Professor of Sociology. Ph.D., University of Tennessee.

CAROL A. BARGERON, Assistant Professor of History. Ph.D., University of Wisconsin-Madison.

MARY D. BARKLEY, Associate Professor of Chemistry. Ph.D., University of California, San Diego.


A. DALE BARNES, Instructor in English. Ph.D., Brandeis University.

EARL P. BARRIOS, JR., Professor of Horticulture. Ph.D., LSU.

OTA BARTA, Professor of Veterinary Immunology (Department of Veterinary Microbiology and Parasitology). M.V.Dr., University of Agriculture (Czechoslovakia); Ph.D., University of Guelph (Canada); Diplomate, American College of Veterinary Microbiologists.

ANTONY G. BARTHELEMY, Assistant Professor of English. Ph.D., Yale University.

SUE G. BARTLETT, Assistant Professor of Biochemistry. Ph.D., Duke University.

SHEILA W. BARTON, Instructor in Education (University Lab School). M.Ed., LSU.

ZAKI BASSIOUNI, Associate Professor of Petroleum Engineering; Chairman, Department of Petroleum Engineering. Ph.D., Lille University (France).

G. ALEXANDER BATMAN, JR., Instructor in English. Ph.D., University of South Carolina.

RALPH E. BEADLE, Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Colorado State University; Ph.D., University of Georgia.

THOMAS R. BEARD, Professor of Economics. Ph.D., Duke University.

MICHAEL BEAUVIS, Instructor in Industrial and Technical Education. M.S., LSU.

FRANCES W. BECK, Professor of Education (Department of Curriculum and Instruction). Ph.D., LSU.

BARBARA S. BECKER, Assistant Professor of Speech (Communication). Ph.D., Northwestern University.

ROBERT A. BECKER, Associate Professor of History. Ph.D., University of Wisconsin—Madison.

B. F. BEESON, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., LSU.

CHARLOTTE I. BEHRE, Associate Professor of Social Work. M.A., University of Chicago; M.A., University of New Orleans.

DAN L. BELL, Instructor in English. M.A., California State University.

BONNIE D. BELLEAU, Assistant Professor of Home Economics. Ph.D., Florida State University.

JOAN H. BENEDICT, Instructor in Home Economics. M.S., LSU.

RICHARD L. BENGTSON, Associate Professor of Agricultural Engineering. Ph.D., Oklahoma State University.

JAMES G. BENNETT, Assistant Professor of English. M.A., Stanford University.

THOMAS H. BERG, Instructor in Chemistry. Ph.D., University of Iowa.

GERARD T. BERGGREN, Associate Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., LSU.

TERRY R. BERKELEY, Assistant Professor of Education (Department of Curriculum and Instruction). Ed.D., Harvard University.


SUSAN M. BERNADZIKOWSKI, Instructor in English. M.A., Ohio State University.

WILLIAM J. BERNARD, Associate Professor of Petroleum Engineering; Mineral Consultant, LSU System. Ph.D., University of Texas at Austin.

ELVA L. BERRYMAN, Instructor in Home Economics. M.S., University of Nebraska.

EVERETT D. BESCH, Professor of Veterinary Parasitology (Department of Veterinary Microbiology and Parasitology); Dean, School of Veterinary Medicine. D.V.M., Texas A&M University, Ph.D., Oklahoma State University.

NORMAN S. BHACCA, Professor of Chemistry. Ph.D., Tohoku University (Japan).

THOMAS D. BIDNER, Professor of Animal Science. Ph.D., Michigan State University.

STANLEY L. BIEDE, Associate Professor of Food Science. Ph.D., Iowa State University.

CHARLES P. BIGGER, III, Professor of Philosophy. Ph.D., University of Virginia.

WILLIAM E. BILES, Professor of Industrial Engineering; Chairman, Department of Industrial Engineering. Ph.D., Virginia Polytechnic Institute.

THOMAS D. BIRCH, Assistant Professor of Economics. Ph.D., Indiana University.

ELAINE J. BIRD, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Swimming Pool Manager. M.Ed., Northeast Louisiana University.

H. DOUGLAS BIRKHEAD, Assistant Professor of Journalism. Ph.D., University of Iowa.
ELDON BIVIN, Professor of Laboratory Animal Science (Department of Veterinary Clinical Sciences); Laboratory Animal Medicine; Laboratory Animal Management, D.V.M., Kansas State University; Ph.D., University of Missouri; Diplomate, American College of Laboratory Medicine.

ILL L. BLACK, Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Wisconsin—Madison.


IAM J. BLACKMON, Professor of Crop Physiology, Department of Plant Pathology and Crop Physiology. North Carolina State University.

DITH M. BLACKWELL, Assistant Professor of Psychology. Ph.D., University of Texas at Austin.

ST W. BLAKENEY, JR., Assistant Professor of History. Ph.D., University of Texas at Austin.

O. BLAKENEY, Assistant Professor of Military Education. B.S., LSU.

DA BLANCHARD-FIELDS, Assistant Professor of Psychology. Ph.D., Wayne State University.

LES E. BLASS, Assistant Professor of Veterinary Surgery (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Auburn University; M.S., Colorado State University.

R. H. BLOCH, Assistant Professor of Marketing. University of Texas at Austin.

ARD C. BLOMEYER, Assistant Professor of Marketing. Ph.D., Indiana University.

D C. BLOUIN, Associate Professor of Experimental Statistics; Associate Professor of Psychology; Acting Director of Criminal Justice; Associate Dean, College. Ph.D., LSU.

S E. BOARD, Assistant Professor of Agronomy. University of California, Davis.

D J. BOETHEL, Professor of Entomology. Ph.D., Oklahoma State University.

BOLLOBAS, Professor of Mathematics. Ph.D., Cambridge University (England).

S. J. BOLNER, Professor of Political Science. University of Virginia.

ARD E. BOND, Professor of Physics and Astronomy. Ph.D., University of Michigan.

AEL E. BOOK, Assistant Professor of Art (Photography). M.F.A., Ohio University.

BORCK, Associate Professor of English. Ph.D., University of California, Riverside.

J. S. BOSSIER, Instructor in Education (University School). Ed.S., LSU.

S E. BOUDEAUX, Assistant Professor of Horticulture. Ph.D., LSU.

T. BOURGOYNE, JR., Campanile Charities Professor of Offshore Mining and Petroleum Engineering. University of Texas at Austin.

H K. BOVA, Professor of Art (Ceramics). M.A., State University of New Mexico.

IAM A. BOWE, Instructor in Military Science.

LD J. BOWER, Associate Professor of Art (Drawing). M.F.A., M.A., LSU.

BERT R. BOYCE, Associate Professor of Library and Information Science. Ph.D., Case Western Reserve University.

HARRY J. BRAUD, Professor of Agricultural Engineering. Ph.D., Oklahoma State University.

HUGH D. BRAYMER, Professor of Microbiology. Ph.D., University of Oklahoma.

JAN F. BRAZZEL, Assistant Professor of Sociology. Ph.D., University of Indiana.

PAUL P. BREAU, JR., Instructor in Finance. J.D., M.S., LSU.

VINCENT C. BRENNER, Professor of Accounting: Chairman, Department of Accounting. Ph.D., Pennsylvania State University.

JOHN A. BREWER, III, Associate Professor of Mechanical Engineering. Ph.D., Purdue University.

MARIE M. BREWER, Assistant Professor of Home Economics. Ph.D., Purdue University.

LUCIE BRIND'AMOUR, Associate Professor of French and Italian. Ph.D., University of Montreal (Canada).

P. WAYNE BRITT, Instructor in Mathematics. M.S., LSU.

SAMUEL S. BRITT, JR., Professor of Education (Department of Administrative and Foundational Services); Associate Dean, Division of Continuing Education. Ed.D., University of Arizona.

GEOFFREY D. BROADHEAD, Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ph.D., University of Wisconsin—Madison.

M. JILL BRODY, Assistant Professor of Geography and Anthropology. Ph.D., Washington University.

EMMA B. BROSSARD, Associate Professor of Political Science; Director, Policy Analysis and Planning, Center for Energy Studies; Assistant Director for Research, Center for Latin American Affairs. Ph.D., Claremont Graduate School.

PANTHEA R. BROUGHTON, Professor of English. Ph.D., University of North Carolina at Chapel Hill.

MARTIN J. BROUSSARD, Associate Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance); Supervisor, Athletic Training Program. Ed.D., LSU.

DANA N. BROWN, Assistant Professor of Landscape Architecture. M.L.A., Harvard University.

LESLIE E. BROWN, Assistant Professor of Music. Ph.D., University of North Carolina.

VONNIE R. BROWN, Instructor in Dance (School of Health, Physical Education, Recreation, and Dance). M.S., Utah State University.

WILLIAM H. BROWN, Professor of Agricultural Engineering; Assistant Director, Louisiana Agricultural Experiment Station. Ph.D., University of Missouri.

ARTHUR BRUCKNER, II, Associate Professor of Industrial Engineering. Ph.D., Oklahoma State University.

THADDEUS J. Brys, Professor of Music. Juilliard School of Music; Mannes College of Music; private cello study with Lieff Rosanoff and Pablo Casals.

HUGH W. BUCKINGHAM, Associate Professor of Speech (Communication Disorders); Director, Interdepartmental Linguistics Program. Ph.D., University of Rochester.
GRANT CAMPBELL, Associate Professor of Music.

JOHN S. CAMPBELL, Assistant Professor of Classical, Germanic, and Slavic Languages.

LARRY B. CAMPBELL, Associate Professor of Music.

O. HUBERT CAMPBELL, Assistant Professor of Psychology.

TERRENCE C. CAMPBELL, Assistant Professor of Military Science.

WILLIAM F. CAMPBELL, Professor of Economics.

AMELIA C. CANADAY, Instructor in English.

NICHOLAS CANADAY, JR., Professor of English.

LOUIS G. CANCIENNE, Professor of Military Science.

VINCENT E. CANGELOSI, Professor of Quantitative Business Analysis.

GAILE S. CANNELLA, Assistant Professor of Education (Department of Curriculum and Instruction).

QUANG V. CAO, Assistant Professor of Forestry.

KELLI A. CAPRILE, Assistant Professor of Veterinary Physiology.

LEONARD E. CARDENAS, JR., Associate Professor of Political Science.

MARK T. CARLETON, Associate Professor of History.

REESE M. CARLETON, Instructor in English.

LEONARD E. CARDENAS, JR., Associate Professor of Political Science.

MARK T. CARLETON, Associate Professor of History.

REESE M. CARLETON, Instructor in English.

LEONARD E. CARDENAS, JR., Associate Professor of Political Science.

MARK T. CARLETON, Associate Professor of History.

REESE M. CARLETON, Instructor in English.

LEONARD E. CARDENAS, JR., Associate Professor of Political Science.

MARK T. CARLETON, Associate Professor of History.

REESE M. CARLETON, Instructor in English.
Burtis G. Casler, Associate Professor of Mathematics. Ph.D., University of Wisconsin—Madison.
George D. Catalano, Assistant Professor of Mechanical Engineering. Ph.D., University of Virginia.
Marilyn H. Catchings, Instructor in Education (Department of Curriculum and Instruction). M.Ed., LSU.
Steven C. Cater, Instructor in Computer Science. M.S., LSU.
H. Rafael Chabran, Assistant Professor of Spanish and Portuguese. Ph.D., University of California, San Diego.
Robert H. Chabreck, Professor of Wildlife (School of Forestry, Wildlife, and Fisheries). Ph.D., LSU.
V. Frank Chaffin, Assistant Professor of Landscape Architecture. M.L.A., University of Georgia.
Doyle Chambers, Professor of Animal Science; Vice-Chancellor for Research, LSU Agricultural Center; Director, Louisiana Agricultural Experiment Station. Ph.D., Oklahoma State University.
Jimmy L. Chambers, Associate Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., University of Missouri.
Lydia Champagne, Instructor in English. M.A., University of Notre Dame.
Lui-Hueung Chan, Associate Professor—Research of Geology. Ph.D., Harvard University.
Lai-Him Chan, Associate Professor of Physics and Astronomy. Ph.D., Harvard University.
John E. Chandler, Associate Professor of Dairy Science. Ph.D., Virginia Polytechnic Institute.
Linda S. Chang, Assistant Professor of Spanish and Portuguese. Ph.D., Indiana University.
Simon H. Chang, Professor of Biochemistry. Ph.D., Oklahoma State University.
Ganesar Channugam, Professor of Physics and Astronomy. Ph.D., Brandeis University.
Joan B. Chapin, Professor of Entomology. Ph.D., LSU.
Russell L. Chapman, Professor of Botany. Ph.D., University of California, Davis.
Roland E. Chardon, Professor of Geography and Anthropology. Ph.D., University of Minnesota.
Rosalind N. Charlesworth, Associate Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Notre Dame.
Eldreda A. Chatman, Assistant Professor of Library and Information Science. Ph.D., University of California, Berkeley.
Earl H. Cheek, Jr., Professor of Education (Department of Curriculum and Instruction). Ph.D., Florida State University.
Lenore C. Cheek, Assistant Professor of Home Economics. Ph.D., Purdue University.
Peter P. Chen, LSU Foundation Murphy J. Foster Professor of Computer Science. Ph.D., Harvard University.
Ying Cheng, Assistant Professor of Mathematics. Ph.D., Yale University.
William R. Cherry, Assistant Professor of Chemistry. Ph.D., University of Washington.
Allison C. Chestnut, Instructor in English. M.A., Mississippi University for Women.
Donald M. Chiarulli, Instructor in Computer Science. M.S., Virginia Polytechnic Institute.
Doo-Youn Cho, Associate Professor of Veterinary Pathology. D.V.M., Seoul National University (Korea); Ph.D., Kansas State University.
Jack C. Cho, Associate Professor of Electrical and Computer Engineering. Ph.D., Iowa State University.
Elvin T. Choong, Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., Michigan State University.
Mark E. Christie, Instructor in Mathematics. M.A., University of Oregon.
Ralph D. Christy, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., Michigan State University.
Robert E. Chumbley, III, Associate Professor of French and Italian. Ph.D., Yale University.
Hye-Yun Chung, Assistant Professor of Music. M.A., California State University at Los Angeles.
Daniel F. Church, Assistant Professor of Chemistry. Ph.D., Oregon State University.
Gabie E. Church, Instructor in Experimental Statistics. M.Ap.Stat., LSU.
Christopher A. Clark, Associate Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., Cornell University.
William M. Clarke, Associate Professor of Classical, Germanic, and Slavic Languages. Ph.D., University of North Carolina at Chapel Hill.
Majorie S. Claxton, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences). D.V.M., M.S., Iowa State University.
Keith Clay, Assistant Professor of Botany. Ph.D., Duke University.
John W. Click, Professor of Journalism; Director, Manship School of Journalism. Ph.D., Ohio State University.
Rinn M. Cloud, Associate Professor of Home Economics. Ph.D., University of North Carolina at Greensboro.
Bennie G. Coates, Instructor in Speech (Communication). Ph.D., LSU.
Sidney L. Cohen, Associate Professor of History. Ph.D., Yale University.
Marc A. Cohn, Associate Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., Cornell University.
James M. Coleman, Boyd Professor, Department of Marine Sciences; Director, Coastal Studies Institute. Ph.D., LSU.
Norman B. Coleman, Assistant Professor of Aerospace Studies. M.B.A., Golden Gate University.
Clude E. Collins, Jr., Assistant Professor of Mathematics. Ph.D., Indiana University.
G. Michelle Collins, Assistant Professor of English. Ph.D., State University of New York at Binghamton.
Heron S. Collins, Professor of Mathematics. Ph.D., Tulane University.
Marta D. Collins, Professor of Education (Department of Curriculum and Instruction). Ph.D., Florida State University.
RICHARD L. COLLINS, Assistant Professor of Zoology and Physiology. Ph.D., University of California, Berkeley.

RICHARD W. COLLINS, Instructor in English. Ph.D., University of California, Irvine.

MICHAEL W. COMBS, Associate Professor of Political Science. Ph.D., Washington University.

RICHARD E. CONDREY, Assistant Professor in Coastal Ecology and Fisheries Institute. Ph.D., University of Washington.

MERYDYN CONNELLY, Instructor in English. M.A., University of Houston.


JEANETTE M. CONNERS, Instructor in Mathematics. M.A., University of Missouri—Columbia.

RICHARD W. CONNERS, Associate Professor of Electrical and Computer Engineering. Ph.D., University of Missouri—Columbia.

MAX Z. CONRAD, Professor of Landscape Architecture. M.L.A., Harvard University.

WILLIAM D. CONSTANT, Assistant Professor of Petroleum Engineering. Ph.D., LSU.

C. DINOS CONSTANTINIDES, Professor of Music. Ph.D., Michigan State University.

RUALL J. COOK, Associate Professor of Social Work. M.S.W., LSU.

HELEN M. COOKSTON, Professor of Education (Department of Curriculum and Instruction); Coordinator of Clinical Experiences, College of Education. Ed.D., University of Alabama.

ROBERT C. COON, Associate Professor of Psychology. Ph.D., Vanderbilt University.

STEPHEN L. COOPER, Assistant Professor of Speech (Communication); Coordinator, Academic Programs Abroad, Department of Extramural Teaching. Ph.D., LSU.

WILLIAM J. COOPER, JR., Professor of History: Dean, Graduate School. Ph.D., Johns Hopkins University.

KEVIN L. COPE, Assistant Professor of English. Ph.D., Harvard University.

MARY K. CORBITT, Associate Professor of Education (Department of Curriculum and Instruction). Ed.D., University of Georgia.

DAVID M. CORDELL, Assistant Professor of Finance. Ph.D., University of Texas at Austin.

CRAIG M. CORDES, Professor of Mathematics; Associate Dean, College of Arts and Sciences. Ph.D., University of Maryland.

KENNETH C. CORKUM, Professor of Zoology and Physiology. Ph.D., LSU.

ARMANDO B. CORRIPIO, Professor of Chemical Engineering. Ph.D., LSU.

RICHARD E. CORSTVET, Professor of Veterinary Microbiology (Department of Veterinary Microbiology and Parasitology); Professor of Veterinary Science. Ph.D., University of California, Davis.

ROBERT COSTANZA, Associate Professor of Marine Sciences; Associate Professor in Coastal Ecology and Fisheries Institute. Ph.D., University of Florida.

ROBERT W. COURTER, Associate Professor of Mechanical Engineering. Ph.D., University of Texas at Austin.

JOHN C. COURTNEY, Professor of Nuclear Engineering (Nuclear Science Center). D.Engr., Catholic University of America.

J. BAINARD COWAN, Associate Professor of English. Ph.D., Yale University.

DAPHNE H. COWART, Instructor in Education (University Lab School). M.Ed., LSU.

CAROLE A. COX, Associate Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Minnesota.

HOLLIS U. COX, Professor of Veterinary Bacteriology (Department of Veterinary Microbiology and Parasitology); Veterinary Microbiologist; Chief, Clinical Diagnostic Services, Veterinary Teaching Hospital and Clinics. D.V.M., Oklahoma State University; Ph.D., LSU; Diplomate, American College of Veterinary Microbiologists; Specialist, American Academy of Microbiology.

RICHARD W. COX, Professor of Art (Art History). Ph.D., University of Wisconsin—Madison.

VAN L. COX, Assistant Professor of Landscape Architecture. M.F.A., LSU.

CECIL V. CRABB, JR., Professor of Political Science. Ph.D., Johns Hopkins University.

W. MICHAEL CRAIG, Assistant Professor of Animal Science. Ph.D., Texas A&M University.

CARL N. CRANE, Instructor in Social Work; Director of Student Admissions, Scheduling, Evaluation, and Counseling, School of Social Work. M.S.W., LSU.

DAVID T. CRAZY, Professor of Finance; Chairman, Department of Finance. Ph.D., Ohio State University.

M. PATRICK CRAWFORD, Professor of Veterinary Physiology and Biophysics (Department of Veterinary Physiology, Pharmacology, and Toxicology); Veterinary Medical Engineer. D.V.M., Iowa State University; Ph.D., University of Mississippi.

MARY A. CRAWFORD, Associate Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Ohio State University.

MICHAEL L. CRESPO, Associate Professor of Art (Painting and Drawing). M.F.A., City University of New York (Queens College).

MOIRA L. CRONE, Assistant Professor of English. M.A., Johns Hopkins University.

CONRAN JULIANUS A. CRONIN, Instructor in English. Ph.D., Emory University.

GEORGE R. CROSS, Assistant Professor of Computer Science. Ph.D., Michigan State University.

GARY A. CRUMP, Associate Professor of History. Ph.D., University of Illinois.

REBECCA W. CRUMP, Professor of English. Ph.D., University of Texas at Austin.

DAVID H. CULBERT, Professor of History. Ph.D., Northwestern University.

W. PATTON CULBERTSON, JR., Professor of Economics. Ph.D., University of Texas at Austin.

DUDLEY L. CULLEY, JR., Professor of Fisheries (School of Forestry, Wildlife, and Fisheries). Ph.D., Mississippi State University.

VIC A. CUNDA, Associate Professor of Mechanical Engineering. Ph.D., University of Wyoming.
ANTHONY P. CURATOLA, Associate Professor of Accounting. Ph.D., Texas A&M University.

DOUGLAS W. CURTIS, Professor of Mathematics. Ph.D., Iowa State University.

MARY B. CURTIS, Instructor in Accounting. M.S., University of Arkansas.

SETH M. DABNEY, Assistant Professor of Agronomy. Ph.D., Cornell University.

CAROL A. DAHL, Associate Professor of Economics. Ph.D., University of Minnesota.

HERMAN E. DALY, Alumni Professor of Economics. Ph.D., Vanderbilt University.

WILLIAM H. DALY, Professor of Chemistry; Chairman, Department of Chemistry. Ph.D., Polytechnic Institute of Brooklyn.

KENNETH E. DAMANN, JR., Associate Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., Michigan State University.

JACK S. DAMICO, Instructor in Speech (Communication Disorders). M.S., University of Oklahoma Health Sciences Center.

JEAN G. DAMPIER, Instructor in Education (University Lab School). M.A., LSU.

RAYMOND G. DANILOFF, Professor of Speech (Communication Disorders). Ph.D., University of Iowa.

FELICIA L. DARDEAU, Instructor in Health Science (School of Health, Physical Education, Recreation, and Dance). M.S., LSU.

BARRY M. DASTE, Professor of Social Work; Associate Dean—Academics, School of Social Work. M.S.W., LSU.

MICHAEL F. DAUGHERTY, Professor of Art (Sculpture). M.F.A., University of Tennessee.

JERRY F. DAVIDSON, Associate Professor of Music; Acting Associate Dean, School of Music. Ph.D., Northwestern University.

JOHN L. DAVIDSON, Alumni Professor of Finance. M.B.A., LSU; J.D., University of North Carolina at Chapel Hill.

MARK G. DAVIDSON, Assistant Professor of Mathematics. Ph.D., University of California, Irvine.

WILLIAM V. DAVIDSON, Associate Professor of Geography and Anthropology. Ph.D., University of Wisconsin—Milwaukee.

BRADFORD D. DAVIS, Instructor in Mathematics. M.S., University of Tulsa.

DONALD F. DAVIS, Instructor in Education (University Lab School). Ph.D., Arizona State University.

HAZEL C. DAVIS, Assistant Professor of Vocational Education (School of Vocational Education and Technology). Ph.D., Ohio State University.

SCOTT A. DAWSON, Assistant Professor of Marketing. Ph.D., University of Arizona.

SUSAN H. DAWSON, Professor of Social Work; Coordinator of Foundation Curriculum, School of Social Work. M.A., University of Chicago.

DONAL F. DAY, Associate Professor of Sugar Science (Audubon Sugar Institute). Ph.D., McGill University (Canada).

JOHN W. DAY, JR., Professor of Marine Sciences; Professor in Coastal Ecology and Fisheries Institute. Ph.D., University of North Carolina at Chapel Hill.

LOUIS A. DAY, Associate Professor of Journalism (Telecommunications). Ph.D., Ohio University.

FREDERICK A. de ARMAS, Professor of Spanish and Portuguese. Ph.D., University of North Carolina at Chapel Hill.

FRANCIS A. de CARO, Associate Professor of English. Ph.D., Indiana University.

STEPHEN L. DELACROIX, Instructor in Education (University Lab School). M.A., LSU.

ADRIAN DEL CARO, Associate Professor of Classical, Germanic, and Slavic Languages. Ph.D., University of Minnesota.

CARMEN M. DEL RIO, Assistant Professor of Spanish and Portuguese. Ph.D., University of Texas at Austin.

JOSEPH G. DELATTE, JR. Assistant Professor of Home Economics. Ph.D., Florida State University.

RONALD D. DELAUNE, Assistant Professor in Laboratory for Wetland Soils and Sediments. M.S., LSU.

TERRY J. DELORD, Instructor in Chemistry. Ph.D., LSU.

CHARLES N. DELZELL, Assistant Professor of Mathematics. Ph.D., Stanford University.

JOHN D. DENNIS, Professor of Speech (Theatre). M.F.A., Ohio University.

KENNETH S. DERRICK, Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., Texas A&M University.

ROBERT DESBRANDES, LSU Foundation Hopkins P. Breazeale Professor of Petroleum Engineering. Ph.D., University of Lyons (France).

FORREST A. DESERAN, Associate Professor of Sociology; Associate Professor of Rural Sociology. Ph.D., Colorado State University.

WILLIAM R. DETMERS, Associate Professor of Art (Art Education). Ed.D., University of Cincinnati.

WALTER A. DEUTSCH, Associate Professor of Biochemistry. Ph.D., Texas A&M University.

ROBERT J. DEVLIN, Associate Professor of Education (Department of Curriculum and Instruction). Ph.D., Pennsylvania State University.

LOURDES L. DEYA, Instructor in Education (Department of Administrative and Foundational Services). M.S., LSU.

TIMOTHY A. DEYAK, Assistant Professor of Economics. Ph.D., State University of New York at Binghamton.

JULES A. d'HEMECOURT, IV, Assistant Professor of Journalism (Telecommunications). J.D., LSU; M.S., Columbia University.

ENRIQUE DIAZ, Assistant Professor of Spanish and Portuguese. Ph.D., Indiana University.

THOMAS H. DIETZ, Professor of Zoology and Physiology; Chairman, Department of Zoology and Physiology. Ph.D., Oregon State University.

IRENE S. DI MAIO, Instructor in Classical, Germanic, and Slavic Languages. Ph.D., LSU.

LOUIS F. DIMAURO, Assistant Professor of Physics and Astronomy. Ph.D., University of Connecticut.
THOMAS J. DI NAPOLI, Associate Professor of Classical, Germanic, and Slavic Languages. Ph.D., University of Texas at Austin.

R. PRAKASH DIXIT, Associate Professor of Speech (Communication Disorders). Ph.D., University of Texas at Austin.

GREGORY H. DOBBINS, Assistant Professor of Psychology. Ph.D., Virginia Polytechnic Institute.

DEBRA DOBRAY, Assistant Professor of Finance. J.D., M.P.A., University of Texas at Austin.

ROY K. DOKKA, Assistant Professor of Geology. Ph.D., University of Southern California.

KAREN J. DOMINGUEZ, Assistant Professor of Architecture. M.Arch., Massachusetts Institute of Technology.

A. ROLAND DOMMERT, Professor of Veterinary Microbiology (Department of Veterinary Microbiology and Parasitology); Associate Vice-Chancellor for Academic Affairs. D.V.M., Texas A&M University; Ph.D., LSU; Diplomate, American College of Veterinary Microbiologists; Fellow, Institute of American Chemists.

KERRY M. DOOLEY, Assistant Professor of Chemical Engineering. Ph.D., University of Delaware.

SUSAN DORMAN, Instructor in English. Ph.D., University of Texas at Austin.

W. WADE DORMAN, Instructor in English. Ph.D., University of Texas at Austin.

J. ROBERT DORROH, Professor of Mathematics; Chairman, Department of Mathematics. Ph.D., University of Texas at Austin.

GRESDNA A. DOTY, Alumni Professor of Speech (Theatre). Ph.D., Indiana University.

JERRY P. DRAAYER, Professor of Physics and Astronomy. Ph.D., Iowa State University.

PEGGY S. DRAUGHN, Associate Professor of Home Economics. Ph.D., Florida State University.

JOHN S. DRILLING, Professor of Physics and Astronomy. Ph.D., Case Western Reserve University.

DENNIS W. DUFFIELD, Associate Professor of Veterinary Anatomy and Fine Structure. D.V.M., University of Illinois; Ph.D., University of Missouri—Columbia.

EDWARD P. DUNIGAN, Professor of Agronomy. Ph.D., University of Arizona.

THOMAS J. DURANT, JR., Associate Professor of Sociology. Ph.D., University of Wisconsin—Madison.

JACKOLYN W. DURRETT, Assistant Professor of Social Work. M.S.W., LSU.

DANIEL W. EARLE, JR., Professor of Landscape Architecture. Ph.D., LSU.

HARVILL C. EATON, Associate Professor of Mechanical Engineering. Ph.D., Vanderbilt University.

KATHLEEN Y. EDEWORTH, Instructor in Computer Science. M.A., DePaul University.

ROBERT J. EDEWORTH, Assistant Professor of Classical, Germanic, and Slavic Languages. Ph.D., University of Michigan.

ROBERT J. EDLING, Associate Professor of Agricultural Engineering. Ph.D., University of Kentucky.

JOHN F. EDMUNDS, Professor of Music. M.M.Ed., Florida State University.

JAY D. EDWARDS, Associate Professor of Geography and Anthropology. Ph.D., Tulane University.

BRUCE E. EILTS, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences). D.V.M., M.S., University of Minnesota.

AHMED A. EL-AMAWY, Assistant Professor of Electrical and Computer Engineering. Ph.D., Iowa State University.

CHAD D. ELLETT, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., University of Georgia.

STEPHEN N. ELLIOTT, Associate Professor of Psychology. Ph.D., Arizona State University.

THOMAS S. ELLIOTT, Instructor in English. M.A., University of Missouri—Columbia.

ALBERT E. ELMORE, Assistant Professor of Criminal Justice. Ph.D., Vanderbilt University.


CAROL L. ENGBRETSON, Professor of Home Economics. Ph.D., Michigan State University.

DAVID A. ENGLAND, Associate Professor of Education (Department of Curriculum and Instruction.) Ph.D., Indiana University.

JAMES J. ENGLAND, Adjunct Associate Professor of Veterinary Virology (Department of Veterinary Microbiology and Parasitology); Director, Louisiana Veterinary Medical Diagnostic Laboratory. D.V.M., Ph.D., Colorado State University.

FREDERICK M. ENRIGHT, Professor of Veterinary Science. D.V.M., Oklahoma State University; Ph.D., University of California, Davis.

ELIN S. EPPERSON, Instructor in English. M.A., Ball State University.

JOHN D. ERICKSON, Professor of French and Italian; Chairman, Department of French and Italian. Ph.D., University of Minnesota.

LUIS A. ESCOBAR, Assistant Professor of Experimental Statistics. Ph.D., Iowa State University.

PATRICIA B. ETIENNE, Assistant Professor of Music. M.F.A., Tulane University.

CECIL L. EUBANKS, Associate Professor of Political Science. Ph.D., University of Michigan.

R. SCOTT EVANS, Instructor in English. M.A., University of California, Davis.

WILLIAM W. EVANS, JR., Associate Professor of English. Ph.D., University of Florida.

PATRICIA A. EXNER, Instructor in Education (University Lab School). M.Ed., LSU.

WARREN O. EYSTER, Assistant Professor of English. M.A., Longwood College.

RAYMOND C. FABEC, Associate Professor of Mathematics. Ph.D., University of Colorado.

ALVIN J. FABRE, JR., Instructor in Education (University Lab School). Ph.D., LSU.

JANE E. FAILE, Instructor in English. M.A., University of South Carolina.

KENNETH S. FALK, Associate Professor of Classical, Germanic, and Slavic Languages. Ph.D., Harvard University.
WILLIAM W. FALK, Associate Professor of Sociology; Associate Professor of Rural Sociology. Ph.D., Texas A&M University.

LAWRENCE FALKOWSKI, Associate Professor of Political Science. Ph.D., Rutgers University.

HELEN E. FANT, Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ph.D., LSU.

STEPHEN C. FARBER, Professor of Economics. Ph.D., Vanderbilt University.

JIJING-LIH FARH, Assistant Professor of Management. Ph.D., Indiana University.

JAMES A. FARMER, JR., Assistant Professor Social Work. M.S.W., University of Iowa.

STEPHEN A. FARMER, Assistant Professor of History. Ph.D., Stanford University.

A. JAMES FARR, Associate Professor of Poultry Science. Ph.D., Mississippi State University.

MARIAN F. FATOUT, Associate Professor of Social Work. D.S.W., University of Southern California.

THOMAS FAYOL, JR. Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Field House Manager (Athletic Department). M.S., LSU.

MACON D. FAULKNER, Professor of Agricultural Engineering; Vice-Chancellor, LSU Agricultural Center; Director, International Programs. M.S., LSU.

SAM E. FEAGLEY, Associate Professor of Agronomy. Ph.D., University of Missouri—Columbia.

JAMES S. FEATHERSTON, Associate Professor of Journalism. M.S., East Texas State University.


ROBERT S. FELTON, Professor of Finance. D.B.A., Indiana University.

COLIN C. FERGUSON, Associate Professor of Geology. Ph.D., University of Nottingham (England).

RAY E. FERRELL, JR., Professor of Geology. Ph.D., University of Illinois.

GUILLERMO S. FERREYRA, Assistant Professor of Mathematics. Ph.D., Rutgers University.

STEPHEN D. FIELD, Assistant Professor of Civil Engineering. Ph.D., Syracuse University.

LONNIE L. FIELDER, JR., Professor of Agricultural Economics and Agribusiness. Ph.D., Iowa State University.

DOROTHY F. FINDLEN, Instructor in English. M.A., Indiana University.

JOHN I. FISCHER, Professor of English. Ph.D., University of Florida.

NIKOLAUS H. FISCHER, Professor of Chemistry. D.Nat.Sci., University of Tübingen (West Germany).

VARDA FISH, Instructor in English. Ph.D., Cornell University.

JON E. FISHER, Instructor in Journalism; Director, Student Media Services. M.A.J., LSU.

J. MICHAEL FITZSIMONS, Curator in Museum of Natural Science; Adjunct Professor of Zoology and Physiology. Ph.D., University of Michigan.

ROBERT A. FLAMMANG, Professor of Economics. Ph.D., University of Iowa.

JOHN W. FLEEGER, Associate Professor of Zoology and Physiology. Ph.D., University of South Carolina.

F. MARION FLETCHER, Professor of Management. Ph.D., University of Pennsylvania.

BRUCE FLINT, Professor of Extension Education (Department of Extension and International Education); Associate Director, Louisiana Cooperative Extension Service. Ph.D., University of Wisconsin—Madison.

HECTOR E. FLORES, Assistant Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., Yale University.

WAYNE FLORY, Associate Professor of Veterinary Physiology, Pharmacology, and Toxicology; Associate Professor of Veterinary Science. Ph.D., University of Texas at Austin.

BARBARA B. FLYNN, Assistant Professor of Quantitative Business Analysis. D.B.A., Indiana University.

E. JAMES FLYNN, Assistant Professor of Management. Ph.D., Indiana University.

DANIEL M. FOGEL, Professor of English. Ph.D., Cornell University.

PETER J. FOGG, Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., LSU.

CAROL S. FOIL, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Dermatologist. M.S., D.V.M., LSU; Diplomate, American College of Veterinary Dermatology.

LANE D. FOIL, Associate Professor of Entomology. Ph.D., North Carolina State University.

RICHARD R. FUXA, Associate Professor of Entomology. Ph.D., North Carolina State University.

RICHARD P. GAGE, Instructor in English. M.A., Queens College.

DIETER A. GALLER, Professor of French and Italian. Ph.D., University of Münster (West Germany).

ROBERT J. GALE, Assistant Professor of Chemistry. Ph.D., McGill University (Canada).

ROBERT P. GAMBRILL, Professor of Marine Sciences; Professor in Laboratory for Wetland Soils and Sediments. Ph.D., North Carolina State University.

RICHARD D. GANDOUR, Associate Professor of Chemistry. Ph.D., Rice University.

RONALD G. GARAY, Associate Professor of Journalism (Telecommunications). Ph.D., Ohio University.

WALTER L. GARNER, JR., Instructor in Education (University Lab School). M.Ed., LSU.

LYNN GARRETT, Assistant Professor of English. M.A., Northeast Louisiana University.

SIDNEY R. GARRETT, Professor of Art (Sculpture); Acting Director, School of Art. M.A., LSU.

MARK J. GASIÓROWSKI, Assistant Professor of Political Science. Ph.D., University of North Carolina at Chapel Hill.

EDWARD W. GASSIE, Professor of Extension Education; Head, Department of Extension and International Education. Ph.D., LSU.

STEPHEN D. GAUNT, Assistant Professor of Veterinary Clinical Pathology (Department of Veterinary Pathology). D.V.M., LSU; Ph.D., Texas A&M University.
WAYNE M. GAUTHIER, Associate Professor of Agricultural Economics and Agribusiness. Ph.D., Oklahoma State University.

RANDALL C. GAYDA, Assistant Professor of Microbiology. Ph.D., University of Chicago.

JAMES P. GEAGHAN, Assistant Professor of Experimental Statistics. Ph.D., North Carolina State University.

PATRICIA C. GEARY, Assistant Professor of English. M.F.A., University of California, Irvine.

JAMES H. GEER, Professor of Psychology; Chairman, Department of Psychology. Ph.D., University of Pittsburgh.

DARRELL L. GERDES, Assistant Professor of Food Science. Ph.D., Texas A&M University.

TERRY G. GESKE, Professor of Education (Department of Administrative and Foundational Services). Ph.D., University of Wisconsin—Madison.

JOSEPH A. GHIOLD, Assistant Professor of Geology. Ph.D., University of Tübingen (West Germany).

CAROLYN C. GIBBONS, Assistant Professor of Home Economics. Ph.D., University of Tennessee.

TERRY L. GIBSON, Assistant Professor of Social Work. D.S.W., University of Alabama.

MARGARET E. GILKISON, Assistant Professor of Political Science. Ph.D., Michigan State University.

PATRICK M. GILMER, Assistant Professor of Mathematics. Ph.D., University of California, Berkeley.

STUART J. GILMORE, Professor of Speech (Communication Disorders). Ph.D., University of Wisconsin—Madison.

GARY G. GINTER, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., University of Southern Mississippi.

GARY S. GIPSON, Assistant Professor of Civil Engineering. Ph.D., LSU.

DANIEL A. GLASER, Assistant Professor of Social Work. M.S.W., Tulane University.

MARY B. GLAZE, Associate Professor of Veterinary Ophthalmology (Department of Veterinary Clinical Sciences); Veterinary Ophthalmologist. D.V.M., Texas A&M University; M.S., Michigan State University; Diplomate, American College of Veterinary Ophthalmologists.

EDMUND J. GLENNY, Associate Professor of Architecture. M.Arch., Yale University.

RAYMOND R. GLOVER, Assistant Professor of Architecture. M.Env.Des., Yale University.

J. SAMUEL GODBER, Assistant Professor of Food Science. Ph.D., University of Missouri—Columbia.

ROBERT A. GODKE, Professor of Animal Science. Ph.D., University of Missouri—Columbia.

DENNIS G. GOLDBACH, Instructor in Military Science.

ROY G. GOODRICH, Professor of Physics and Astronomy. Ph.D., University of California, Riverside.

VIJAYA K. A. GOPU, Associate Professor of Civil Engineering. Ph.D., Colorado State University.

ROGER D. GORMAN, Instructor in English. M.A., Wright State University.

JAMES G. GOSSELINK, Professor of Marine Sciences; Professor in Coastal Ecology and Fisheries Institute; Chairman, Department of Marine Sciences. Ph.D., Rutgers University.

KENT A. GOSSETT, Assistant Professor of Veterinary Clinical Pathology (Department of Veterinary Pathology); Veterinary Clinical Pathologist; Assistant Director, Veterinary Teaching Hospital and Clinics. D.V.M., Purdue University; Ph.D., LSU; Diplomate, American College of Veterinary Pathologists.

NATHAN W. GOTTFRIED, Professor of Psychology. Ph.D., Ohio State University.

RONALD H. GOUGH, Associate Professor of Dairy Science. Ph.D., LSU.

RICHARD A. GOYER, Professor of Entomology. Ph.D., University of Wisconsin—Madison.

WILLIAM F. GRADY, Professor of Education (Department of Administrative and Foundational Services). Ed.D., University of Arkansas.

LORETTA W. GRANT, Instructor in Accounting. B.A., University of West Florida.

GERALD R. GRAVES, Assistant Professor of Industrial Engineering. Ph.D., Oklahoma State University.

JERRY B. GRAVES, Professor of Entomology; Head, Department of Entomology. Ph.D., LSU.

EDMUND R. GRAY, Professor of Management; Chairman, Department of Management. Ph.D., University of California, Los Angeles.

ANITA D. GREENE, Instructor in English. M.A., Texas A&M University.

CHRIS H. GREENE, Associate Professor of Physics and Astronomy. Ph.D., University of Chicago.


WILLIAM D. GREENFIELD, Jr. Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., University of New Mexico.

RAYMOND T. GRENCIK, Associate Professor of Physics and Astronomy. Ph.D., Indiana University.

CHARLES E. GRENIER, Associate Professor of Social Work. Ph.D., LSU.

CLAUDE G. GRENIER, Professor of Physics and Astronomy. D.Sc., University of Paris, Sorbonne (France).

FRANK M. GRESHAM, Associate Professor of Psychology. Ph.D., University of South Carolina.

JAMES B. GRIFFIN, Associate Professor of Architecture. Ph.D., University of North Carolina.

MICHAEL D. GRIMES, Associate Professor of Sociology. Ph.D., University of Texas at Austin.

WILLIAM F. GRIMES, Assistant Professor of Music. M.M., Eastman School of Music (University of Rochester).

ROBERT M. GRONDER, Professor of Food Science. Ph.D., LSU.

PAUL E. GROSSER, Assistant Professor of Political Science. Ph.D., Pennsylvania State University.

FRANK R. GROVES, JR., Professor of Chemical Engineering. Ph.D., University of Wisconsin—Madison.

LEO J. GUEDRY, Professor of Agricultural Economics and Agribusiness; Head, Department of Agricultural Economics and Agribusiness. Ph.D., Oregon State University.

JACK E. GUERRY, Professor of Music. Ph.D., Michigan State University.

MELODY M. GUICHET, Associate Professor of Art (Painting and Drawing). M.F.A., Temple University.
DEWEY J. GUILLOT, JR., Assistant Professor of Education (University Lab School). M.Ed., LSU.

THOMAS R. GULLEDGE, Assistant Professor of Quantitative Business Analysis. Ph.D., Clemson University.

CAMERON R. HACKNEY, Associate Professor of Food Science. Ph.D., North Carolina State University.

MARK S. HAFNER, Associate Professor of Zoology and Physiology; Adjunct Associate Curator in Museum of Natural Science. Ph.D., University of California, Berkeley.

HARRY V. HAGSTAD, Professor of Epidemiology and Community Health; Head, Department of Epidemiology and Community Health. D.V.M., Cornell University; M.P.H., Tulane University; Diplomate, American College of Veterinary Preventive Medicine.

JOSEPH F. HAIR, JR., Professor of Marketing; Chairman, Department of Marketing. Ph.D., University of Florida.

JERROLD T. HALDIMAN, Associate Professor of Veterinary Anatomy and Fine Structure. Ph.D., Kansas State University.

BRIAN J. HALE, Associate Professor of Chemistry. Ph.D., University of Minnesota.

CLARENCE E. HALL, Professor of Engineering Graphics (Department of Industrial Engineering). Ph.D., East Texas State University.

EVELYN G. HALL, Associate Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance); Associate Professor of Psychology. Ed.D., University of Virginia.

MILTON H. HALLMAN, Professor of Music. D.M., Florida State University.

PENELlope C. HALLMAN, Instructor in Education (University Lab School). M.M.Ed., Florida State University.

Marilyn S. HAMILTON, Assistant Professor of Speech (Communication Disorders). Ph.D., University of Washington.

ROBERT B. HAMILTON, Associate Professor of Wildlife (School of Forestry, Wildlife, and Fisheries). Ph.D., University of California, Berkeley.

WILLIAM O. HAMILTON, III, Professor of Physics and Astronomy. Ph.D., Stanford University.

ABNER M. HAMMOND, JR., Professor of Entomology. Ph.D., LSU.

DONALD W. HAMMONS, Assistant Professor of Education (Department of Curriculum and Instruction); Head, Office of Independent Study. Ed.D., LSU.

CYNTHIA M. HANCHEY, Instructor in Computer Science. M.B.A., LSU.

LYNN M. HANNAMAN, Associate Professor of Industrial and Technical Education. Ed.D., University of Northern Colorado.

JEFFREY S. HANOR, Professor of Geology. Ph.D., Harvard University.

THOMAS HANSBROUGH, Professor of Forestry; Director, School of Forestry, Wildlife, and Fisheries. Ph.D., LSU.

SCOTT W. HANSEN, Instructor in Marketing. M.B.A., LSU.

BILLy J. HARBIN, Professor of Speech (Theatre). Ph.D., Indiana University.

ANN HARDING, Associate Professor of Art (Painting and Drawing). M.F.A., University of Cincinnati.

JAMES D. HARDY, JR., Professor of History. Ph.D., University of Pennsylvania.

CAROLYN H. HARGRAVE, Professor of Quantitative Business Analysis; Vice-Chancellor for Academic Affairs and Provost. Ph.D., University of Texas at Austin.

CHARLES A. HARLOW, Professor of Electrical and Computer Engineering. Ph.D., University of Texas at Austin.

WALTER J. HARMAN, Professor of Zoology and Physiology. Ph.D., University of Illinois at Urbana-Champaign.

ROBERT M. HARPER, JR., Assistant Professor of Accounting. D.B.A., Florida State University.

J. DAVID HARRIS, Assistant Professor of Music. M.M., Cleveland Institute of Music.

MARY B. HARRIS, Instructor in Education (University Lab School). M.A., Middlebury College.

MARY C. HARRIS, Assistant Professor of Medical Technology (Department of Biochemistry). M.S., Temple University.

O. JEFF HARRIS, JR., Professor of Management. Ph.D., University of Texas at Austin.

BETTY C. HARRISON, Assistant Professor of Vocational Home Economics Education. Ph.D., Texas A&M University.

DOUGLAS P. HARRISON, Professor of Chemical Engineering. Ph.D., University of Texas at Austin.

E. EARNEST HARRISON, Professor of Music. M.M., Eastman School of Music (University of Rochester).

STEPHEN A. HARRISON, Assistant Professor of Agronomy. Ph.D., University of Illinois at Urbana-Champaign.

GAIL A. HAROUNI, Instructor in Education (University Laboratory School). M.Ed., LSU.

GEORGE F. HART, Professor of Geology. Ph.D., University of Sheffield (England).

MARY I. HART, Instructor in Computer Science. M.A., LSU.

LEWIS T. HART, Professor of Veterinary Science. Ph.D., LSU.

PIERRE R. HART, Professor of Classical, Germanic, and Slavic Languages; Chairman, Department of Classical, Germanic, and Slavic Languages. Ph.D., University of Wisconsin—Madison.

CRAIG S. HARTLEY, Professor of Mechanical Engineering; Associate Dean for Research and Graduate Activities, College of Engineering; Director, Division of Engineering Research. Ph.D., Ohio State University.

BART P. HARTMAN, Professor of Accounting. D.B.A., University of Kentucky.

BOBBY G. HARVILLE, Associate Professor of Agronomy. Ph.D., University of Tennessee.

MARK P. HASELKORN, Assistant Professor of English. Ph.D., University of Michigan.

DINESH S. HASSAN, Instructor in English. M.A., University of Mysore (India).

MARGUERITE HATCH, Assistant Professor—Research of Zoology and Physiology. Ph.D., University of Dublin (Ireland).

PEGGY D. HATCH, Instructor in Computer Science. M.A., LSU.
WILLIAM K. HATHAWAY, Associate Professor of English. M.F.A., University of Iowa.

ROBERT M. HAUSEY, Associate Professor of Art (Painting and Drawing). M.F.A., University of Pennsylvania.

MIKE F. HAWKINS, Assistant Professor of Psychology. Ph.D., Colorado State University.

PAUL M. HAYDEN, Assistant Professor of Music. D.M.A., University of Illinois at Urbana-Champaign.

RICHARD W. HAYMAKER, Professor of Physics and Astronomy. Ph.D., University of California, Berkeley.

JACK N. HAYNES, Professor of Landscape Architecture; Associate Dean, College of Design; Director, Division of Design Research and Services. M.L.A., University of Michigan.

PETER F. HAYNES, Professor of Veterinary Surgery (Department of Veterinary Clinical Sciences); Veterinary Surgeon; Assistant Director, Veterinary Teaching Hospital and Clinics (Large Animal Clinic). D.V.M., M.S., Colorado State University; Diplomate, American College of Veterinary Surgeons.

ARTHUR M. HEAGLER, Associate Professor of Agricultural Economics and Agribusiness. Ph.D., LSU.

KAY G. HEATH, Instructor in English. M.A., LSU.

ELSIE S. HEBERT, Associate Professor of Journalism; Director, Journalism Extension Service. Ph.D., University of Texas at Austin.

JOHN A. HEBERT, JR., Professor of Poultry Science. Ph.D., LSU.

ROBERT W. HECK, Alumni Professor of Architecture. M.S. Arch., Columbia University.

CHERYL S. HEDLUND, Associate Professor of Veterinary Surgery (Department of Veterinary Clinical Sciences); Veterinary Surgeon. D.V.M., Iowa State University; M.S., Texas A&M University; Diplomate, American College of Veterinary Surgeons.

MAREN HEGSTED, Assistant Professor of Home Economics. Ph.D., University of Wisconsin—Madison.

KATHLEEN M. HEIM, Associate Professor of Library and Information Science; Dean, School of Library and Information Science. Ph.D., University of Wisconsin—Madison.

F. GLEN HEMBRY, Professor of Animal Science. Ph.D., University of Missouri—Columbia.

EDWARD H. HENDERSON, Associate Professor of Philosophy; Chairman, Department of Philosophy. Ph.D., Tulane University.

JOHN B. HENDERSON, Associate Professor of History. Ph.D., University of California, Berkeley.

WILLIAM G. HENK, Associate Professor of Veterinary Anatomy and Fine Structure; Chief, Electron Microscopy Laboratory. Ph.D., University of Georgia.

STEVEN A. HENNING, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., Mississippi State University.

JAMES B. HENRY, Professor of Finance; Dean, College of Business Administration. Ph.D., Syracuse University.

JANE A. HENRY, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance). M.Ed., McNeese State University.

RONALD J. W. HENRY, Professor of Physics and Astronomy; Dean, College of Basic Sciences. Ph.D., Queens University of Belfast (Ireland).

CHRISTOPHER A. HENTZ, Associate Professor of Art (Jewelry/Metalsmithing). M.F.A., Cranbrook Academy of Art; M.S., Indiana State University.

JAN W. HERLINGER, Associate Professor of Music. Ph.D., University of Chicago.

JOHN A. HILDEBRANT, Professor of Mathematics. Ph.D., University of Tennessee.

GLADYS J. HILDRETH, Professor of Home Economics. Ph.D., Michigan State University.

CARL A. HILL, Associate Professor of Recreation Studies; Assistant Director, School of Health, Physical Education, Recreation, and Dance. Ed.D., University of Arkansas.

JOHN M. HILL, Associate Professor of Civil Engineering. Ph.D., Texas A&M University.

KATHERINE F. HILL, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance). M.Ed., Northwestern State University of Louisiana.

ROY F. HILL, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance). M.S., University of Colorado.

SAM B. HILLIARD, Alumni Professor of Geography and Anthropology. Ph.D., University of Wisconsin—Madison.

DANIEL J. HILLMANN, Professor of Veterinary Anatomy and Fine Structure; Biomedical Communicator. D.V.M., Ph.D., Iowa State University.

EDITH B. HILTON, Instructor in Education (University Lab School). M.Ed., LSU.

STANLEY E. HILTON, Professor of History; Assistant Director for Academic Programs, Center for Latin American Affairs. Ph.D., University of Texas at Austin.

H. GRADY HINES, JR., Associate Professor of Social Work; Coordinator of Field of Social Work Practice Area, School of Social Work. M.S.W., LSU.

ROGER A. HINSON, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., University of Tennessee.

S. JAMES HINTZE, Associate Professor of Classical, Germanic, and Slavic Languages. Ph.D., Karl Franzens Universität (Austria).


MARTIN A. HJORTSO, Assistant Professor of Chemical Engineering. Ph.D., University of Houston.

BOU-LOONG HO, Associate Professor of Electrical and Computer Engineering. Ph.D., Iowa State University.

YEW K. HO, Assistant Professor—Research of Physics and Astronomy. Ph.D., University of Western Ontario (Canada).

ANATOLY B. HOCHSTEIN, LSU Foundation James C. Bolton Professor of Ports and Waterways; Director, Ports and Waterways Institute. Ph.D., Navigation Institute (USSR).

E. CLAY HODGIN, Adjunct Associate Professor of Veterinary Pathology; Senior Diagnostic Pathologist, Louisiana Veterinary Medical Diagnostic Laboratory. D.V.M., Oklahoma State University; Ph.D., Washington State University.

BERT J. HOFF, Associate Professor of Agronomy. Ph.D., University of Arizona.

DONALD R. HOFFELD, Professor of Psychology. Ph.D., University of Wisconsin—Madison.
J. WILLIAM HOFFMAN, Associate Professor of Mathematics. Ph.D., Harvard University.

MICHAEL J. R. HOFFMAN, Assistant Professor of Accounting. D.B.A., Indiana University.

PAUL E. HOFFMAN, Associate Professor of History. Ph.D., University of Florida.

PAUL R. HOFFMAN, Associate Professor of Speech (Communication Disorders). Ph.D., Indiana University.

GORDON E. HOLCOMB, Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Wisconsin—Madison.

WILLIAM R. HOLDEN, Professor of Petroleum Engineering. Ph.D., University of Texas at Austin.

ROBERT A. HOLMES, Assistant Professor of Veterinary Radiology (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Purdue University; Ph.D., University of Georgia.

BARBARA A. HOLT, Associate Professor of Vocational Home Economics Education. Ph.D., Cornell University.

DOUGLAS H. HOLT, Instructor in English. M.A., University of Mississippi.

DOMINIQUE G. HOMBERGER, Associate Professor of Zoology and Physiology. Ph.D., University of Zurich (Switzerland).

ARTHUR M. HOOVER, Assistant Professor of Industrial and Technical Education. M.Ed., Sam Houston State University.

JAMES L. HOPE, Assistant Professor of Education; Assistant Principal, University Lab School. Ed.D., University of Arkansas.

MARY F. HOPKINS, Professor of Speech (Communication); Chairman, Department of Speech Communication, Theatre, and Communication Disorders. Ph.D., LSU.

THOMAS W. HOSIE, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., State University of New York at Buffalo.

JOHNNY D. HOSKINS, Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Internist. D.V.M., Oklahoma State University; Ph.D., Iowa State University; Diplomate, American College of Veterinary Internal Medicine.

DANIEL G. HOTARD, Assistant Professor of Industrial Engineering. Ph.D., Mississippi State University.

JAMES E. HOTVEDT, Associate Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., Virginia Polytechnic Institute.

JERRY G. HOUSTON, Assistant Professor of Military Science. B.S., Southern University.

PERRY H. HOWARD, Professor of Sociology. Ph.D., LSU.

PAULA M. HOWAT, Associate Professor of Home Economics. Ph.D., Virginia Polytechnic Institute.

RENEE D. HOWERTON, Assistant Professor of Home Economics. Ph.D., Texas Woman's University.

JEFFREY W. HOY, Assistant Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D. University of California, Davis.

PHILLIP G. HOYT, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Kansas State University.

THOMAS N. HRIBERNIK, Associate Professor of Veterinary Internal Medicine (Department of Veterinary Clinical Sciences); Veterinary Internist; Assistant Director, Veterinary Teaching Hospital and Clinics (Small Animal Clinic). D.V.M., University of Missouri; Diplomate, American College of Veterinary Internal Medicine.

THOMAS C. Y. HSIEH, Assistant Professor of Biochemistry. Ph.D., University of Kentucky.

SHIH-ANG HSU, Professor of Marine Sciences; Professor in Coastal Studies Institute. Ph.D., University of Texas at Austin.

SHIH-CHANG HU, Associate Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., LSU.

WAYNE H. HUDNALL, Associate Professor of Agronomy. Ph.D., University of Hawaii.

AMELIA I. HUDSON, Associate Professor of Speech (Communication Disorders). Ph.D., Florida State University.

DONALD C. HUFFMAN, Professor of Agricultural Economics and Agribusiness. Ph.D., Ohio State University.

RICHARD W. HUGGETT, Professor of Physics and Astronomy. Ph.D., Indiana University.

MARTIN E. HUGH-JONES, Professor of Epidemiology and Community Health. V.M.B., Ph.D., Cambridge University (England); Diplomate, American College of Epidemiology.

OSCAR K. HUH, Professor of Marine Sciences; Professor in Coastal Studies Institute. Ph.D., Pennsylvania State University.

DAVID F. HULL, JR. Adjunct Assistant Professor of Education (Department of Administrative and Foundational Services); Assistant Vice-Chancellor for Student Affairs. Ed.D., Indiana University.

PAUL E. HUMES, Professor of Animal Science; Associate Dean, College of Agriculture. Ph.D., Oregon State University.

JOHN J. HUMPHRIES, Assistant Professor of French and Italian. Ph.D., Yale University.

BURKE HUNER, Assistant Professor of Electrical and Computer Engineering. Ph.D., LSU.

JURGEN HURRELBLINK, Associate Professor of Mathematics. Ph.D., University of Gottingen (West Germany).

VIVIAN W. HURST, Instructor in Education (University Lab School). M.S., LSU.

BARBARA B. HURT, Instructor in Mathematics. M.S., LSU.

R. GREGORY HUSSEY, Professor of Physics and Astronomy; Associate Dean, College of Basic Sciences. Ph.D., LSU.

JOSEPH A. HUTCHINSON, Assistant Professor of Education (Department of Administrative and Foundational Services); Assistant Director, Division of Instructional Support and Development. Ed.D., LSU.

DANIEL H. HWANG, Associate Professor of Home Economics. Ph.D., Colorado State University.

EMILIO A. IACAZA, Assistant Professor of Experimental Statistics (part-time); Assistant Director, Administrative Information Systems. Ph.D., LSU.

TISSA H. ILLANGASEKARE, Assistant Professor of Civil Engineering. Ph.D., Colorado State University.
RICHARD L. IMLAY, Professor of Physics and Astron­omy. Ph.D., Princeton University.

RODNEY H. INGRAHAM, Professor of Veterinary Physiology, Pharmacology, and Toxicology; Professor of Veterinary Science. D.V.M., University of California, Davis; Ph.D., Iowa State University.

DENNIS R. INGRAM, Assistant Professor of Poultry Science. Ph.D., University of Florida.

JOY S. IRWIN, Instructor in Accounting. M.B.A., LSU.

CHARLES J. ISSEL, Professor of Veterinary Science; Professor of Veterinary Virology (Department of Veterinary Microbiology and Parasitology). D.V.M., University of California, Davis; Ph.D., University of Wisconsin—Madison; Diplomate, American College of Veterinary Microbiologists.

S. SITHARAMA IYENGAR, Associate Professor of Computer Science. Ph.D., Mississippi State University.

YURUK IYRIBOZ, Assistant Professor of Health Science (School of Health, Physical Education, Recreation, and Dance). M.D., Aegean University Medical School (Turkey); M.P.H., Johns Hopkins University.

Ben D. Jackson, Associate Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., Texas A&M University.

DANIEL F. JACKSON, Professor of Environmental Studies; Director, Institute for Environmental Studies. Ph.D., State University of New York, College of Environmental Sciences and Forestry.

DAVID C. JACOBSEN, Assistant Professor of Music. D.M.A., University of Illinois at Urbana-Champaign.

MELVIN H. JAMESON, Assistant Professor of Finance. Ph.D., University of California, Berkeley.

BARBARA S. JAMISON, Instructor in English. M.A., West Virginia University.

ROBERT A. JAY, Assistant Professor of Art (Art History). Ph.D., University of Minnesota.

JESSE JAYNES, Assistant Professor of Biochemistry. Ph.D., Brigham Young University.

JEANNE M. JENDRZEJEWSKI, Instructor in Education (University Lab School). M.A., LSU.

QUENTIN A. L. JENKINS, Professor of Sociology. Ph.D., Iowa State University.

BERNARD J. JENSEN, Assistant Professor of Psychology. Ph.D., Southern Illinois University.

SUZANNE M. JENSEN, Adjunct Associate Professor of Psychology; Psychologist, Student Health Center. Ph.D., University of Bonn (West Germany).

ALBERT J. JETTY, Associate Professor of Speech (Com­munication Disorders). Ph.D., Michigan State University.

CALVIN C. JILLSON, Assistant Professor of Political Science. Ph.D., University of Maryland.

CHRISTOPHER K. JOHNS, Assistant Professor of Art (Painting and Drawing). M.F.A., Stanford University.

ADRAIN E. JOHNSON, JR., Professor of Chemical En­gineering. Ph.D., University of Florida.

DAVID B. JOHNSON, Professor of Economics; Director, Division of Research and Development (College of Business Administration). Ph.D., University of Virginia.

MARK K. JOHNSON, Associate Professor of Wildlife (School of Forestry, Wildlife, and Fisheries). Ph.D., Colorado State University.

MICHAEL K. JOHNSON, Assistant Professor of Chemistry. Ph.D., University of East Anglia (England).

SETH J. JOHNSON, Associate Professor of Entomology. Ph.D., Texas A&M University.

WILLIAM A. JOHNSON, Professor of Poultry Science; Head, Department of Poultry Science. Ph.D., University of Minnesota.

J. BUSH JONES, Associate Professor of Computer Science. Ph.D., Southern Methodist University.

J. PRESTON JONES, Professor of Agronomy; Head, Department of Agronomy. Ph.D., University of Arizona.

JACK J. JONES, Professor of Agronomy. Ph.D., LSU.

JOHN P. JONES, Associate Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Georgia.

JOSEPH H. JONES, JR., Professor of Sociology; Professor of Extension Education (Department of Extension and International Education); Program Analyst. Ph.D., University of Kentucky.

LAMAR B. JONES, Professor of Economics. Ph.D., University of Texas at Austin.

W. VERNON JONES, Professor of Physics and Astronomy. Ph.D., LSU.

ROSS JORDAN, Associate Professor of English. Ph.D., Indiana University.

DEBRA S. JOURNET, Assistant Professor of English. Ph.D., McGill University (Canada).

SUBHASH C. KAK, Professor of Electrical and Computer Engineering. Ph.D., Indian Institute of Technology (India).

RODERICK L. KAMENETZ, Assistant Professor of English. M.A., Stanford University.

ARTHUR H. KAPLE, Associate Professor of Construction; Chairman, Department of Construction. M.A., University of Minnesota.

LEONARD C. KAPPEL, Associate Professor of Veterinary Physiology, Pharmacology, and Toxicology. Ph.D., University of Missouri.

PHILLIP A. KARNS, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Equine Specialist. D.V.M., Ohio State University: Diplomate, American Board of Veterinary Practitioners.

GARY H. KECK, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Assistant Wrestling Coach. M.A., Adams State College.

BANWARI L. KEDIA, Associate Professor of Manage­ment. Ph.D., Case Western Reserve University.

JAMES E. KEISLER, Professor of Mathematics; Vice-Chairman for Instruction, Department of Mathematics. Ph.D., University of Michigan.

ROLAND A. KELLER, Assistant Professor of Military Science. B.S., North Georgia College.

ELEANOR A. KELLEY, Professor of Home Economics. Ph.D., Michigan State University.

MARY L. KELLEY, Assistant Professor of Psychology. Ph.D., West Virginia University.
GARY G. KELLY, Instructor in Civil Engineering. M.S., Ohio State University.

JOAN L. KELLY, Instructor in English. M.A., Ohio State University.

WILLIAM E. KELSO, Assistant Professor of Fisheries (School of Forestry, Wildlife, and Fisheries). Ph.D., Virginia Polytechnic Institute.

DEBORAH J. KEMP, Assistant Professor of Finance. J.D., University of Florida.

DONALD M. KENDRICK, Assistant Professor of Music. M.M., New England Conservatory of Music.

CHARLES W. KENNEDY, Assistant Professor of Agronomy. Ph.D., University of Kentucky.

J. GERALD KENNEDY, Associate Professor of English. Ph.D., Duke University.

KIRKLYN M. KERR, Professor of Veterinary Science: Head, Department of Veterinary Science; Assistant Dean, School of Veterinary Medicine. D.V.M., Ohio State University; Ph.D., Texas A&M University; Diplomate, American College of Veterinary Pathologists.

RICHARD H. KESEL, Professor of Geography and Anthropology. Ph.D., University of Maryland.

NEIL R. KESTNER, Professor of Chemistry. Ph.D., Yale University.

K. JILL KIECOLT, Assistant Professor of Sociology. Ph.D., University of California, Los Angeles.

EDGAR L. KILLINGSWORTH, Associate Professor of Architecture. M.Arch., University of Michigan—Ann Arbor.

DUNCAN W. KINCHEN, Assistant Professor of Construction. B.I.E., Georgia Institute of Technology.

RALPH A. KINNEY, Professor of Electrical and Computer Engineering. Ph.D., University of Florida.

CHARLES F. KIRBY, Jr., Instructor in Experimental Statistics. M.A., Ph.B., LSU.

HARRY L. KIRBY, Jr., Associate Professor of Spanish and Portuguese. Ph.D., University of Illinois at Urbana-Champaign.

PAUL N. KIRK, Associate Professor of Physics and Astronomy. Ph.D., Massachusetts Institute of Technology.

KENNETH F. KITCHELL, Jr., Associate Professor of Classical, Germanic, and Slavic Languages. Ph.D., Loyola University of Chicago.

LYNN M. KITCHEN, Assistant Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Kentucky.

THOMAS R. KLEI, Professor of Parasitology (Department of Veterinary Microbiology and Parasitology); Professor of Veterinary Science. Ph.D., Wayne State University.

DAVID M. KLEIN, Assistant Professor of Mathematics. Ph.D., Cornell University.

VICTOR A. KLIMASH, Associate Professor of Music. D.M., Florida State University.

POWSIRI KLINKHACHORN, Assistant Professor of Electrical and Computer Engineering. Ph.D., West Virginia University.

RONALD M. KNAUS, Associate Professor of Nuclear Science. Ph.D., Oregon State University.

JUDY K. KNIPMEYER, Instructor in English. M.A., LSU.

F. CARL KNOPF, Assistant Professor of Chemical Engineering. Ph.D., Purdue University.


ROBERT J. KOCH, Professor of Mathematics. Ph.D., Tulane University.

JOHN B. KOEHL, Instructor in Mathematics. M.A., Sam Houston State University.

MAREILE A. KOENIG, Assistant Professor of Speech (Communication Disorders). Ph.D., University of Illinois at Urbana-Champaign.

BONNIE C. KONOPAK, Assistant Professor of Education (Department of Curriculum and Instruction). Ph.D., University of California, Santa Barbara.

KENNETH L. KOONCE, Professor of Experimental Statistics: Head, Department of Experimental Statistics. Ph.D., North Carolina State University.

FAIK A. KORAY, Assistant Professor of Economics. Ph.D., Duke University.

CHERYL A. KOSKI, Instructor in English. M.A., Iowa State University.

JERZY S. KOSMALA, Associate Professor of Music. D.M.A., Indiana University.

JOE W. KOTRLIK, Associate Professor of Vocational Agricultural Education; Associate Professor of Extension Education. Ph.D., Texas A&M University.

DONALD H. KRAFT, Professor of Computer Science; Adjunct Professor of Library and Information Science. Ph.D., Purdue University.

TILLIE KRIEGER, Assistant Professor of Library and Information Science. Ph.D., University of Illinois at Urbana-Champaign.

JOSEPH KRONICK, Assistant Professor of English. M.A., University of California, Los Angeles.

VINCENT F. KUETEMEYER, Associate Professor of Industrial and Technical Education. Ed.D., Texas A&M University.

SUKHAMAY KUNDU, Associate Professor of Computer Science. Ph.D., University of California, Berkeley.

SANDRA KUNDE, Associate Professor of Music. D.M.A., University of Colorado.

HUI-HSIUNG KUO, Professor of Mathematics. Ph.D., Cornell University.

DANIEL G. KYLE, Associate Professor of Accounting. Ph.D., University of Arkansas.

JEFFERY P. LAFA GE, Associate Professor of Entomology. Ph.D., University of Arizona.

LINDA J. LAFFERTY, Assistant Professor of Home Economics. Ph.D., University of Missouri—Columbia.

ROGER A. LAINÉ, Professor of Biochemistry; Chairman, Department of Biochemistry. Ph.D., Rice University.

ALESON L. LAKE, Assistant Professor of Military Science. B.S., Morehead State University.

EDWARD N. LAMBRÉMONT, Professor of Nuclear Science; Director, Nuclear Science Center. Ph.D., Ohio State University.

DENNIS K. LANDIN, Assistant Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ed.D., West Virginia University.
ARLO U. LANDOLT, Professor of Physics and Astronomy. Ph.D., Indiana University.

IRVING M. LANE, Professor of Psychology. Ph.D., Michigan State University.

WILLIAM R. LANE, Associate Professor of Finance; Associate Dean, College of Business Administration. Ph.D., University of North Carolina at Chapel Hill.

MARK D. LANGE, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., Iowa State University.

JULIUS P. LANGLINAIS, Associate Professor of Petroleum Engineering. Ph.D., LSU.

C. DAVID LANGLOIS, Assistant Professor of Industrial and Technical Education. M.S., University of North Dakota.

DARLENE R. LANIER, Instructor in Quantitative Business Analysis. M.S., LSU.

PHILIP B. LARIMORE, JR., Assistant Professor of Geography and Anthropology; Cartographer. M.S., University of Virginia.


JOHN M. LARKIN, Professor of Microbiology. Ph.D., Washington State University.

MUHAMMAD LATIF, Assistant Professor of Electrical and Computer Engineering. Ph.D., University of Michigan.

VERONICA LAUGHLIN, Instructor in Speech (Communication Disorders). M.A., LSU.

THOMAS G. LAVAZZI, Instructor in English. M.F.A., University of Iowa.

FRANCES C. LAWRENCE, Associate Professor of Home Economics. Ph.D., Florida State University.

PATRICIA A. LAWRENCE, Professor of Art (Art History). Ph.D., University of California, Berkeley.

JIMmie D. LAWSON, Professor of Mathematics. Ph.D., University of Tennessee.

THOMAS B. LAWSON, III, Assistant Professor of Agricultural Engineering. Ph.D., University of Maryland.

ROBERT F. LAX, Associate Professor of Mathematics. Ph.D., Massachusetts Institute of Technology.

JOHN F. LEAVER, III, Assistant Professor of Architecture. M.A., University of Oklahoma.

RAYMOND M. LEDBETTER, Assistant Professor of Military Science. B.S., University of Utah.

ALLEN F. LEE, Associate Professor of Veterinary Neurophysiology (Department of Veterinary Physiology, Pharmacology, and Toxicology); Coordinator, Preveterinary Programs. D.V.M., Tuskegee Institute; Ph.D., University of Georgia.

AMELIA M. LEE, Associate Professor of Physical Education. Ph.D., Texas Woman’s University.

EDWARD T. LEE, Professor of Computer Science. Ph.D., University of California, Berkeley.

PAUL D. LEE, Associate Professor of Physics and Astronomy. Ph.D., University of Illinois at Urbana-Champaign.

WILLIAM R. LEE, Professor of Zoology and Physiology. Ph.D., University of Wisconsin—Madison.

WILLIAM H. LEONARD, Associate Professor of Education (Department of Curriculum and Instruction); Associate Professor of Zoology and Physiology. Ph.D., University of California, Berkeley.

THOMAS W. LESTER, Professor of Mechanical Engineering; Chairman, Department of Mechanical Engineering. Ph.D., Purdue University.

ALEXANDRE LEUPIN, Associate Professor of French and Italian. Ph.D., University of Geneva (Switzerland).

HELEN E. LEVY, Instructor in Veterinary Science. B.S., LSU.

JERRY W. LEWIS, Assistant Professor of Agronomy. Ph.D., Iowa State University.

JOSEPH W. LICATA, Professor of Education; Chairman, Department of Administrative and Foundational Services. Ph.D., Pennsylvania State University.

DONALD R. LICHENSTEIN, Assistant Professor of Marketing. Ph.D., University of South Carolina.

SARAH L. LIGGETT, Assistant Professor of English. Ph.D., Purdue University.

CHARLES W. LINDAU, Assistant Professor of Nuclear Science; Assistant Professor in Laboratory for Wetland Soils and Sediments. Ph.D., Texas A&M University.

GEORGE D. LINDBERG, Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Wisconsin—Madison.

DAVID F. LINDENFELD, Associate Professor of History. Ph.D., University of Chicago.

DONALD R. LINGARD, Professor of Veterinary Medicine; Professor of Theriogenology; Head, Department of Veterinary Clinical Sciences; Director, Veterinary Teaching Hospital and Clinics. D.V.M., Ontario Veterinary College (Canada); Ph.D., Washington State University; Diplomat, American College of Theriogenologists.

NORWIN E. LINNARTH, Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., LSU.

PATRICK C. LIPCSICMB, III, Associate Professor of History. Ph.D., University of Texas at Austin.

RICHARD A. LITHERLAND, Assistant Professor of Mathematics. Ph.D., University of Cambridge (England).

DANIEL C. LITTLEFIELD, Associate Professor of History. Ph.D., Johns Hopkins University.

KAM-BIU LIU, Assistant Professor of Geography and Anthropology. Ph.D., University of Toronto (Canada).

JOSEPH A. LIUZZO, Professor of Food Science. Ph.D., Michigan State University.

RICHARD G. LOMAX, Assistant Professor of Education (Department of Administrative and Foundational Services). Ph.D., University of Pittsburgh.

KAYLENE G. LONG, Assistant Professor of Speech (Communication); Director, Special Services; Associate Director, Developmental Education. Ph.D., Indiana University.

DAVID J. LONGSTRETH, Assistant Professor of Botany. Ph.D., Duke University.

STEPHEN W. LOONEY, Assistant Professor of Quantitative Business Analysis. Ph.D., University of Georgia.

JOHN L. LOOS, Alumni Professor of History; Chairman, Department of History. Ph.D., Washington University.

ANNE C. LOVELAND, Professor of History. Ph.D., Cornell University.

DONALD R. LOWE, Professor of Geology. Ph.D., University of Illinois at Urbana-Champaign.

ALFREDO R. LOZADA, Professor of Spanish and Portuguese. Ph.D., University of California, Berkeley.
FERNANDO LOZANO, Assistant Professor of Veterinary Pathology: Diagnostic Pathologist, Louisiana Veterinary Medical Diagnostic Laboratory. D.V.M., Universidad Nacional (Colombia); Ph.D., Texas A&M University.

CATHARINE A. LUNDERGAN, Assistant Professor of Horticulture. Ph.D., Purdue University.

JOHN E. LUNN, Assistant Professor of Economics. Ph.D., University of California, Los Angeles.

ROBERT M. LUSCHER, Instructor in English. Ph.D., Duke University.

D. GENE LUTHER, Associate Professor of Veterinary Science. D.V.M., Oklahoma State University; Ph.D., LSU; Diplomate, American College of Veterinary Microbiologists.

JOHN W. LYNN, Assistant Professor of Zoology and Physiology. Ph.D., University of California, Davis.

ROBERT F. LYON, Associate Professor of Art (Ceramics). M.F.A., Tyler School of Art.

NICHOLAS J. MACARI, Instructor in English. M.S., Purdue University.

SUSAN K. MacGREGOR, Assistant Professor of Education (Department of Administrative and Foundational Services). Ed.D., North Carolina State University.

NONA F. MACK, Instructor in English. M.Ed., Southern University.

DAVID R. MacKENZIE, Professor of Plant Pathology: Head, Department of Plant Pathology and Crop Physiology. Ph.D., Pennsylvania State University.

DORIS L. MacKENZIE, Assistant Professor of Experimental Statistics. Ph.D., Pennsylvania State University.

JAMES A. MACK, Associate Professor of Education (Department of Administrative and Foundational Services); Associate Dean for Administration and Student Services, College of Education. Ed.D., LSU.

MAE S. MACKY, Instructor in Education (University Lab School). M.Ed., LSU.


STEVEN C. MADDOX, Instructor in Education (University Lab School). M.S., LSU.

PHILIP MAECHLING, Assistant Professor of Landscape Architecture. M.L.A., University of Pennsylvania.

RICHARD A. MAGILL, Associate Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance); Associate Professor of Psychology. Ph.D., Florida State University.

JOHN B. MALONE, JR., Professor of Veterinary Parasitology (Department of Veterinary Microbiology and Parasitology). D.V.M., University of California, Davis; Ph.D., University of Georgia.

MARK R. MALONE, Assistant Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Colorado.

RONALD F. MALONE, Associate Professor of Civil Engineering. Ph.D., Utah State University.

JOHN A. MALVETO, Assistant Professor of Art (Painting and Drawing). M.F.A., Arizona State University.

MICHAEL MANGUM, Assistant Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ph.D., Florida State University.

LAWRENCE MANN, JR., Professor of Industrial Engineering. Ph.D., Purdue University.

DUPREE MAPLES, Professor of Mechanical Engineering. Ph.D., Oklahoma State University.

DANIEL B. MARIN, Assistant Professor of Business Administration; M.B.A. Director, College of Business Administration. Ph.D., University of Iowa.

YVONNE B. MARQUETTE, Instructor in Home Economics. M.S., LSU.

ALAN H. MARSHAK, Professor of Electrical and Computer Engineering; Chairman, Department of Electrical and Computer Engineering. Ph.D., University of Arizona.

BENJAMIN F. MARTIN, Associate Professor of History. Ph.D., University of North Carolina at Chapel Hill.

FREDDIE A. MARTIN, Professor of Agronomy. Ph.D., Cornell University.

GEORGE S. MARTIN, Assistant Professor of Veterinary Surgery (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., University of Illinois; M.S., Colorado State University.

ROBERT E. MARTIN, Associate Professor of Economics. Ph.D., Southern Methodist University.

LAWRENCE J. MARX, Instructor in Mathematics. Ph.D., University of Minnesota.

CARROLL K. MATHews, Instructor in Interior Design (School of Architecture). B.F.A., LSU.

F. NEIL MATHews, Associate Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Connecticut.

ROBERT C. MATHews, Associate Professor of Psychology. Ph.D., Yale University.

WAYNE L. MATTICE, Boyd Professor, Department of Chemistry. Ph.D., Duke University.

RICHARD A. MATULA, Professor of Mechanical Engineering; Dean, College of Engineering. Ph.D., Purdue University.

MARCHITA B. MAUCK, Associate Professor of Art (Art History). Ph.D., Tulane University.

SPENCER J. MAXCY, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., Indiana University.

JOHN R. MAY, Professor of English; Chairman, Department of English. Ph.D., Emory University.

FLOYD A. McBRIDE, Instructor in Journalism (Telecommunications). M.A., LSU.

FRITZ A. McCAMeron, Professor of Accounting; Dean, Division of Continuing Education. Ph.D., University of Alabama.

EUGENE C. McCANN, Professor of Management. Ph.D., LSU.

JILL J. McCLURE, Associate Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Internist. D.V.M., M.S., University of Minnesota; Diplomate, American College of Veterinary Internal Medicine; Diplomate, American Board of Veterinary Practitioners.

J. RAYMOND McClURE, Associate Professor of Veterinary Surgery (Department of Veterinary Clinical Sciences); Veterinary Surgeon. D.V.M., Kansas State University; M.S., University of Minnesota; Diplomate, American College of Veterinary Surgeons.
MARK E. McCONNAUGHAY, Instructor in Petroleum Engineering. M.S., Rice University.

DAVID J. McCLOY, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Ohio State University.

VICTOR McDaniel, Instructor in Agricultural Engineering. M.E., LSU.

JAMES L. McDUFFIE, Professor of Education (Department of Curriculum and Instruction). Ed.D., University of Virginia.

BOBBIE B. McFATTER, Professor of Extension Education (Department of Extension and International Education); Division Leader, Cooperative Extension Service. Ed.D., LSU.

EDWARD C. McGAWLEY, Assistant Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Kentucky.

LEA M. McGEE, Associate Professor of Education (Department of Curriculum and Instruction). Ed.D., Virginia Polytechnic Institute.

O. CARRUTH McGEHEE, Professor of Mathematics. Ph.D., Yale University.

LYLE D. McGINNIS, Professor of Geology; Chairman, Department of Geology. Ph.D., University of Illinois at Urbana-Champaign.

SEAN P. MCGLYNN, Boyd Professor, Department of Chemistry; Vice-Chancellor for Research. Ph.D., Florida State University.

PATRICK E. McGREGORY, Assistant Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Kansas.

ROBERTA McHARDY, Instructor in Education (University Laboratory School). Ph.D., Columbia University.

ROBERT C. McILHENNY, Associate Professor of Nuclear Science; Associate Professor of Interdisciplinary Engineering. Ph.D., University of Tennessee.

WESLEY J. McJULIEN, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., Syracuse University.

WALLACE C. McKENZIE, JR., Professor of Music. Ph.D., North Texas State University.

ROBERT D. MCKINNON, Instructor in English. M.A., Hardin-Simmons University.

EDWARD McLAUGHLIN, Professor of Chemical Engineering; Chairman, Department of Chemical Engineering. Ph.D., S.C., London University (England).

KENNETH W. McMILLIN, Associate Professor of Animal Science. Ph.D., Iowa State University.

W. DOUGLAS McMILLIN, Assistant Professor of Economics. Ph.D., LSU.

MICALA McMURRIAN, Instructor in English. M.A., University of Western Louisiana.

JAMES G. McMURRY, Professor of Industrial and Technical Education; Head, Department of Industrial and Technical Education. Ed.D., University of Missouri.

ANDREW J. MCPHATE, Professor of Mechanical Engineering. M.S., Louisiana Tech University.

TROY M. McQUEEN, Associate Professor of Architecture. M.S., Cornell University.

WARREN A. MEADOWS, Professor of Horticulture. Ph.D., LSU.

W. WAYNE MEAUX, Assistant Professor of Industrial and Technical Education. M.A., Northwestern State University of Louisiana.

ALBERT J. MEEK, Associate Professor of Art (Photography). M.F.A., Ohio University.

C. LAMAR MEEK, Professor of Entomology. Ph.D., Texas A&M University.

ALBERT H. MEIER, Professor of Zoology and Physiology. Ph.D., University of Missouri—Columbia.

MUHTAQ A. MEMON, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. B.V.Sc., University of Punjab (Pakistan); Ph.D., University of Minnesota.

IRVING A. MENDELSSOHN, Associate Professor of Marine Sciences; Associate Professor in Laboratory for Wetland Soils and Sediments. Ph.D., North Carolina State University.

DOROTHY J. MERRILL, Instructor in Speech (Communication); Academic Counselor, College of Arts and Sciences. M.A., Northwestern State University of Louisiana.

JOHN C. MERRILL, Professor of Journalism. Ph.D., University of Iowa.

WILLIAM J. METCALF, Associate Professor of Physics and Astronomy. Ph.D., California Institute of Technology.

GAYE S. MEYER, Instructor in Dance (School of Health, Physical Education, Recreation, and Dance). M.F.A., University of Utah.

SAMUEL P. MEYERS, Professor of Food Science; Professor of Marine Sciences; Professor in Coastal Ecology and Fisheries Institute. Ph.D., Columbia University.

JAMES O. MIDDELEY, Professor of Social Work. Ph.D., University of Cape Town (South Africa).

BOBBY J. MILLER, Professor of Agronomy. Ph.D., University of Tennessee.

CREIGHTON J. MILLER, Assistant Professor of Speech (Communication Disorders). Ph.D., Purdue University.

JAMES E. MILLER, Assistant Professor of Epidemiology and Community Health. D.V.M., Ph.D., University of California, Davis.

JEFFERY R. MILLER, Instructor in Accounting. M.B.A., Southwest Texas State University.

PERCY H. MILLER, Professor of Mechanical Engineering. Ph.D., University of Texas at Austin.

RICHARD I. MILLER, Assistant Professor of Veterinary Pathology. B.V.Sc., University of Queensland (Australia); Ph.D., James Cook University (Australia).

RUSSELL L. MILLER, Professor of Agronomy. Ph.D., LSU.

STEPHAN W. MILLER, Assistant Professor of Geography and Anthropology. M.S., Florida State University.

RUTH G. MILLWARD, Professor of Art (Design). M.F.A., Basel College of Design (Switzerland).

MERRILL T. MIMS, Instructor in Computer Science. Ph.D., North Texas State University.

RAYMOND R. MINCHEW, Instructor in Education (University Lab School). Ed.D., Louisiana Tech University.

S. ALI MIRBOD, Assistant Professor of Electrical and Computer Engineering. Ph.D., University of Toronto (Canada).

HAROLD D. MIXON, Associate Professor of Speech (Communication). Ph.D., Florida State University.
ALDEN J. MOE, Professor of Education; Chairman, Department of Curriculum and Instruction. Ph.D., University of Minnesota.

BRUJ MOHAN, Professor of Social Work; Dean, School of Social Work. Ph.D., Lucknow University (India).

WILLIAM C. MOLONEY, Assistant Professor of Military Science. B.B.A., St. Mary's University of San Antonio.

CLIFFORD L. MONDART, JR., Professor of Agronomy. Ph.D., Mississippi State University.

TERESA G. MONGER, Assistant Professor of Petroleum Engineering. Ph.D., University of Washington.

CHARLES J. MONLEZUN, Associate Professor of Experimental Statistics. Ph.D., Tulane University.

RONALD C. MONTELARO, Associate Professor of Biochemistry; Associate Dean, College of Basic Sciences. Ph.D., University of Wisconsin—Madison.

BARBARA A. MOORE, Associate Professor of Vocational Home Economics Education. Ph.D., Ohio State University.

BRUCE E. MOORE, Assistant Professor of Architecture. M.Arch., University of Michigan—Ann Arbor.

CLYDE H. MOORE, JR., Professor of Geology; Director, Basin Research Institute. Ph.D., University of Texas at Austin.

DON D. MOORE, Professor of English. Ph.D., Tulane University.

GARY E. MOORE, Associate Professor of Vocational Agricultural Education. Ph.D., Ohio State University.

THOMAS S. MOORE, JR., Professor of Botany; Chairman, Department of Botany. Ph.D., Indiana University.

WILLIAM J. MOORE, Professor of Economics. Ph.D., University of Texas at Austin.

PATRICIA G. MORGAN, Instructor in English. Ph.D., University of Southwestern Louisiana.

MAURICE C. MORRISSETTE, Professor of Veterinary Pharmacology (Department of Veterinary Physiology, Pharmacology, and Toxicology); Assistant to the Dean for Facility Planning and Control. D.V.M., Kansas State University; Ph.D., Oklahoma State University.

E. BARRY MOSER, Assistant Professor of Experimental Statistics. Ph.D., University of Georgia.

KEVIN V. MULCAHY, Assistant Professor of Political Science. Ph.D., Brown University.

ROBERT A. MULLER, Professor of Geography and Anthropology; Professor of Agricultural Engineering. Ph.D., Syracuse University.

AUTTIS M. MULLINS, Professor of Food Science; Head, Department of Food Science. Ph.D., University of Missouri—Columbia.

WHITNEY R. MUNDT, Associate Professor of Journalism. Ph.D., LSU.

NORIMOTO MURAI, Associate Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Wisconsin—Madison.

KATHLEEN A. MURRAY, Assistant Professor of Laboratory and Exotic Animal Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., Purdue University; M.S., Pennsylvania State University.

STEPHEN P. MURRAY, Professor of Marine Sciences; Assistant Director, Coastal Studies Institute. Ph.D., University of Chicago.

RICHARD A. MUSEMECHE, Professor of Education (Department of Administrative and Foundational Services). Ed.D., University of Arkansas.

MARTHA C. MYERS, Instructor in Marketing. M.B.A., LSU.

SAMUEL J. NADER, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Coordinator of On-Campus Recruiting (Athletic Department). Ph.D., LSU.

E. GREGORY NAGODE, Assistant Professor of Music. M.M., M.S., University of Illinois at Urbana-Champaign.

JAMES T. NARDIN, Professor of English. Ph.D., University of Chicago.

ANNA K. NARDO, Associate Professor of English. Ph.D., Emory University.

ROBERT V. NAUMAN, Professor of Chemistry. Ph.D., University of California, Berkeley.

T. MARK NEER, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Internist. D.V.M., Oklahoma State University; Diplomate, American College of Veterinary Internal Medicine.

THOMAS M. NEFF, Assistant Professor of Art (Photography). M.F.A., University of Colorado.

MOHSEN NEGHABAT, Instructor in Quantitative Business Analysis. Ph.D., LSU.

JACK K. NELSON, Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ed.D., University of Oregon.

ROBERT T. NETTKEN, Associate Professor of Electrical and Computer Engineering; Associate Professor of Construction. M.S., University of Kentucky.

ROBERT W. NEUMAN, Assistant Curator in Museum of Geosciences; Assistant Director, Museum of Geosciences; Adjunct Assistant Professor of Geography and Anthropology. M.A., LSU.

EDWARD J. NEWBY, Professor of Classical, Germanic, and Slavic Languages. Ph.D., University of North Carolina at Chapel Hill.

EDWIN J. NEWCHURCH, Professor of Environmental Engineering (Institute for Environmental Studies). B.S., LSU.

GEORGE R. NEWKOME, Professor of Chemistry; Executive Director, Center for Energy Studies. Ph.D., Kent State University.

ROBERT J. NEWMAN, Associate Professor of Economics. Ph.D., University of California, Los Angeles.

DONALD W. NEWSOM, Professor of Horticulture; Head, Department of Horticulture. Ph.D., Michigan State University.

MILTON B. NEWTON, JR., Professor of Geography and Anthropology; Chairman, Department of Geography and Anthropology. Ph.D., LSU.

STEVEN S. NICHOLSON, Associate Professor of Veterinary Physiology, Pharmacology, and Toxicology; Specialist. Louisiana Cooperative Extension Service. D.V.M., Texas A&M University; Diplomate, American Board of Veterinary Toxicology.

STEPHEN C. NICKERSON, Assistant Professor of Dairy Science. Ph.D., Virginia Polytechnic Institute.
JERRY L. NIELSON, Professor of Interior Design (School of Architecture); Dean, College of Design. B.A., University of Washington.

W. ALLEN NIPPER, Assistant Professor of Dairy Science. Ph.D., Iowa State University.

CHARLES E. NIVENS, Assistant Professor of Art (Graphic Design). M.F.A., Indiana University.

AUGUSTO NOBILE, Associate Professor of Mathematics. Ph.D., Massachusetts Institute of Technology.

ROBERT E. NOBLE, Professor of Wildlife (School of Forestry, Wildlife, and Fisheries). Ph.D., Michigan State University.

BURL L. NOGGLE, Professor of History. Ph.D., Duke University.

MARY E. NORCKAUER, Associate Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ph.D., Texas Woman's University.

RICHARD F. NOREM, Professor of Music. M.M., Eastman School of Music (University of Rochester).

H. LOUANNE NORWOOD, Assistant Professor of Dance (School of Health, Physical Education, Recreation, and Dance). Ph.D., Texas Woman's University.

DAG NUMMEDAL, Professor of Geology. Ph.D., University of Illinois at Urbana-Champaign.

JEFFREY A. NUNN, Assistant Professor of Geology. Ph.D., Northwestern University.

JOHN C. NYE, Professor of Agricultural Engineering; Head, Department of Agricultural Engineering. Ph.D., Purdue University.

ANNE B. O'BRIEN, Instructor in Education (University Lab School). M.Ed., Central State University.

ROBERT F. O'CONNELL, Professor of Physics and Astronomy. Ph.D., University of Notre Dame; D.Sc., National University of Ireland.

NEIL G. ODENWALD, Professor of Landscape Architecture; Director, School of Landscape Architecture. Ph.D., Mississippi State University.

GEORGE W. OHLENDORF, Associate Professor of Rural Sociology; Associate Professor of Veterinary Educational Research (School of Veterinary Medicine). Ph.D., Texas A&M University.

ANSA T. OJANLATVA, Assistant Professor of Health Science (School of Health, Physical Education, Recreation, and Dance). Ph.D., Southern Illinois University.

ANTHONY J. O'KEEFFE, Instructor in English. Ph.D., University of Pennsylvania.

D. ROBERT OKOPNY, Assistant Professor of Accounting. Ph.D., Texas A&M University.

BRUCE M. OLCOTT, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., University of Georgia; M.S., Washington State University.

ABE D. OLIVER, JR., Professor of Entomology. Ph.D., LSU.

PHILIP D. OLIVIER, Assistant Professor of Electrical and Computer Engineering. Ph.D., Texas Tech University.

JAMES OLNEY, LSU Foundation Henry J. Voorhies Professor of English; Coeditor, Southern Review. Ph.D., Columbia University.

GLENN H. OLSEN, Assistant Professor of Laboratory and Exotic Animal Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., University of Illinois at Urbana-Champaign; Ph.D., University of Massachusetts.

NEVA F. OLSEN, Professor of Home Economics; Director, School of Home Economics. Ph.D., Texas Woman's University.

JOHN P. O'NEILL, Curator in Museum of Natural Science. Ph.D., LSU.

A. PETERS OPPERMANN, Professor of Architecture; Director, School of Architecture. M.Arch., University of Michigan—Ann Arbor.

FRANK M. O'QUINN, Assistant Professor of Construction. M.S., Oklahoma State University.

KENNETH N. ORBACH, Professor of Accounting. Ph.D., Texas A&M University.

SALLY P. O'REILLY, Associate Professor of Music. M.M., Indiana University.

MICHAEL E. ORLOWSKI, Associate Professor of Microbiology. Ph.D., Indiana University.

EDMUND N. O'ROURKE, Professor of Horticulture. Ph.D., Cornell University.

CHARLES E. ORSER, Assistant Professor of Geography and Anthropology. Ph.D., Southern Illinois University.

KATHLEEN D. OSBORNE, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Athletic Trainer. M.A., Western Michigan University.

YVONNE H. OSBORNE, Assistant Professor of Psychology. Ph.D., University of Louisville.

PEGGY S. OTT, Associate Professor of Home Economics. Ph.D., Florida State University.

EDWARD B. OVERTON, Professor—Research of Environmental Studies. Ph.D., University of Alabama.

THOMAS C. OWEN, Associate Professor of History. Ph.D., Harvard University.

JILL T. OWENS, Instructor in English. Ph.D., University of Mississippi.

DOUGLAS W. OWSLEY, Associate Professor of Geography and Anthropology. Ph.D., University of Tennessee.

JAMES G. OXLEY, Assistant Professor of Mathematics. Ph.D., University of Oxford (England).

HALIT H. OZ, Assistant Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Clinician. D.V.M., University of Istanbul (Turkey); Ph.D., University of Minnesota.

STEVEN C. PACK, Assistant Professor of Civil Engineering. Ph.D., Syracuse University.

KATHARINE M. PAINE, Instructor in English; Administrative Analyst, College of Arts and Sciences. M.A., Duke University.

PATRICIA M. PALMER, Assistant Professor of Aerospace Studies. M.S.P.A., Troy State University.

DERYA PAMUKCU, Instructor in Industrial Engineering. M.S., LSU.

T. WAYNE PARENT, Assistant Professor of Political Science. Ph.D., Indiana University.
RICHARD L. PARISH, Associate Professor of Agricultural Engineering. Ph.D., University of Missouri—Columbia.

HAI G. PARK, Assistant Professor of Accounting. Ph.D., University of Oklahoma.

FRANK P. PARKER, Professor of English. Ph.D., Purdue University.

JACK B. PARKER, Professor of Criminal Justice; Dean, General College. Ed.D., LSU.

MARGARET PARKER, Associate Professor of Spanish and Portuguese. Ph.D., Indiana University.

CHARLES M. PARKS, Assistant Professor of Industrial Engineering. Ph.D., Oklahoma State University.

W. WARD PARKS, Assistant Professor of English. Ph.D., University of Missouri—Rolla.

DOROTHY P. PASHLEY, Assistant Professor of Entomology. Ph.D., University of Texas at Austin.

PAUL F. PASKOFF, Associate Professor of History. Ph.D., Johns Hopkins University.

CHANDRAKANT PATEL, Assistant Professor of Mechanical Engineering. Ph.D., University of Birmingham (England).

WILLIAM H. PATRICK, JR., Boyd Professor, Department of Marine Sciences; Director, Laboratory for Wetland Soils and Sediments. Ph.D., LSU.

CHARLES D. PATTERSON, Professor of Library and Information Science. Ph.D., University of Pittsburgh.

JOHN P. PATTERSON, Professor of Music. M.M., University of Texas at Austin.

KENNETH W. PAXTON, Professor of Agricultural Economics and Agribusiness. Ph.D., University of Tennessee.

ROBERT D. PECHMAN, JR., Associate Professor of Veterinary Radiology (Department of Veterinary Clinical Sciences); Veterinary Radiologist. D.V.M., University of California, Davis; Diplomate, American College of Veterinary Radiology.

MARY J. PENDLETON, Instructor in English. Ph.D., University of Southwestern Louisiana.

JOHN H. PENNYBACKER, Professor of Journalism (Telecommunications). Ph.D., Ohio State University.

A. CLINTON PEREBOOM, Associate Professor of Psychology. Ph.D., University of California, Los Angeles.

LISANDRO PEREZ, Associate Professor of Sociology. Ph.D., University of Florida.

HUEL D. PERKINS, Professor of Humanities; Assistant Vice-Chancellor for Academic Affairs. Ph.D., Northwestern University.

JAY L. PERKINS, Instructor in Journalism; Reveille Adviser. B.S., Oklahoma State University.

ROBERT V. PERLIS, Associate Professor of Mathematics; Vice-Chairman and Director of Graduate Studies, Department of Mathematics. Ph.D., Massachusetts Institute of Technology.

PATSY H. PERRITT, Associate Professor of Library and Information Science. Ph.D., LSU.

CHARLES L. PERRY, Professor of Physics and Astronomy. Ph.D., University of California, Berkeley.

LYNN L. PESSON, Professor of Extension Education (Department of Extension and International Education); Vice-Chancellor for Student Affairs. Ph.D., LSU.

MICHAEL H. PETERS, Professor of Quantitative Business Analysis; Chairman, Department of Quantitative Business Analysis. D.B.A., Indiana University.

OWEN M. PETERSON, Professor of Speech (Communication). Ph.D., University of Iowa.

LORRAINE H. PHILLIPS, Associate Professor of Home Economics. M.S., LSU.

NELSON W. PHILPOT, Professor of Dairy Science. Ph.D., Oklahoma State University.

ROBERT G. PICARD, Assistant Professor of Journalism. Ph.D., University of Missouri—Columbia.

DAVID H. PICA, Assistant Professor of Horticulture. Ph.D., University of Florida.

RALPH W. PIKE, JR., Professor of Chemical Engineering; Associate Vice-Chancellor for Research; Director, Mining and Mineral Resources Research Institute. Ph.D., Georgia Institute of Technology.

REX H. PILGER, JR., Associate Professor of Geology. Ph.D., University of Southern California.

HERBERT PILLER, Associate Professor of Physics and Astronomy. Ph.D., University of Vienna (Austria).

DAVID W. PITRE, Instructor in English. Ph.D., University of South Carolina.

JAMES M. PITTS, Assistant Professor of Architecture. M.Arch., University of Detroit.

ANDREW A. POE, Instructor in Civil Engineering. B.S.C.E., LSU.

JOSEPH A. POLACK, Professor of Chemical Engineering; Director, Audubon Sugar Institute. Sc.D., Massachusetts Institute of Technology.

JOSEPH S. POPADIC, Professor of Landscape Architecture. M.L.A., State University of New York, College of Environmental Science and Forestry.

MARY R. POPADIC, Instructor in Physical Education (School of Health, Physical Education, Recreation and Dance). M.S., LSU.

JACK K. POPLIN, Associate Professor of Civil Engineering; Associate Professor of Construction. Ph.D., North Carolina State University.

WILLIAM A. PORTER, Professor of Electrical and Computer Engineering. Ph.D., University of Michigan.

RALPH J. PORTIER, Assistant Professor of Environmental Studies. Ph.D., LSU.

TERRY A. POSTERO, Assistant Professor of Interior Design (School of Architecture). M.F.A., University of Georgia.

GREGORY M. POSTULKA, Assistant Professor of Aerospace Studies. M.S., Air Force Institute of Technology.

MARY L. POTTER, Instructor in Microbiology. M.S., LSU.

DIANA G. POUNDER, Assistant Professor of Education (Department of Administrative and Foundational Services). Ph.D., University of Wisconsin—Madison.

SCOTTY K. POWERS, Assistant Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ed.D., University of Tennessee.

EDWARD R. PRAMUK, Professor of Art (Painting and Drawing). M.A., Kent State University.

PERRY H. PRESTHOLDT, Associate Professor of Psychology. Ph.D., University of Minnesota.

GEOFFREY L. PRICE, Associate Professor of Chemical Engineering. Ph.D., Rice University.
DAVID B. PRIOR, Professor of Marine Sciences; Professor in Coastal Studies Institute. Ph.D., Queen’s University (N. Ireland).

JAMES M. PRUETT, Associate Professor of Industrial Engineering. Ph.D., University of Arkansas.

WILLIAM A. PRYOR, Boyd Professor, Department of Chemistry. Ph.D., University of California, Berkeley.

SUZANNE L. PUCCI, Assistant Professor of French and Italian. Ph.D., Syracuse University.

JOANN M. PULS, Instructor in Home Economics. M.S., University of Missouri—Columbia.


JOHN D. PURDY, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Athletic Trainer. B.S., Saint Mary College.

VIRGINIA S. PURTLE, Professor of Sociology; Associate Dean, College of Arts and Sciences. Ph.D., LSU.

SHARRON S. QUisenBERRY, Assistant Professor of Entomology. Ph.D., University of Missouri.

J. DONALD RAGSDALE, JR., Professor of Speech (Communication). Ph.D., University of Illinois.

J. GAUT RAGSDALE, Assistant Professor of Speech (Communication). Ph.D., Indiana University.

ATTIPAT K. RAJAGOPAL, Professor of Physics and Astronomy. Ph.D., Harvard University.

ARAVAMUDHAN RAMAN, Professor of Mechanical Engineering. Dr. rer Nat., Technische Hochschule, Stuttgart (West Germany).

ANN F. RAMENOFSKY, Assistant Professor of Geography and Anthropology. Ph.D., University of Washington.

WILLIAM M. RANDLE, Assistant Professor of Horticulture. Ph.D., University of Minnesota.

PAULINE M. RANKIN, Professor of Education (Department of Administrative and Foundational Services); Director, Division of Instructional Support and Development. Ph.D., LSU.

RAMU M. RAO, Professor of Food Science. Ph.D., LSU.

A. RAVI RAU, Professor of Physics and Astronomy. Ph.D., University of Chicago.

JOHN R. RAUSH, Associate Professor of Music; Assistant to the Dean, School of Music. D.M.A., University of Texas at Austin.

THOMAS G. RAY, Associate Professor of Industrial Engineering. Ph.D., Virginia Polytechnic Institute.

KATHERINE V. RAYNÉ, Associate Professor of Social Work. M.S.W., LSU.

JOHN E. READENCE, Associate Professor of Education (Department of Curriculum and Instruction). Ph.D., Arizona State University.

THOMAS E. REAGAN, Associate Professor of Entomology. Ph.D., North Carolina State University.

LOIS RECTOR, Instructor in Education (University Lab School). M.Ed., Northwestern State University of Louisiana.

JAMES W. REDDOCH, Professor of Marketing; Vice-Chancellor for Administrative Services. Ph.D., LSU.

JAMES G. REDFERN, Professor of French and Italian. Ph.D., University of Michigan.

EVELYN REED, Associate Professor of Social Work. D.S.W., University of California, Berkeley.

WILSON A. REEVES, Professor of Home Economics. Sc.D., Clemson University.

DANNY D. REIBLE, Assistant Professor of Chemical Engineering. Ph.D., California Institute of Technology.

KENNETH B. REID, JR., Professor of Mathematics. Ph.D., University of Illinois.

DEBORAH M. REKART, Instructor in English. M.A., University of Rochester.

JAMES V. REMSEN, JR., Associate Curator in Museum of Natural Science; Adjunct Associate Professor of Zoology and Physiology. Ph.D., University of California, Berkeley.

JAMES R. RETHERFORD, Professor of Mathematics. Ph.D., Florida State University.

JOHN W. REZNIK, Associate Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance); Director, Division of Leisure Sports. Ph.D., University of Illinois.

JOSEPH M. REYNOLDS, Boyd Professor, Department of Physics and Astronomy; Vice-President for Academic Affairs (LSU System). Ph.D., Yale University.

JOHN D. RHOADES, Professor of Veterinary Medicine (Department of Epidemiology and Community Health); Assistant Dean for Student and Public Affairs; School of Veterinary Medicine. D.V.M., University of Missouri; Ph.D., University of Minnesota.

JOSEPH V. RICAPITO, Professor of Spanish and Portuguese; Chairman, Department of Spanish and Portuguese. Ph.D., University of California, Los Angeles.

RAY RICAUD, Professor of Agronomy. Ph.D., LSU.

G. RANDOLPH RICE, Professor of Economics. Ph.D., University of Kentucky.

RICHARD G. RICE, Professor of Chemical Engineering. Ph.D., University of Pennsylvania.

GILL G. RICHARDS, Associate Professor of Electrical and Computer Engineering; Associate Dean, Graduate School. Ph.D., University of Southern California.

JAMES A. RICHARDSON, Professor of Economics; Director, Public Administration Institute. Ph.D., University of Michigan.

LEONARD F. RICHARDSON, Professor of Mathematics. Ph.D., Yale University.

MILES E. RICHARDSON, Professor of Geography and Anthropology. Ph.D., Tulane University.

WILLIAM B. RICHARDSON, Professor of Vocational Agricultural Education; Director, School of Vocational Education and Technology. Ph.D., University of Missouri.

N. JEAN RICHEY, Instructor in English. M.A., University of Oklahoma.

DONALD J. RICHELS, Assistant Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Wisconsin—Madison.

MARSHA L. RICHINS, Assistant Professor of Marketing. Ph.D., University of Texas at Austin.

NANCY M. RIDGWAY, Assistant Professor of Marketing. Ph.D., University of Texas at Austin.

DAVID E. RIGSBEE, Instructor in English. M.A., Johns Hopkins University.
MYRTIS F. RILEY, Associate Professor of Music. M.M., LSU.

THOMAS J. RILEY, Associate Professor of Entomology. Ph.D., University of Missouri—Columbia.

JEFFREY L. RINGUEST, Assistant Professor of Quantitative Business Analysis. Ph.D., Clemson University.

JAMES W. RINKER, Instructor in Chemistry. Ph.D., University of Virginia.

DAN B. RINKS, Assistant Professor of Quantitative Business Analysis. Ph.D., University of Houston.

ARTHUR J. RIOPELLE, Boyd Professor, Department of Psychology. Ph.D., University of Wisconsin—Madison.

DON L. RISTROPH, Assistant Professor of Chemical Engineering. Ph.D., University of Pennsylvania.

OSCAR RIVERA-RODAS, Associate Professor of Spanish and Portuguese. Ph.D., University of California, Davis.

CHARLIE W. ROBERTS, Jr., Professor of Education (Department of Administrative and Foundational Services); Vice-Chancellor for University Relations and Development. Ed.D., LSU.

EDGAR D. ROBERTS, Professor of Veterinary Pathology; Coordinator for Advanced Studies, School of Veterinary Medicine. D.V.M., Colorado State University; Ph.D., Iowa State University; Diplomate, American College of Veterinary Pathologists.

FAIMON A. ROBERTS, Instructor in Education (University Lab School). M.A., LSU.

HARRY H. ROBERTS, Professor of Marine Sciences; Professor in Coastal Studies Institute. Ph.D., LSU.

JOSEPHINE A. ROBERTS, Associate Professor of English. Ph.D., University of Pennsylvania.

KENNETH J. ROBERTS, Professor in Office of Sea Grant Development; Specialist (Marine Resource Economics), Louisiana Cooperative Extension Service. Ph.D., Oregon State University.

DONALD L. ROBINSON, Professor of Agronomy. Ph.D., Kansas State University.

JAMES W. ROBINSON, Professor of Chemistry. Ph.D., D.S., Birmingham University (England).

JAMES E. ROCHE, Professor of Geology. Ph.D., University of Illinois at Urbana-Champaign.

GEORGE L. ROGERS, Assistant Professor of Music. D.M.E., Indiana University.

KARL A. ROIDER, JR., Professor of History. Ph.D., Stanford University.

LAWRENCE H. ROLSTON, Professor of Entomology. Ph.D., Ohio State University.

ROBERT P. ROMAIRE, Associate Professor of Fisheries (School of Forestry, Wildlife, and Fisheries). Ph.D., Auburn University.

ANTHONY W. ROMANO, Assistant Professor of Education (Department of Curriculum and Instruction). Ph.D., University of South Carolina.

CARL ROSENFELD, Assistant Professor—Research of Physics and Astronomy. Ph.D., California Institute of Technology.

ARTHUR L. ROSENKRANTZ, Adjunct Assistant Professor of Psychology; Psychologist, Student Health Service. Ph.D., University of Florida.

DOUGLAS A. ROSSMAN, Curator in Museum of Natural Science; Director, Museum of Natural Science; Adjunct Professor of Zoology and Physiology. Ph.D., University of Florida.

L. LESLIE ROSSO, Instructor in Construction. M.S., LSU.

HERBERT B. ROTHSCILD, JR., Associate Professor of English. Ph.D., Harvard University.

GEORGE A. ROUNDTREE, Professor of Social Work; Associate Dean—Administration, School of Social Work. Ed.D., LSU.

LAWRENCE J. ROUSE, JR., Associate Professor of Marine Sciences; Associate Professor in Coastal Studies Institute. Ph.D., LSU.

JOSEPH D. ROUSSEL, Professor of Dairy Science. Ph.D., LSU.

VIRGINIA T. ROWLAND, Assistant Professor of Home Economics. Ph.D., Oklahoma State University.

DIPAK ROY, Assistant Professor of Civil Engineering. Ph.D., University of Illinois at Urbana-Champaign.

CHARLES W. ROYSTER, Professor of History. Ph.D., University of California, Berkeley.

WALTER G. RUDD, Professor of Computer Science; Chairman, Department of Computer Science. Ph.D., Rice University.

LAWRENCE P. RUHR, Associate Professor of Veterinary Toxicology (Department of Veterinary Physiology, Pharmacology, and Toxicology). D.V.M., Oklahoma State University; Ph.D., University of Missouri—Columbia; Diplomate, American Board of Veterinary Toxicology.

LYNN K. RUNNELS, Professor of Chemistry. Ph.D., Yale University.

MILTON C. RUSH, Professor of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., North Carolina State University.

ADELAIDE M. RUSSO, Assistant Professor of French and Italian. Ph.D., Columbia University.

PAUL S. RUSSO, Assistant Professor of Chemistry. Ph.D., University of Minnesota.

WALTER E. RUTKOWSKI, Professor of Art. Ed.D., Pennsylvania State University.

MEHDY SABBAGHIAN, Professor of Mechanical Engineering. Ph.D., University of Oklahoma.

BETSY A. ST. JULIEN, Assistant Professor of Education (Department of Administrative and Foundational Services). M.S., Colorado State University.

JOHN W. ST. MARTIN, Associate Professor of Architecture. M.Arch., Yale University.

KEITH A. SANDIFORD, Assistant Professor of English. Ph.D., University of Illinois at Urbana-Champaign.

G. ELLIS SANDOZ, JR., Professor of Political Science. Dr.oec.publ., University of Munich (West Germany).

PAUL L. SANZENBACH, Associate Professor of Social Work. M.S.W., Tulane University.

HUSAIN SARKAR, Associate Professor of Philosophy. Ph.D., University of Minnesota.

GLORIA B. SASEK, Assistant Professor of English. M.A., Radcliffe College.

LAWRENCE A. SASEK, Professor of English. Ph.D., Harvard University.
JOSEPH E. SEDBERRY, JR., Professor of Agronomy. Ph.D., LSU.

ROBERT A. SEGAL, Assistant Professor of Philosophy (Religious Studies). Ph.D., Princeton University.

CAMERON L. SEGER, Professor of Veterinary Science. D.V.M., M.S., Colorado State University; Diplomate, American College of Veterinary Pathologists.

HASAN SEHITOGLU, Assistant Professor of Mechanical Engineering. Ph.D., University of Illinois.

FAROUK Y. SEIF, Assistant Professor of Architecture. M.Arch., Kent State University.

JOEL SELBIN, Professor of Chemistry. Ph.D., University of Illinois.

HUSSEIN M. SELIM, Professor of Agronomy. Ph.D., Iowa State University.

BUDDHADEV SEN, Professor of Chemistry. Ph.D., University of Calcutta (India).

BARUN K. SEN GUPTA, Professor of Geology. Ph.D., Indian Institute of Technology (India).

ROBERT J. SERRY, Assistant Professor of Interior Design (School of Architecture). M.Arch., Harvard University.

A. CAROLYN SESSIONS, Instructor in Education (University Lab School). M.Ed., LSU.

HOSSEIN SHALCHI, Assistant Professor of Accounting. Ph.D., University of Illinois at Urbana-Champaign.

ROBERT F. SHAMBAUGH, Professor of Music. Ed.D., University of Colorado.

BARBARA S. SHANE, Assistant Professor of Environmental Studies. Ph.D., University of Witwatersrand (South Africa).

SIMON M. SHANE, Associate Professor of Epidemiology and Community Health. B.V.Sc., University of Pretoria (South Africa); Ph.D., Cornell University.

K. PAM SHAO, Assistant Professor of Experimental Statistics. Ph.D., University of Nebraska—Lincoln.

JONATHAN Z. SHAPIRO, Associate Professor of Education (Department of Administrative and Foundational Services). Ph.D., Michigan State University.

GOVIND SHARMA, Assistant Professor of Electrical and Computer Engineering. Ph.D., University of Southern California.

BETTY A. SHEPHERD, Instructor in Computer Science. M.S., University of Illinois.

DANIEL P. SHER, Professor of Music; Acting Dean, School of Music. Ed.D., Columbia University.

JOHN F. SHERMAN, Assistant Professor of Art (Graphic Design). M.F.A., Indiana University.

DANIEL L. SHERRELL, Assistant Professor of Marketing. Ph.D., University of South Carolina.

LINDA B. SHERRELL, Instructor in Mathematics. M.S., Auburn University.

LEESHIFLETT, Associate Professor of Library and Information Science. Ph.D., Florida State University.

DING S. SHIH, Associate Professor of Biochemistry. Ph.D., Virginia Polytechnic Institute.

JASON C. SHIH, Professor of Architecture. Ph.D., Duke University.

CHARLES L. SHILLING, Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., Texas A&M University.
LARRY E. STANFEL, Professor of Quantitative Business Analysis. Ph.D., Northwestern University.

WILLIAM B. STANLEY, Assistant Professor of Education (Department of Curriculum and Instruction). Ed.D., Rutgers University.

LINDA B. STEARNS, Assistant Professor of Sociology. Ph.D., State University of New York at Stony Brook.

RALPH E. STEBEN, Associate Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance). Ph.D., University of Utah.

WILLIS STELLELY, Instructor in Education (University Lab School). M.S., LSU.

ARTHUR M. STERLING, Professor of Chemical Engineering. Ph.D., University of Washington.

BETTY J. STEWART, Associate Professor of Social Work; Coordinator of Direct Practice Curriculum Area, School of Social Work. Ph.D., Florida State University.

T. BONNER STEWART, Professor of Parasitology (Department of Veterinary Microbiology and Parasitology). Ph.D., University of Illinois at Urbana-Champaign.

LINDA M. STICKELS, Assistant Professor of Health Sciences (School of Health, Physical Education, Recreation, and Dance). Ph.D., Southern Illinois University.

WILLIAM B. STICKLE, Jr., Professor of Zoology and Physiology. Ph.D., University of Saskatchewan (Canada).

DENNIS R. STIPE, Professor of Agricultural Engineering. Assistant Director, Louisiana Agricultural Experiment Station. M.S., Texas A&M University.

NEAL W. STOLTZFUSS, Associate Professor of Mathematics. Ph.D., Princeton University.

RICHARD N. STORY, Assistant Professor of Entomology. Ph.D., University of Missouri.

JOHANNES STORZ, Professor of Veterinary Microbiology: Head, Department of Veterinary Microbiology and Parasitology. D.V.M., Veterinary College, Hannover (West Germany); Dr. Med. Vet., University of Munich (West Germany); Ph.D., University of California, Davis; Diplomate, American College of Veterinary Microbiologists.

GEORGE M. STRAIN, Associate Professor of Veterinary Physiology, Pharmacology, and Toxicology: Biomedical Engineer. Ph.D., Iowa State University.

BARBARA M. STRAWITZ, Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Texas at Austin.

SUNGWOO SUH, Instructor in Mathematics. Ph.D., University of Connecticut.

JOSEPH N. SUHAYDA, Associate Professor of Civil Engineering. Ph.D., University of California, San Diego.

TERESA A. SUMMERS, Assistant Professor of Home Economics; Associate Dean, College of Agriculture. Ph.D., Texas Woman's University.

GLENN E. SUMMERS, Assistant Professor of Accounting. Ph.D., University of Tennessee.

FREDERICK J. SUNDMAN, Associate Professor of Horticulture. Ph.D., Virginia Polytechnic Institute.

JOHN D. SUTcliffe, Instructor in English. M.A., University of Michigan.

OWEN T. TAN, Professor of Electrical and Computer Engineering. Ph.D., Eindhoven Institute of Technology (Netherlands).

GERILYN G. TANDBERG, Associate Professor of Speech (Theatre). Ph.D., University of Minnesota.

KWEI TANG, Assistant Professor of Quantitative Business Analysis. Ph.D., Purdue University.

DENISE C. TAYLOR, Instructor in Speech (Communication Disorders). M.A., Western Kentucky University.

HARRIET G. TAYLOR, Instructor in Computer Science. Ph.D., North Texas State University.

HENRY W. TAYLOR, Professor of Veterinary Pathology: Veterinary Pathologist. D.V.M., Auburn University; Ph.D., University of Missouri—Columbia; Diplomate, American College of Veterinary Pathologists.

PETER A. TERRITO, Jr. Assistant Professor of Industrial and Technical Education. M.S., LSU.

MAURICE E. TERRY, Assistant Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., University of California, Davis.

LOUIS J. THIBODEAUX, Professor of Chemical Engineering; Director, Hazardous Waste Research Center. Ph.D., LSU.

JERRY R. THOMAS, Professor of Physical Education (School of Health, Physical Education, Recreation, and Dance); Professor of Psychology. Ed.D., University of Alabama.

MICHAEL D. THOMAS, Instructor in Industrial Engineering. B.S. in Ag. E., LSU.

ANDREW G. THOMASON, Assistant Professor of Mathematics. Ph.D., Cambridge University (England).

DAVID E. THOMPSON, Professor of Mechanical Engineering. Ph.D., Purdue University.

DONALD L. THOMPSON, Jr., Associate Professor of Animal Science. Ph.D., Colorado State University.

KATHY S. THOMPSON, Instructor in Zoology and Physiology. M.S., Tulane University.

WILLIAM W. THOMPSON, Jr., Professor of Quantitative Business Analysis. Ph.D., University of Alabama.

ANN M. THRO, Assistant Professor of Agronomy. Ph.D., Iowa State University.

RONALD L. THUNE, Assistant Professor of Aquatic Animal Health (Department of Veterinary Microbiology and Parasitology); Assistant Professor of Veterinary Science. Ph.D., Auburn University.

CHARLES W. TITKEMEYER, Professor of Veterinary Anatomy and Fine Structure; Head, Department of Veterinary Anatomy and Fine Structure. D.V.M., Ohio State University; Ph.D., Michigan State University.


MARTY E. TITLEBAUM, Associate Professor of Civil Engineering. Ph.D., University of Louisville.

WILLIAM J. TODD, Assistant Professor of Veterinary Microbiology (Department of Veterinary Microbiology and Parasitology); Assistant Professor of Veterinary Science. Ph.D., Colorado State University.

JOEL E. TOHLINE, Assistant Professor of Physics and Astronomy. Ph.D., University of California, Santa Cruz.

JOHN R. TOLIVER, Associate Professor of Forestry (School of Forestry, Wildlife, and Fisheries). Ph.D., Texas A&M University.
SEISHIRO TOMIOKA, Associate Professor of Landscape Architecture. M.L.A., University of Wisconsin—Madison.

KATHERINE C. TONORE, Instructor in Education (University Lab School). M.Ed., LSU.

ATTILIO A. TOPAZIO, Instructor in Petroleum Engineering. M.S., LSU.

KENNETH C. TORRES, Assistant Professor of Horticulture.Ph.D., University of Missouri—Columbia.

JACK B. TOURTELLOTTE, Instructor in English. M.F.A., Bowling Green State University; M.A., East Carolina University.

GEORGE S. TRACY, Assistant Professor of Experimental Statistics. M.A., University of North Carolina at Chapel Hill.

JERRY E. TRAPPELL, Associate Professor of Accounting. Ph.D., University of Georgia.

NORMA C. TRAVIS, Instructor in Speech (Communication Disorders). Ph.D., LSU.

HARLON D. TRAYLOR, Professor of Agricultural Economics and Agribusiness. Ph.D., Cornell University.

JAMES G. TRAYNHAM, Professor of Chemistry. Ph.D., Northwestern University.

MANMOHAN M. TRIVEDI, Assistant Professor of Electrical and Computer Engineering. Ph.D., Utah State University.

JAMES W. TROTT, JR., Associate Professor of Industrial and Technical Education. Ed.D., Auburn University.

DUANE K. TROXEL, Assistant Professor of Education (Department of Administrative and Foundational Services). Ed.D., Temple University.

FRANK M. TRUESDALE, Associate Professor of Fisheries (School of Forestry, Wildlife, and Fisheries). Ph.D., Texas A&M University.


SHIRLEY C. TUCKER, Boyd Professor, Department of Botany. Ph.D., University of California, Davis.

RAYMOND E. TULLY, Assistant Professor of Crop Physiology (Department of Plant Pathology and Crop Physiology). Ph.D., University of California, Santa Cruz.

JUNE M. TUMA, Professor of Psychology. Ph.D., LSU.

WALTER V. TUMAN, Assistant Professor of Classical, Germanic, and Slavic Languages. Ph.D., Georgetown University.

MEHMET T. TUMAY, Professor of Civil Engineering. Ph.D., Istanbul Technical University (Turkey).

JAMES R. TURK, Associate Professor of Veterinary Pathology; Veterinary Pathologist. D.V.M., University of Missouri; Ph.D., Washington State University; Diplomate, American College of Veterinary Pathologists.

JUDY V. TURK, Assistant Professor of Journalism. M.A., Northern Illinois University.

MARGARET A. M. TURK, Associate Professor of Veterinary Pathology; Veterinary Pathologist. D.V.M., University of Missouri; Ph.D., Washington State University; Diplomate, American College of Veterinary Pathologists.

PETER B. TURK, Associate Professor of Journalism. Ph.D., University of Wisconsin—Madison.

JAMES W. TURNER, Professor of Animal Science; Head, Department of Animal Science. Ph.D., Oklahoma State University.

LORINA B. TURNER, Instructor in Education (University Lab School). M.Ed., Southern University.

R. EUGENE TURNER, Professor of Marine Sciences; Professor in Coastal Ecology and Fisheries Institute. Ph.D., University of Georgia.

SUZANNE L. TURNER, Associate Professor of Landscape Architecture. M.L.A., University of Georgia.

GRANT H. TURNWALD, Associate Professor of Veterinary Clinical Medicine (Department of Veterinary Clinical Sciences); Veterinary Internist. B.V.Sc., University of Sydney (Australia); M.S., Texas A&M University; Diplomate, American College of Veterinary Internal Medicine.

JOHN M. TYLER, Associate Professor of Computer Science; Assistant Vice-Chancellor for Computing Services; Director, System Network Computer Center. Ph.D., LSU.

LOWELL E. URBATSCH, Associate Professor of Botany. Ph.D., University of Georgia.

AGNES VAJNA, Assistant Professor of Architecture. M.F.A., LSU.

WILLEMM A. van den BOLD, Professor of Geology. Ph.D., University of Utrecht (Netherlands).

LONNIE R. VANDEVEER, Associate Professor of Agricultural Economics and Agribusiness. Ph.D., Oklahoma State University.

JACK R. VAN LOPIK, Professor of Marine Sciences; Dean, Center for Wetland Resources; Director, Office of Sea Grant Development; Adviser to the Chancellor for Marine Affairs. Ph.D., LSU.

VINAY K. VASUDEV, Instructor in Industrial Engineering. M.S. in I.E., LSU.

LYNWOOD VAUGHN, Instructor in Civil Engineering. B.S., LSU.

ARMANDO J. VEGA, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Coordinator of Special Events, Athletics. M.S., Northwestern State University of Louisiana.

CHANGARAMKUMARATH S. VENUGOPALAN, Assistant Professor of Pharmacology and Toxicology (Department of Veterinary Physiology, Pharmacology, and Toxicology). B.V.Sc., Kerala University (India); Ph.D., Massachusetts College of Pharmacy.

LALIT R. VERMA, Associate Professor of Agricultural Engineering. Ph.D., University of Nebraska.

SATISH VERMA, Professor of Extension Education (Department of Extension and International Education). Ed.D., LSU.

DONALD E. VERMEER, Professor of Geography and Anthropology. Ph.D., University of California, Berkeley.

DAVID B. VICKNIR, Assistant Professor of Accounting. D.B.A., University of Tennessee.

LUIS E. VIDAURRETA, Associate Professor of Chemistry. Ph.D., University of Havana (Cuba).

CHARLES H. VOSS, JR., Professor of Electrical and Computer Engineering. Ph.D., North Carolina State University.

GEORGE Z. VOYADJIS, Assistant Professor of Civil Engineering. D.Sc., Columbia University.
GEORGE S. WACHOB, Associate Professor of Interior Design (School of Architecture). M.A., Purdue University.

FREDERICK E. WADDELL, Assistant Professor of Home Economics. Ph.D., Virginia Polytechnic Institute.

MICHAEL G. WALDON, Assistant Professor of Environmental Studies. Ph.D., Case Western Reserve University.

CLAUDE M. WALDRON, Instructor in Speech (Communication Disorders). M.A., University of Missouri—Columbia.

DON R. WALDRON, Assistant Professor of Veterinary Surgery (Department of Veterinary Clinical Sciences); Companion Animal Specialist. D.V.M., University of Missouri—Columbia; Diplomate, American Board of Veterinary Practitioners.

DAVID W. WALKER, Assistant Professor of Horticulture. Ph.D., Texas A&M University.

JOHN R. WALKER, Associate Professor of Entomology; Assistant Vice-President for Academic Affairs (LSU System). Ph.D., Iowa State University.

EDWARD WALKWITZ, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance). M.S., University of Montana.

JERRY A. WALLIN, Associate Professor of Management. Ph.D., University of Nebraska.

GEORGE H. WALTER, JR., Associate Professor of Music. M.M., University of Illinois.

JEAN A. WALTMAN, Instructor in English; Academic Counselor. College of Arts and Sciences. M.A., Colorado State University.

JOHN L. WALTMAN, Assistant Professor of Management. Ph.D., University of Texas at Austin.

FLORA C. WANG, Associate Professor of Marine Sciences; Associate Professor in Coastal Ecology and Fisheries Institute. Ph.D., Stanford University.

JAMES W. WANSLEY, Assistant Professor of Finance. Ph.D., University of South Carolina.

WILLIAM G. WARREN, Professor of Experimental Statistics. Ph.D., University of North Carolina at Chapel Hill.

ROBERT J. WARENS, Professor of Art (Painting and Drawing). M.F.A., University of Iowa.

MICHAEL W. WASCOM, Assistant Professor in Coastal Ecology and Fisheries Institute; Coordinator, Sea Grant Legal Program. LL.M., Georgetown University.

WILLIAM F. WATERS, Professor of Psychology. Ph.D., Case Western Reserve University.

ROSEMARY C. WATKINS, Assistant Professor of Music. Ph.D., University of Texas at Austin.

STEVEN F. WATKINS, Associate Professor of Chemistry. Ph.D., University of Wisconsin—Madison.

THOMAS L. WATSON, Associate Professor of English. Ph.D., University of Texas at Austin.

JOHN W. WATTERS, Professor of Veterinary Radiology (Department of Veterinary Clinical Sciences); Veterinary Radiologist; Chief, Ancillary Services. D.V.M., Texas A&M University; M.S., Colorado State University; Diplomate, American College of Veterinary Radiology.

JOHN J. W. WEAVER, Associate Professor of English. Ph.D., Ohio State University.

RONALD E. WEBER, Professor of Political Science. Ph.D., Syracuse University.

JOHN P. WEFEL, Assistant Professor of Physics and Astronomy. Ph.D., Washington University.

EARL H. WEIDNER, Associate Professor of Zoology and Physiology. Ph.D., Tulane University.

MICHAEL A. WEGAND, Assistant Professor of Industrial and Technical Education. M.S., University of Arizona.

STEVEN H. WEINTRAUB, Associate Professor of Mathematics. Ph.D., Princeton University.

LUTZ W. WEIS, Associate Professor of Mathematics. Ph.D., University of Bonn (West Germany).

DORIS M. WELLAN, Assistant Professor of Home Economics. M.S., LSU.

JAMES D. WERBEL, Assistant Professor of Management. Ph.D., Northwestern University.

JAMES R. WEST, Associate Professor of Music. M.M., Northwestern University.

JOHN D. WEST, Associate Professor of Education (Department of Administrative and Foundational Services). Ed.D., Idaho State University.

E. ROBERT WESTERMAN, Instructor in English. Ph.D., University of Arkansas.

DAVID M. WETZEL, Associate Professor of Chemical Engineering. Ph.D., University of Delaware.

JAMES H. WHARTON, Professor of Chemistry; Chancellor, LSU. Ph.D., LSU.

ROBERT B. WHARTON, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., Washington State University.

CHARLES H. WHITE, Professor of Dairy Science. Ph.D., University of Missouri.

JAMES N. WHITE, Instructor in Mathematics. Ph.D., LSU.

JULIAN T. WHITE, Associate Professor of Architecture. M.Arch., University of Illinois at Urbana-Champaign.

MICHAEL C. WHITE, Associate Professor of Management. Ph.D., University of Georgia.

RICHARD A. WHITE, Assistant Professor of Accounting. D.B.A., Arizona State University.

SHIRLEY A. WHITE, Assistant Professor of Management. Ed.D., Arizona State University.

WALTER R. WHITEHEAD, Associate Professor of Petroleum Engineering. Ph.D., LSU.

GERALD D. WHITEHOUSE, Professor of Mechanical Engineering. Ph.D., Oklahoma State University.

JOHN H. WHITTAKER, Associate Professor of Philosophy. Ph.D., Yale University.

ELLEN O. WICKERSHAM, Instructor in Education (University Lab School). M.S., Western Connecticut State University.

FRANK B. WICKES, Associate Professor of Music; Director of Band Organizations. M.M., University of Michigan.

E. JANE WILLIAMS, Assistant Professor of Education (Department of Administrative and Foundational Services; Department of Curriculum and Instruction). Ph.D., Ohio State University.

FRED E. WILLIAMS, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., North Carolina State University.
JAMES C. WILLIAMS, Professor of Parasitology (Department of Veterinary Science). Ph.D., LSU Medical Center.

JERYL S. WILLIAMS, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance); Assistant Manager of Aquatics, Division of Leisure Sports. M.A., Northwestern State University.

MALCOLM D. WILLIAMS, Assistant Professor of Veterinary Pathology. D.V.M., Tuskegee Institute; Ph.D., Michigan State University.

MARK L. WILLIAMS, Associate Professor of Nuclear Engineering (Nuclear Science Center). Ph.D., University of Tennessee.

THOMAS J. WILLIAMS, Instructor in Physical Education (School of Health, Physical Education, Recreation, and Dance). M.A.T., University of North Carolina at Chapel Hill.

WILLIAM W. WILLIAMS, Associate Professor of Quantitative Business Analysis; Associate Dean, College of Business Administration. Ph.D., Pennsylvania State University.

DONALD A. WILLIAMSON, Associate Professor of Psychology: Director, Psychological Services Center. Ph.D., Memphis State University.

G. BRUCE WILLIAMSON, Assistant Professor of Botany. Ph.D., Indiana University.

JAMES E. WILLIS, Associate Professor of Quantitative Business Analysis. Ph.D., Tulane University.

CHARLES A. WILSON, Assistant Professor in Coastal Ecology and Fisheries Institute. Ph.D., University of South Carolina.

PAUL W. WILSON, Assistant Professor of Horticulture. Ph.D., Purdue University.

JOHN W. WINDHAUSER, Associate Professor of Journalism. Ph.D., Ohio University.

L. THOMAS WINFREE, JR., Associate Professor of Criminal Justice. Ph.D., University of Montana.

DAVID G. WINSLOW, Instructor in Mathematics. Ph.D., University of Florida.

GARY W. WINSTON, Assistant Professor of Environmental Studies. Ph.D., University of Nevada.

WILLIAM J. WISEMAN, JR., Professor of Marine Sciences: Professor in Coastal Studies Institute. Ph.D., Johns Hopkins University.

JOSEPH C. WITT, Associate Professor of Psychology. Ph.D., Arizona State University.

ANDRZEJ WOJTANOWICZ, Assistant Professor of Petroleum Engineering. Ph.D., Technical University of Mining and Metallurgy (Poland).

ROBERT A. WOLF, III, Instructor in Civil Engineering. B.S.C.E., LSU.

WILLIAM R. WOLFE, Assistant Professor of Military Science. B.S., U.S. Military Academy.

WILLIAM R. WOLTERS, Assistant Professor of Fisheries (School of Forestry, Wildlife, and Fisheries). Ph.D., Purdue University.

WAYNE M. WOMACK, Professor of Landscape Architecture. M.L.A., Harvard University.

MICHAEL D. WOOD, Instructor in English. M.A., University of Missouri—Columbia.

DON L. WOODLAND, Professor of Finance. Ph.D., University of Texas at Austin.

J. PORTER WOODRING, Professor of Entomology; Professor of Zoology and Physiology. Ph.D., University of Minnesota.

WILLIAM R. WOODSON, Assistant Professor of Horticulture. Ph.D., Cornell University.

TERRY E. WORTHY, Associate Professor of Dance (School of Health, Physical Education, Recreation, and Dance). Ph.D., Texas Woman's University.

PATRICIA J. WOZNIAK, Instructor in Experimental Statistics. Ph.D., University of Wisconsin—Milwaukee.

MALCOLM E. WRIGHT, Professor of Agricultural Engineering. Ph.D., Oklahoma State University.

VERNON L. WRIGHT, Associate Professor of Experimental Statistics. Ph.D., Washington State University.

DANIEL W. YANNITELL, Associate Professor of Mechanical Engineering. Ph.D., Cornell University.

JAMES F. YESTADT, Associate Professor of Music. M.A., Columbia University.

R. PAUL YODER, Instructor in English. M.A., Ohio State University.

EZZAT S. YOUNATHAN, Professor of Biochemistry. Ph.D., Florida State University.

MARGARET T. YOUNATHAN, Professor of Home Economics. Ph.D., Florida State University.

A. GRANT YOUNG, Professor of Psychology. Ph.D., Ohio State University.

MYRON H. YOUNG, Professor of Marine Sciences; Professor in Special Projects Office, Center for Wetland Resources. Ph.D., North Carolina State University.

SHARON L. YOUNG, Assistant Professor of Education (Department of Curriculum and Instruction). Ph.D., University of Colorado.

FREDERIC A. YOUNGS, JR., Professor of History. Ph.D., University of Cambridge (England).

EDEN S. H. YU, Associate Professor of Economics. Ph.D., Washington University.

MINE K. YUCEL, Assistant Professor of Economics. Ph.D., Rice University.

THOMAS P. ZACHARIAS, Assistant Professor of Agricultural Economics and Agribusiness. Ph.D., University of Illinois at Urbana-Champaign.

EDUARDO A. ZARRUK, Instructor in Quantitative Business Analysis. M.B.A., LSU.

NADIM H. ZEBOUNI, Associate Professor of Physics and Astronomy. Ph.D., LSU.

SELMA A. ZEBOUNI, Associate Professor of French and Italian. Ph.D., LSU.

EDWARD F. ZGANJAR, Professor of Physics and Astronomy; Chairman, Department of Physics and Astronomy. Ph.D., Vanderbilt University.

ELIZABETH A. ZIMMER, Assistant Professor of Biochemistry. Ph.D., University of California, Berkeley.

PETER D. ZIMMERMAN, Associate Professor of Physics and Astronomy. Ph.D., Stanford University.

ROBERT M. ZINK, Assistant Curator in Museum of Natural Science; Adjunct Assistant Professor of Zoology and Physiology. Ph.D., University of California, Berkeley.
MAGD E. ZOHDI, Professor of Industrial Engineering. Ph.D., Oklahoma State University.

MARK J. ZUCKER, Associate Professor of Art (Art History). Ph.D., Columbia University.

LIBRARY PERSONNEL

College of Design Resource Center
DORIS A. WHEELER, Assistant Librarian. M.S., LSU.

Cartographic Information Center
JOYCE E. NELSON, General Librarian. M.S., LSU.

Middleton Library
STEPHEN J. BENSMA, Associate Librarian. Ph.D., University of Wisconsin—Madison.
CERES B. BIRKHEAD, Assistant Librarian. M.L.S., University of Iowa.
MYRTLE S. BOLNER, Assistant Librarian. M.S., LSU.
PEGGY P. CHALARON, Associate Librarian. M.S., LSU.
DORIS B. DANTIN, Associate Librarian. B.S. in L.S., Columbia University.
ALMA DAWSON, Assistant Librarian. M.L.S., University of Michigan.
SILVIA D. ESPINOSA, Associate Librarian. M.S., LSU.
MICHELE L. FAGAN, Assistant Librarian. M.S. in L.S., San Jose State University.
CHERYL A. FIELDS, Assistant Librarian. M.S.L.S., University of Kentucky.
STEPHEN L. HAAS, Assistant Librarian. A.M.L.S., University of Michigan.
SHARON A. HOGAN, Librarian; Director of Libraries. M.A.L.S., University of Michigan.
JANELLYN P. KLEINER, Associate Librarian. M.S., LSU.
MARY JANE H. LANE, Associate Librarian. M.S., LSU.
THERESA H. LUNSFORD, Associate Librarian. M.S., LSU.
EVANGELINE M. LYNCH, Librarian. M.S., LSU.
NORMA H. MARTIN, Associate Librarian. M.S., LSU.
JOHN M. MAXSTADT, Assistant Librarian. M.L.S., Ball State University.

PETER R. ZWICK, Associate Professor of Political Science; Chairman, Department of Political Science. Ph.D., Duke University.

BARBARA J. MEADES, Associate Librarian. M.S., LSU.
MARGARET V. MERING, Assistant Librarian. M.L.S., University of Arizona.
M. STONE MILLER, JR., Associate Librarian. M.A., LSU.
SANDRA T. MOONEY, Associate Librarian. M.S., LSU.
KATHRYN N. MORGAN, Assistant Librarian. M.L.S., LSU.
DON P. MORRISON, Associate Librarian. M.S., LSU.
SUSAN P. MORRISON, Assistant Librarian. M.L.S., University of Texas at Austin.
RUTH C. MURRAY, Associate Librarian. M.S., LSU.
BETH M. PASKOFF, Associate Librarian. M.L.S., State University of New York at Albany.
ANNA H. PERRAULT, Librarian. M.S., LSU.
THOMAS E. PRICE, Assistant Librarian. M.S. in L.S., Case Western Reserve University.
MARIAN T. REID, Librarian; Assistant Director for Technical Services. M.S., University of Illinois.
LYNN P. ROUNDTREE, Assistant Librarian. M.S.L.S., University of North Carolina.
DON W. SCHNEIDER, Associate Librarian; Associate Director. M.A., Indiana University.
ROBERTA A. SCULL, Librarian; Director, Information Services Division, Center for Energy Studies. M.S., LSU.
EDITH M. SIMS, Associate Librarian. B.S. in L.S., LSU.
MICHAEL P. SOTILE, Associate Librarian; Coordinator of Special Services. M.S., LSU.
ANNE G. STANTON, Associate Librarian. M.S. in L.S., Florida State University.
ETHELYN R. STOTT, Associate Librarian. M.S., LSU.
PAUL G. WANK, Associate Librarian. M.S., LSU.
BETH F. WARNER, Assistant Librarian. M.L.S., University of Denver.
KATHLEEN L. WELLS, Assistant Librarian. M.L.S., LSU.
JOYCE C. WERNER, Associate Librarian. M.S., LSU.
G. CAROLINE WIRE, Associate Librarian; Assistant to the Director. M.S., LSU.

School of Veterinary Medicine Library
SUE LOUBIERE, Librarian. M.S., LSU.
CAROL J. MARCKS, General Librarian. M.L.S., LSU.

FACULTY AND ADMINISTRATIVE EMERITI

LEONARD C. ADAMS, Professor Emeritus of Electrical and Computer Engineering. Ph.D., University of Florida.

WILLIAM H. ALEXANDER, Professor Emeritus of Agricultural Economics and Agribusiness. Ph.D., University of Illinois.
WILLIE M. ALEXANDER, Professor Emeritus of Social Welfare. M.S.W., LSU.

HAROLD V. ANDERSEN, Professor Emeritus of Geology. Ph.D., LSU.

RICHARD D. ANDERSON, Boyd Professor Emeritus. Department of Mathematics. Ph.D., University of Texas at Austin.

BETH ANDREWS, Professor Emeritus of Home Economics. M.A., Texas Woman's University.


JAMES C. ATHERTON, Professor Emeritus of Vocational Agricultural Education. Ed.D., University of Illinois.

RUTH M. BALDWIN, Professor Emeritus of Library Science. Ph.D., University of Illinois.

HAROLD T. BARR, Professor Emeritus of Agricultural Engineering. M.S., Iowa State University.

BRYANT A. BATEMAN, Professor Emeritus of Forestry. Ph.D., University of Michigan.

ELLINOR H. BEHRE, Professor Emeritus of Zoology. Ph.D., University of Chicago.

EUGENE W. BERG, Professor Emeritus of Chemistry. Ph.D., University of Texas at Austin.

IRWIN A. BERG, Professor Emeritus of Psychology. Dean Emeritus, College of Arts and Sciences. Ph.D., University of Michigan.

ALVIN L. BERTRAND, Boyd Professor Emeritus, Department of Sociology. Ph.D., LSU.

ALFREDO BERUMEN, Professor Emeritus of Foreign Languages. Ph.D., University of Texas at Austin.

C. ROBERT BLACKMON, Professor Emeritus of Education (Department of Administrative and Foundational Services). Ed.D., University of Florida.

BORIS W. BOGUSLAVSKY, Professor Emeritus of Engineering Graphics (Department of Industrial Engineering). D.Sc., Massachusetts Institute of Technology.

H. BRUCE BOUDREAUX, Professor Emeritus of Entomology. Ph.D., LSU.

RALPH F. BOULWARE, Professor Emeritus of Animal Science. Ph.D., University of Nebraska.

PERRY F. BOYER, Professor Emeritus of Finance. Ph.D., University of Texas.

WALDO W. BRADEN, Boyd Professor Emeritus, Department of Speech. Ph.D., University of Iowa.

CLINTON W. BRADFORD, Professor Emeritus of Speech. Ph.D., LSU.

DONALD BRUCE, Professor Emeritus of Design (School of Architecture). M.A., University of Denver.

ROBERT H. BRUPBACHER, Professor Emeritus of Agronomy. M.S., LSU.

EDWARD C. BURNS, Professor Emeritus of Entomology. Ph.D., Iowa State University.

CLAYTON D. CALLIHAN, Professor Emeritus of Chemical Engineering. Ph.D., Michigan State University.

JOE R. CAMPBELL, Professor Emeritus of Agricultural Economics and Agribusiness. Ph.D., Cornell University.

WILLIAM H. CARTER, Professor Emeritus of Agricultural Engineering. M.S., Iowa State University.

DALE R. CARVER, Professor Emeritus of Civil Engineering. Ph.D., University of Illinois.

TOM R. CAVANAUGH, Professor Emeritus of Art (Painting and Drawing). M.F.A., University of Illinois.

ST. JOHN P. CHILTON, Professor Emeritus of Plant Pathology. Ph.D., University of Minnesota.

JOHN W. CHISHOLM, Professor Emeritus of Economics. Ph.D., LSU.

EDWIN R. CHUBBUCK, Professor Emeritus of Civil Engineering. Ph.D., Iowa State University.

ALMA B. CLARK, Professor Emeritus of Home Economics. Ph.D., Cornell University.


W. RODNEY CLINE, Professor Emeritus of Education. Ph.D., George Peabody College for Teachers.

DAN F. CLOWER, Professor Emeritus of Entomology. Ph.D., Cornell University.

JESSE COATES, Alumni Professor Emeritus of Chemical Engineering. Ph.D., University of Michigan.

BILLY J. COCHRAN, Professor Emeritus of Agricultural Engineering. Ph.D., Oklahoma State University.

ARTHUR R. COLMER, Alumni Professor Emeritus of Microbiology. Ph.D., University of Wisconsin.

MARY W. COLMER, Librarian Emeritus. M.A., LSU.

DORIS J. CONWAY, Professor Emeritus of Education. Ed.D., Oklahoma State University.

JAMES B. CORDINER, Professor Emeritus of Chemical Engineering. Ph.D., University of Washington.

FLOYD L. CORTY, Professor Emeritus of Agricultural Economics and Agribusiness. Ph.D., Cornell University.

BEVERLY J. COVINGTON, Alumni Professor Emeritus of Civil Engineering. Ph.D., Northwestern University.

A. BIGLER CROW, Professor Emeritus of Forestry and Wildlife Management. M.F., Yale University.

CHARLIE M. CURTIS, Professor Emeritus of Vocational Agricultural Education; Director Emeritus, School of Vocational Education; Head Emeritus, Department of Vocational Agricultural Education. Ph.D., LSU.

LAWRENCE R. DANIEL, JR., Professor Emeritus of Mechanical Engineering; Department Head Emeritus. Ph.D., Michigan State University.

ELVIN J. DANTIN, Professor Emeritus of Civil Engineering; Director Emeritus, Louisiana Water Resources Research Institute. Ph.D., Stanford University.

OLIN K. DART, JR., Professor Emeritus of Civil Engineering. Ph.D., Texas A&M University.

EDWIN A. DAVIS, Professor Emeritus of History. Ph.D., LSU.

JOSEPH G. DAWSON, Professor Emeritus of Psychology. Ph.D., University of Chicago.

M. CLYDE DAY, JR., Professor Emeritus of Chemistry. Ph.D., Iowa State University.

JANE L. DEGRUMMOND, Professor Emeritus of History. Ph.D., LSU.

JOE M. DIXON, Professor Emeritus of Veterinary Science; Professor Emeritus of Veterinary Clinical Medicine. D.V.M., Oklahoma State University.

DALLAS M. DRAPER, Professor Emeritus of Music. M.M., LSU.

RALPH M. DREGER, Professor Emeritus of Psychology. Ph.D., University of Southern California.

FRANCIS A. DRURY, Professor Emeritus of Health, Physical, and Recreation Education. Ph.D., University of Iowa.

CLARENCE L. DUNN, Professor Emeritus of Accounting. Ph.D., University of Illinois.

CAROLINE W. DURIEUX, Professor Emeritus of Fine Arts. M.A., LSU.

PAUL DUFOUR, Professor Emeritus of Art (Stained Glass). B.F.A., Yale University.

ANNE JANE H. DYSON, Librarian Emeritus. B.S. in L.S., LSU.

J. NORMAN EFFERSON, Professor Emeritus of Agricultural Economics and Agribusiness; Chancellor Emeritus, Center for Agricultural Sciences and Rural Development. Ph.D., Cornell University.

WARRICK R. EDWARDS, Professor Emeritus of Chemistry. Ph.D., Johns Hopkins University.


NECDET F. ERA SLAN, Professor Emeritus of Mechanical, Aerospace, and Industrial Engineering. Ph.D., University of Istanbul (Turkey).

BEATRICE B. EXNER, Professor Emeritus of Botany. Ph.D., LSU.

GEORGE W. FAIR, Professor Emeritus of Accounting. Ph.D., LSU.

BARTON R. FARTHING, Professor Emeritus of Experimental Statistics. Ph.D., North Carolina State University.


ETTA LUCILLE FINLEY, Professor Emeritus of Home Economics. M.A., Texas Woman's University.

ERNEST H. FLOYD, Professor Emeritus of Entomology. M.S., LSU.

IRVIN L. FORBES, Professor Emeritus of Plant Pathology. Ph.D., University of Wisconsin.


J. B. FRYE, JR., Professor Emeritus of Dairy Science; Head Emeritus, Department of Dairy Science. Ph.D., Iowa State University.


OLLIE B. FUGLAAR, Professor Emeritus of Education. Ed.D., George Peabody College for Teachers.

LEMOS L. FULMER, Professor Emeritus of Education. Ph.D., LSU.

JOHN L. GARRETT, JR., Professor Emeritus of Education; Dean Emeritus, College of Education. Ph.D., LSU.

THEODOSIA J. GATES, Registrar Emeritus.


JAMES H. GHOLSON, Professor Emeritus of Dairy Science. Ph.D., University of Missouri.

JACK G. GILBERT, Professor Emeritus of English. Ph.D., University of Texas at Austin.

BUERFORD M. GILE, Professor Emeritus of Agricultural Economics. Ph.D., University of Minnesota.

VIRGINIA B. GLAD, Professor Emeritus of Psychology. Ph.D., University of Chicago.

LARON E. GOLDEN, Professor Emeritus of Agronomy. Ph.D., LSU.

ADOLPH O. GOLDSMITH, Professor Emeritus of Journalism; Director Emeritus, School of Journalism. Ph.D., University of Iowa.

MARY L. GOOD, Boyd Professor Emeritus, Division of Engineering Research. Ph.D., University of Arkansas.

MAX GOODRICH, Professor Emeritus of Physics; Dean Emeritus, Graduate School. Ph.D., University of Minnesota.

J. BERTON GREMILLION, Professor Emeritus of Education (Department of Administrative and Foundational Services). Ph.D., LSU.


FABIAN GUDAS, Professor Emeritus of English. Ph.D., University of Chicago.

GEORGE J. GUIDRY, JR., Librarian Emeritus; Director Emeritus, Middleton Library. M.A., LSU.

HELEN L. GUNDERSON, Professor Emeritus of Music. M.M., Yale University.


R. HOWARD HANCHEY, Professor Emeritus of Horticulture; Dean Emeritus, College of Agriculture. Ph.D., Ohio State University.

ALVIN C. HARPER, Professor Emeritus of Agricultural Economics and Agribusiness; Chancellor Emeritus, LSU Agricultural Center. Ph.D., Purdue University.

HARVEY S. HARRIS, Professor Emeritus of Art (Painting and Drawing). M.F.A., Yale University.

LEE M. HARRISON, Professor Emeritus of Education. Ph.D., LSU.

MURRAY F. HAWKINS, JR., Campanile Charities Professor Emeritus of Petroleum Engineering. M.S., LSU.

P. LYNNWOOD HAWTHORNE, Professor Emeritus of Horticulture. M.S., LSU.

RUDOLF HEBERLE, Boyd Professor Emeritus, Department of Sociology. D.Sc.Pol., University of Kiel (Germany).

RUSSELL E. HELMICK, Professor Emeritus of Education. Ed.D., University of Cincinnati.

MERLIN T. HELMICK, Alumni Professor Emeritus of Agronomy. Ph.D., University of Minnesota.

JOHN A. HENDRIX, Professor Emeritus of Agronomy. M.S., LSU.

MILICENT M. HENNIGAN, Librarian Emeritus. B.S. in L.S., LSU.

HERBERT G. HICKS, Professor Emeritus of Management. Ph.D., University of Alabama.

RONALD G. HICKS, Professor Emeritus of Journalism. Ph.D., LSU.

JOHN P. HOLLIS, Professor Emeritus of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., University of Nebraska.


JIMMIE H. HOOVER, Librarian Emeritus. M.S., LSU.

NORMAN L. HORN, Professor Emeritus of Plant Pathology (Department of Plant Pathology and Crop Physiology). Ph.D., LSU.

FREDERICK H. HOSKINS, Professor Emeritus of Food Science. Ph.D., LSU.

JAMES F. HUDSON, Professor Emeritus of Agricultural Economics and Agribusiness. Ph.D., Iowa State University.

JAMES H. HUTCHINSON, Professor Emeritus of Vocational Agricultural Education. Ph.D., LSU.


BLANCHE E. JACKSON, Professor Emeritus of Zoology and Physiology. Ph.D., Radcliffe College.

WILLIAM H. JAMES, Professor Emeritus of Food Science. Ph.D., Pennsylvania State University.

DAVID E. JOHNSON, Professor Emeritus of Electrical and Computer Engineering. Ph.D., Auburn University.


LLOYD G. JONES, Professor Emeritus of Horticulture. Ph.D., Purdue University.


GEORGE C. KENT, JR., Alumni Professor Emeritus of Zoology and Physiology. Ph.D., Vanderbilt University.

LEONARD L. KILGORE, JR., Professor Emeritus of Education (Department of Curriculum and Instruction). Ed.D., George Peabody College for Teachers.

OSCAR K. KIMBLER, Professor Emeritus of Petroleum Engineering. Ph.D., University of Texas at Austin.

THOMAS A. KIRBY, Professor Emeritus of English; Head Emeritus, Department of English. Ph.D., Johns Hopkins University.

RICHARD G. KLENK, Librarian Emeritus. M.S., LSU.

FRED B. KNIFFEN, Boyd Professor Emeritus, Department of Geography and Anthropology. Ph.D., University of California, Berkeley.

PAUL E. KOENIG, Professor Emeritus of Chemistry. Ph.D., University of Iowa.

JOHN T. KRUMPELMANN, Professor Emeritus of Foreign Languages. Ph.D., Harvard University.

DONALD H. KUPFER, Professor Emeritus of Geology. Ph.D., Yale University.

THOMAS R. LANDRY, Professor Emeritus of Education. Ph.D., LSU.

ROBERT B. LANK, Professor Emeritus of Veterinary Science; Head Emeritus, Department of Veterinary Science; Associate Dean Emeritus, School of Veterinary Medicine. D.V.M., Kansas State University.

ALWORTH D. LARSON, Professor Emeritus of Microbiology. Ph.D., University of Iowa.

JERRY M. LAW, Professor Emeritus of Agricultural Economics and Agribusiness. Ph.D., University of Minnesota.

WILLIAM A. LAWRENCE, Professor Emeritus of Education. Ph.D., LSU.

JORDAN G. LEE, Professor Emeritus of Biochemistry. Ph.D., University of Missouri.

THELMA H. LEONARD, Professor Emeritus of Vocational Home Economics Education. Ed.D., Oklahoma State University.

RAYMOND V. LESIKAR, Professor Emeritus of Management. Ph.D., University of Texas at Austin.

HARVYE F. LEWIS, Professor Emeritus of Home Economics. Ph.D., Iowa State University.

J. QUITMAN LONG, Professor Emeritus of Education. Ph.D., LSU.

THOMAS M. LOWE, Professor Emeritus of Civil Engineering. M.S., University of Wisconsin.

BERNARD LOWY, Professor Emeritus of Botany. Ph.D., University of Iowa.

PETER J. LUNARDINI, Professor Emeritus of Spanish and Portuguese. Ph.D., University of New Mexico.

JULIAN A. MARTIN, Professor Emeritus of Law Enforcement. J.D., LSU.

WESTON J. MARTIN, Professor Emeritus of Plant Pathology; Head Emeritus, Department of Plant Pathology and Crop Physiology. Ph.D., University of Minnesota.

JOSEPH D. MARTINEZ, Professor Emeritus of Petroleum Engineering. Ph.D., LSU.

GEORGE F. MATHES, Professor Emeritus of Mechanical, Aerospace, and Industrial Engineering. S.M., Massachusetts Institute of Technology.

ROBERT E. MAY, Professor Emeritus of Education. Ph.D., LSU.

MANSEL M. MAYEUX, Professor Emeritus of Agricultural Engineering. M.S., LSU.


CHARLES S. McCLESHOE, Professor Emeritus of Microbiology. Ph.D., Iowa State University.

SWAYZE E. McCRAINE, Professor Emeritus of Animal Science. M.S., LSU.

ROBERT W. MCDERMID, Professor Emeritus of Forestry and Wildlife Management. M.F., Yale University.

WILLIAM G. McINTIRE, Professor Emeritus of Geography and Anthropology; Professor Emeritus of Marine Sciences. Ph.D., LSU.

DEAN C. MCKEE, Professor Emeritus of Civil Engineering; Professor Emeritus of Construction. Ph.D., University of Illinois.

CRAWFORD R. McLELLAN, Professor Emeritus of Chemistry. Ph.D., LSU.


T. N. MCMULLAN, Director Emeritus of the Library. M.S., LSU.

LEON C. MEGGINSON, Professor Emeritus of Management. Ph.D., LSU.
LEE J. MELTON, JR., Professor Emeritus of Economics. Ph.D., LSU.

J. FRANCINE MERRITT, Professor Emeritus of Speech (Communication). Ph.D., LSU.


CLIFFORD L. MONDART, SR., Professor Emeritus of Vocational Agricultural Education; Director Emeritus, School of Vocational Education. Ph.D., Pennsylvania State University.

J. PRESTON MOORE, Professor Emeritus of History. Ph.D., Northwestern University.


JAMES P. MORGAN, Professor Emeritus of Geology. Ph.D., LSU.

FLORRINELL F. MORTON, Professor Emeritus of Library Science. M.A., University of California, Berkeley.

PAUL W. MURRILL, Professor Emeritus of Chemical Engineering; Chancellor Emeritus. Ph.D., LSU.

RICHARD B. MYERS, Professor Emeritus of Veterinary Science; Professor Emeritus of Veterinary Anatomy and Fine Structure. D.V.M., Kansas State University.

ROBERT J. NEWMAN, Curator Emeritus, Museum of Zoology. Ph.D., LSU.

L. DALE NEWSOM, Boyd Professor Emeritus, Department of Entomology. Ph.D., Cornell University.

JACK E. OHM, Professor Emeritus of Mathematics. Ph.D., University of California, Berkeley.

CORBIN R. OWEN, Professor Emeritus of Agronomy. M.S. Texas A&M University.

ELIAS D. PALIATESEAS, Professor Emeritus of Plant Pathology and Crop Physiology. Ph.D., LSU.

GORDON PALL, Professor Emeritus of Mathematics. Ph.D., University of Chicago.

HELEN H. PALMER, Librarian Emeritus. M.A., M.S., LSU.

VERNON J. PARENTON, Professor Emeritus of Sociology. Ph.D., Harvard University.

JAMES P. PAYNE, JR., Alumni Professor Emeritus of Economics. Ph.D., University of Illinois.

WALTER J. PEEVY, Professor Emeritus of Agronomy. Ph.D., Iowa State University.

LIONEL O. PELLEGRIN, Professor Emeritus of Education; Director Emeritus, Division of Continuing Education. Ph.D., LSU.

ROBERT A. PERKINS, Professor Emeritus of Social Work. Ph.D., LSU.

JOSEPH A. PINCKARD, Professor Emeritus of Plant Pathology. Ph.D., University of Wisconsin.

ANTONIOS G. PLAKIDAS, Professor Emeritus of Botany and Plant Pathology. Ph.D., University of California.

NICHOLAS N. PLASTERER, Professor Emeritus of Journalism. J.D., University of Toledo; M.S.J., Northwestern University.

WILEY D. POOLE, Professor Emeritus of Agricultural Engineering. M.S., LSU.

BERNARD S. PRESSBurg, Professor Emeritus of Chemical Engineering. Ph.D., LSU.

FRANK J. PRICE, Professor Emeritus of Journalism. Ph.D., University of Iowa.

AMBROSE K. RAMSEY, JR., Professor Emeritus of Electrical Engineering. M.S., Ohio State University.

MARION B. REED, Professor Emeritus of Electrical Engineering. M.S., LSU.

PAUL K. REES, Professor Emeritus of Mathematics. Ph.D., Rice University.

ROBERT S. REICH, Professor Emeritus of Landscape Architecture; Director Emeritus, School of Landscape Architecture. Ph.D., Cornell University.

KARL D. REYER, Professor Emeritus of Management and Marketing. Ph.D., Ohio State University.

ALLAN R. RICHARDS, Professor Emeritus of Political Science. Ph.D., University of North Carolina at Chapel Hill.

ROGER W. RICHARDSON, Professor Emeritus of Chemical Engineering; Dean Emeritus, College of Engineering. Ph.D., Iowa State University.

FRANK A. RICKEY, Professor Emeritus of Mathematics. Ph.D., LSU.

CECIL B. ROARK, Professor Emeritus of Agronomy. M.S., LSU.

EDWARD B. ROBERT, Professor Emeritus of Education; Dean Emeritus, College of Education. Ph.D., George Peabody College for Teachers.

J. HARVEY ROBERTS, Professor Emeritus of Entomology; Professor Emeritus of Zoology and Physiology. Ph.D., University of Maryland.

GEORGE L. ROBERTSON, Professor Emeritus of Animal Science; Head Emeritus, Department of Animal Science. Ph.D., University of Wisconsin.

WILLIAM D. ROSS, Professor Emeritus of Economics; Dean Emeritus, College of Business Administration. Ph.D., Duke University.


ADOLPH E. SANDBERG, Professor Emeritus of Geology. Ph.D., University of Cincinnati.

HARRY C. SANDERS, Professor Emeritus of Extension Education; Director Emeritus, Agricultural Extension Service. LL.D., Clemson University.

ARMIN A. SCHELER, Professor Emeritus of Fine Arts.


JAMES P. SCHWEITZER, Professor Emeritus of Marine Sciences; Professor Emeritus in Office of Sea Grant Development. Ed.D., Auburn University.

FERD W. SELF, Professor Emeritus of Agronomy. M.S., Oklahoma State University.

CLAUDE L. SHAYER, Alumni Professor Emeritus of Speech. Ph.D., University of Wisconsin.

DARWIN H. SHRELL, Professor Emeritus of English. Ph.D., University of Texas at Austin.

LAURENCE SIEGEL, Professor Emeritus of Psychology. Ph.D., University of Tennessee.

ROBERT F. SMITH, Professor Emeritus of Economics. Ph.D., University of Illinois.
WILLIAM M. SMITH, Professor Emeritus of Education. Ph.D., LSU.

WILLIAM T. SPINK, Professor Emeritus of Entomology. Ph.D., North Carolina State University.

RICHARD J. STADTHERR, Professor Emeritus of Horticulture. Ph.D., University of Minnesota.

ERNEST R. STAMPER, Professor Emeritus of Plant Pathology and Crop Physiology. M.S., LSU.


RENE J. STEIB, Professor Emeritus of Plant Pathology and Crop Physiology. Ph.D., LSU.

EARL D. STOUT, Professor Emeritus of Music. B.M., Syracuse University; piano study with Ernest Hutchison, Tina Lerner, Franklin Cannon.

WILLIAM E. SWYERS, Professor Emeritus of Accounting. Ph.D., LSU.

ELIZABETH TARVER, Librarian Emeritus. B.S. in L.S., University of North Carolina at Chapel Hill.

CECIL G. TAYLOR, Professor Emeritus of Romance Languages; Chancellor Emeritus, LSU. Ph.D., University of North Carolina at Chapel Hill.

CARL H. THOMAS, Professor Emeritus of Agricultural Engineering. Ph.D., Michigan State University.

JOHN A. THOMPSON, Professor Emeritus of Foreign Languages. Ph.D., University of North Carolina at Chapel Hill.

ROBERT L. THOMS, Professor Emeritus of Environmental Studies; Professor Emeritus of Civil Engineering. Ph.D., University of Illinois.

ERIC L. THURSTON, Professor Emeritus of Education (Department of Curriculum and Instruction). Ed.D., University of Houston.

EVERETT L. TIMM, Professor Emeritus of Music; Dean Emeritus, School of Music. Ph.D., Eastman School of Music (University of Rochester); Honorary Doctorate, Morningside College.


EDWIN O. TIMMONS, Alumni Professor Emeritus of Psychology. Ph.D., University of Tennessee.

CLARA TUCKER, Professor Emeritus of Home Economics. Ph.D., Columbia University.

HUMPHREYS T. TURNER, Professor Emeritus of Civil Engineering. C.E., Massachusetts Institute of Technology.

MAURICE M. VICK, Professor Emeritus of Chemistry. Ph.D., LSU.

ROBERT C. VON BROCK, Professor Emeritus of Education (Department of Administrative and Foundational Services). Ph.D., Northwestern University.

ALEXIS VOORHIES, JR., Professor Emeritus of Chemical Engineering. M.S., Honorary D.Sc., Loyola University.


H. JESSE WALKER, Boyd Professor Emeritus, Department of Geography and Anthropology. Ph.D., LSU.

HENRY J. WERNER, Professor Emeritus of Zoology and Physiology. Ph.D., University of Maryland.


PHILIP W. WEST, Boyd Professor Emeritus, Department of Chemistry. Ph.D., University of Iowa.

ROBERT C. WEST, Boyd Professor Emeritus, Department of Geography and Anthropology. Ph.D., University of California, Berkeley.

OTIS B. WHEELER, Professor Emeritus of English. Ph.D., University of Minnesota.


FRED H. WIEGGMANN, Professor Emeritus of Agricultural Economics and Agribusiness; Head Emeritus, Department of Agricultural Economics and Agribusiness. Ph.D., Iowa State University.


RICHARD H. WIGGINS, Professor Emeritus of Journalism. Ph.D., University of Iowa.

WESLEY A. WIKSELL, Professor Emeritus of Speech. Ph.D., LSU.


HULEN B. WILLIAMS, Professor Emeritus of Chemistry; Dean Emeritus, College of Chemistry and Physics. Ph.D., LSU.

RENE de V. WILLIAMSON, Professor Emeritus of Political Science. Ph.D., Harvard University.

WILLIAM H. WILLIS, Professor Emeritus of Agronomy; Head Emeritus, Department of Agronomy. Ph.D., Iowa State University.

MARTIN D. WOODIN, Professor Emeritus of Agricultural Economics and Agribusiness; President Emeritus, LSU System. Ph.D., Cornell University.

FINIST W. WRATTEN, Professor Emeritus of Agricultural Engineering. M.S., LSU.

ORAMAY B. YOUNG, Professor Emeritus of Music. M.M., LSU.

PAUL C. YOUNG, Professor Emeritus of Psychology. Ph.D., Harvard University.

DONALD W. HAMMONS, Assistant Professor of Education (Department of Curriculum and Instruction); Head, Office of Independent Study. Ed.D., LSU.

THOMAS L. HEBERT, Director, Firemen Training Program.

LINDA L. HOLLIDAY, Director, Computer Rehabilitation Training Program for the Severely Handicapped. J.D., M.Ed., LSU.
WINTON W. HYMEL, Assistant Dean, Division of Continuing Education; Head, Short Courses and Conferences. B.S., University of Southwestern Louisiana.

FRITZ A. McCAMERON, Professor of Accounting; Dean, Division of Continuing Education. Ph.D., University of Alabama.

HOWARD M. SCHOBER, Executive Director, Louisiana Council on Economic Education. Ed.D., Rutgers University.

EDWARD L. SIMON, Head, Department of Extramural Teaching. M.S., LSU.

JAMES H. SYKORA, Director, IADC Blowout Control School. B.S., Texas A&M University.

DANIEL C. WALSH, Jr., Assistant Dean, Division of Continuing Education; Manager, Conference Center. Ed.D., LSU.

ANDREW H. YARROW, Head, English Language and Orientation Program. Ph.D., Yale University.

Junior Division

MELANIE F. AMRHEIN, Counselor (Information). B.A., LSU.

HARLEY F. ANTON, Instructor (Reading). M.A., LSU.

RHONDA H. ATKINSON, Instructor (Reading). M.A., University of Central Arkansas.

CAROL H. BADER, Instructor (Reading); Coordinator of Reading. Ph.D., LSU.

VINETTA D. BOYD, Counselor. M.Ed., LSU.

CAROLYN C. COLLINS, Assistant Dean, Junior Division. M.Ed., LSU.

KAREN L. COLTHARP, Counselor. M.Ed., LSU.

ANN FITZMORRIS, Instructor (Reading). M.Ed., LSU.

SHARON L. HANCOCK, Counselor. M.Ed., LSU.

PAMELA B. HOFFMAN, Counselor. M.S., Indiana University.


LAURA F. LEMOINE, Dean, Junior Division; Director, Developmental Education. Ph.D., LSU.

KAYLENE G. LONG, Assistant Professor of Speech; Associate Director, Developmental Education; Director, Special Services. Ph.D., Indiana University.

DEBBIE G. LONGMAN, Instructor (Reading). M.Ed., LSU.

KATHLEEN MARSHALL, Counselor (Special Services). M.Ed., LSU.

JO ANN PICCIONE, Counselor (Special Services). M.Ed., Brigham Young University.

LOU D. POWERS, Counselor. M.S., University of Tennessee.

CURTIS P. SCHAFER, Head of Counseling. M.Ed., LSU.

GWENDOLYN SNEARL, Counselor. M.S., University of Southwestern Louisiana.

CLIFTON E. STRINGFIELD, Counselor. M.S., Louisiana Tech University.

M. SUE TWEEDY, Counselor. M.Ed., LSU.

Faculty, LSU Agricultural Center

H. ROUSE CAFFEY, Chancellor; Professor. Ph.D., LSU.

MACON D. FAULKNER, Vice-Chancellor; Director, International Programs; Professor. M.S., LSU.

LOUISIANA AGRICULTURAL EXPERIMENT STATION

Administration

DOYLE CHAMBERS, Vice-Chancellor; Director; Professor. Ph.D., Oklahoma State University.

KENNETH W. TIPTON, Associate Director; Professor. Ph.D., Mississippi State University.

WILLIAM H. BROWN, Assistant Director; Professor. Ph.D., University of Missouri.

DENNIS R. STIPE, Assistant Director; Professor. M.S., Texas A&M University.

CLIFTON L. WALES, Assistant to the Director. M.S., LSU.

Cotton Fiber Lab

WILBUR AGUILLARD, Associate Professor; Supervisor of Laboratory. M.S., LSU.

Editorial and Publications Department

TED R. HOLMES, Coordinator of Agricultural Information; Specialist (Editor). M.A.J., LSU.

DONALD E. DIDIER, Editor; Associate Professor. M.A., LSU.

*Also listed as member of instructional faculty.

WILEY M. FUTRELL, Division Leader (Communications); Head; Associate Specialist. M.A., LSU.

GAIL M. SMITH, Assistant Editor; Assistant Professor. Ph.D., Texas A&M University.

JOHN R. TARVER, Assistant Editor; Instructor. M.A., Northwestern State University.

MARY W. THRASHER, Assistant Specialist. B.F.A., University of Oklahoma.

Feed and Fertilizer Laboratory

HERSHEL F. MORRIS, JR., Chief Chemist; Head; Instructor. M.S., LSU.

PEDRO V. CARRASCO, Instructor. Ph.D., LSU.

LEONARD DEVO LD, Instructor. B.S., Southern University.

AUSTIN T. HARRELL, Associate Professor. M.S., LSU.

Sugar Station

MIKE J. GIAMALVA, Professor; Head of Sugar Station. Ph.D., LSU.
Departments of the Central Experiment Station

Department of Agricultural Economics and Agribusiness

LEO J. GUEDRY, Professor; Head of Department. Ph.D., Oregon State University.*
RALPH D. CHRISTY, Assistant Professor. Ph.D., Michigan State University.*
LONNIE L. FIELDER, JR., Professor. Ph.D., Iowa State University.*
WAYNE M. GAUTHIER, Associate Professor. Ph.D., Oklahoma State University.*
ARTHUR M. HEAGLER, Associate Professor. Ph.D., LSU.*
STEVE A. HENNIG, Assistant Professor. Ph.D., Mississippi State University.*
ROGER A. HINSON, Assistant Professor. Ph.D., University of Tennessee.*
DONALD C. HUFFMAN, Professor. Ph.D., Ohio State University.*
MARK D. LANGE, Assistant Professor. Ph.D., Iowa State University.*
KENNETH W. PAXTON, Professor. Ph.D., University of Tennessee.*
ALVIN R. SCHUPP, Professor. Ph.D., University of Missouri.*
HARLON D. TRAYLOR, Professor. Ph.D., Cornell University.*
LONNIE R. VANDEVEER, Associate Professor. Ph.D., Oklahoma State University.*
ROBERT B. WHARTON, Assistant Professor. Ph.D., Washington State University.*
FRED E. WILLIAMS, Assistant Professor. Ph.D., North Carolina State University.*

Richard C. Thompson, Instructor. M.S., Southern Oregon State University.
Lalit R. Verma, Associate Professor. Ph.D., University of Nebraska.*
Malcolm E. Wright, Professor. Ph.D., Oklahoma State University.*

Department of Agronomy

J. PRESTON JONES, Professor; Head of Department. Ph.D., University of Arizona.*
MICHAEL C. AMACHER, Assistant Professor. Ph.D., Pennsylvania State University.*
JAMES E. BOARD, Assistant Professor. Ph.D., University of California, Davis.
H. ROUSE CAFFEY, Professor; Chancellor, LSU Agricultural Center. Ph.D., LSU.
AUGUSTUS G. CALDWELL, Professor. Ph.D., Iowa State University.*
SETH M. DABNEY, Assistant Professor. Ph.D., Cornell University.
EDWARD P. DUNIGAN, Professor. Ph.D., University of Arizona.*
SAM E. FEAGLEY, Associate Professor. Ph.D., University of Missouri.*
STEPHEN A. HARRISON, Assistant Professor. Ph.D., University of Illinois.*
BOBBY G. HARVILLE, Associate Professor. Ph.D., University of Tennessee.*
BERT J. HOFF, Associate Professor. Ph.D., University of Arizona.*
WAYNE H. HUDNALL, Associate Professor. Ph.D., University of Hawaii.*
JACK E. JONES, Professor. Ph.D., LSU.
CHARLES W. KENNEDY, Assistant Professor. Ph.D., University of Kentucky.*
FREDIE A. MARTIN, Professor. Ph.D., Cornell University.
BOBBY J. MILLER, Professor. Ph.D., University of Tennessee.*
CLIFFORD L. MONDART, JR., Professor. Ph.D., Mississippi State University.*
RAY RICAUD, Professor. Ph.D., LSU.
DONALD L. ROBINSON, Professor. Ph.D., Kansas State University.*
JOSEPH E. SEDBERRY, JR., Professor. Ph.D., LSU.*
HUSSEIN M. SELIM, Professor. Ph.D., Iowa State University.*
ANN M. THRO, Assistant Professor. Ph.D., Iowa State University.
KENNETH W. TIPTON, Professor; Associate Director, Louisiana Agricultural Experiment Station. Ph.D., Mississippi State University.

Department of Animal Science

JAMES W. TURNER, Professor; Head of Department. Ph.D., Oklahoma State University.*
THOMAS D. BIDNER, Professor. Ph.D., Michigan State University.*
DOYLE CHAMBERS, Professor; Vice-Chancellor; Director, Louisiana Agricultural Experiment Station. Ph.D., Oklahoma State University.
W. MICHAEL CRAIG, Assistant Professor. Ph.D., Texas A&M University.*
DONALD E. FRANKE, Professor. Ph.D., Texas A&M University.*
ROBERT A. GODKE, Professor. Ph.D., University of Missouri.*

*Also listed as member of instructional faculty.
F. GLEN HEMBRY, Professor; Ph.D., University of Missouri.*
PAUL E. HUMES, Professor; Associate Dean, College of Agriculture. Ph.D., Oregon State University.*
KENNETH W. McMILLIN, Associate Professor. Ph.D., Iowa State University.*
LEWIS I. SMART, Professor; Ph.D., Kansas State University.*
LINCOLN L. SOUTHERN, Assistant Professor. Ph.D., University of Illinois at Urbana-Champaign.*
DONALD L. THOMPSON, JR. Associate Professor. Ph.D., Colorado State University.*

**Department of Biochemistry**

ROGER A. LAINE, Professor; Chairman of Department. Ph.D., Rice University.*
SUE G. BARTLETT, Assistant Professor. Ph.D., Duke University.*
WALTER A. DEUTSCH, Associate Professor. Ph.D., Texas A&M University.*
JESSE JAYNES, Assistant Professor. Ph.D., Brigham Young University.*
RONALD C. MONTELARO, Associate Professor. Ph.D., University of Wisconsin—Madison.*
DING-SHING SHIH, Associate Professor. Ph.D., Virginia Polytechnic Institute.*

**Department of Dairy Science**

ROBERT W. ADKINSON, Associate Professor; Acting Head of Department. Ph.D., University of Florida.*
ANTONIO S. ACHACOSO, Associate Professor. Ph.D., LSU.*
ARNOLD BAHAM, Associate Professor. Ph.D., Auburn University.*
JOHN E. CHANDLER, Associate Professor. Ph.D., Virginia Polytechnic Institute.
AUTAR K. KARIHALOO, Adjunct Associate Professor. Ph.D., University of Alberta (Canada).
STEPHEN C. NICKERSON, Assistant Professor. Ph.D., Virginia Polytechnic Institute.
ALLEN W. NIPPER, Assistant Professor. Ph.D., Oklahoma State University.*
W. N. PHILPOT, Professor. Ph.D., Oklahoma State University.*
JOSEPH D. ROUSSEL, Professor. Ph.D., LSU.*
CHARLES H. WHITE, Professor. Ph.D., University of Missouri.*

**Department of Entomology**

JERRY B. GRAVES, Professor; Head of Department. Ph.D., LSU.*
DAVID J. BOETHEL, Professor. Ph.D., Oklahoma State University.*
RONNIE L. BYFORD, Assistant Professor. Ph.D., Oklahoma State University.*
JOAN B. CHAPIN, Professor. Ph.D., LSU.*
DAN F. CLOWER, Professor. Ph.D., Cornell University.
LANCE D. FOIL, Associate Professor. Ph.D., Mississippi State University.*
JAMES R. FUXA, Associate Professor. Ph.D., North Carolina State University.*
RICHARD A. GOYER, Professor. Ph.D., University of Wisconsin—Madison.*
ABNER M. HAMMOND, JR., Professor. Ph.D., LSU.*

JOHN A. HARBO, Entomologist (USDA). Ph.D., Cornell University.*
SESS D. HENSLEY, Entomologist (USDA). Ph.D., Oklahoma State University.*
SETH J. JOHNSON, Associate Professor. Ph.D., Texas A&M University.*
JEFFERY P. LaFAGE, Associate Professor. Ph.D., University of Arizona.*
C. LAMAR MEEK, Professor. Ph.D., Texas A&M University.*
ABE D. OLIVER, JR., Professor. Ph.D., LSU.*
SHARRON S. QUISENBERY, Assistant Professor. Ph.D., University of Missouri.*
THOMAS E. REAGAN, Associate Professor. Ph.D., North Carolina State University.*
THOMAS J. RILEY, Associate Professor. Ph.D., University of Missouri.*
LAWRENCE H. ROLSTON, Professor. Ph.D., Ohio State University.*
CHARLES M. SMITH, Associate Professor. Ph.D., Mississippi State University.*
THOMAS C. SPARKS, Associate Professor. Ph.D., University of California, Riverside.*
RICHARD N. STORY, Assistant Professor. Ph.D., University of Missouri.*

**Department of Experimental Statistics**

KENNETH L. KOONCE, Professor; Head of Department. Ph.D., North Carolina State University.*
DAVID C. BLOUN, Associate Professor. Ph.D., LSU.*
LUIS A. ESCOBAR, Assistant Professor. Ph.D., Iowa State University.*
JAMES P. GEAUGHAN, Assistant Professor. Ph.D., North Carolina State University.
CHARLES J. MONLEZUN, Associate Professor. Ph.D., Tulane University.*
ARNOLD M. SANTX, Assistant Professor. Ph.D., North Carolina State University.*
PRENTISS E. SCHILLING, Professor; Dean, College of Agriculture. Ph.D., Oregon State University.*
K. PAM SHAO, Assistant Professor. Ph.D., University of Nebraska.*
WILLIAM G. WARREN, Professor. Ph.D., University of North Carolina.*
VERNON L. WRIGHT, Associate Professor. Ph.D., Washington State University.*

**Department of Food Science**

AUTTIS M. MULLINS, Professor; Head of Department. Ph.D., University of Missouri.*
STANLEY L. BIEDE, Associate Professor. Ph.D., Iowa State University.*
DARRELL L. GERDES, Assistant Professor. Ph.D., Texas A&M University.*
J. SAMUEL GODBER, Assistant Professor. Ph.D., University of Missouri.*
ROBERT M. GRODNER, Professor. Ph.D., LSU.*
CAMERON R. HACKNEY, Associate Professor. Ph.D., North Carolina State University.*
JOSEPH A. LIUZZO, Professor. Ph.D., Michigan State University.*
SAMUEL P. MEYERS, Professor. Ph.D., Columbia University.*
FREDERICH W. PARRISH, Adjunct Professor. Ph.D., University of London (England).*
RAMU M. RAO, Professor. Ph.D., LSU.*

*Also listed as member of instructional faculty.
School of Forestry, Wildlife, and Fisheries

THOMAS HANSBROUGH, Professor; Director of School. Ph.D., LSU.*
JAMES W. AVAULT, Professor. Ph.D., Auburn University.*
CHARLES F. BRYAN, Adjunct Professor; Leader, Louisiana Cooperative Fishery Research Unit (USDI). Ph.D., University of Louisville.*
PAUL Y. BURNS, Professor. Ph.D., Yale University.*
QUANG V. CAO, Assistant Professor. Ph.D., Virginia Polytechnic Institute.*
ROBERT H. CHABRECK, Professor. Ph.D., LSU.*
JIMMY L. CHAMBERS, Associate Professor. Ph.D., University of Missouri.*
ELVIN T. CHOONG, Professor. Ph.D., Syracuse University.*
TERRY R. CLASON, Associate Professor. Ph.D., University of Georgia.
DUDLEY D. CULLY, Professor. Ph.D., Mississippi State University.*
PETER J. FOGG, Professor. Ph.D., LSU.*
ROBERT B. HAMILTON, Associate Professor. Ph.D., University of California, Berkeley.*
WILLIAM H. HERKE, Adjunct Associate Professor; Assistant Leader, Louisiana Cooperative Fishery Research Unit (USDI). Ph.D., LSU.*
JAMES E. HOTVEDT, Associate Professor. Ph.D., Virginia Polytechnic Institute.*
SHIH-CHANG HU, Associate Professor. Ph.D., LSU.*
BEN D. JACKSON, Associate Professor. Ph.D., Texas A&M University.*
MARK K. JOHNSON, Associate Professor. Ph.D., Colorado State University.
NORWIN E. LINNARTZ, Professor. Ph.D., LSU.*
JOHN D. NEWSOM, Adjunct Professor. M.S.G.Mgt., LSU.*
ROBERT E. NOBLE, Professor. Ph.D., Michigan State University.*
ROBERT R. ROMAIRE, Associate Professor. Ph.D., Auburn University.
CHARLES L. SHILLING, Professor. Ph.D., Texas A&M University.*
JOHN R. TOLIVER, Associate Professor. Ph.D., Texas A&M University.*
FRANK M. TRUESDALE, Associate Professor. Ph.D., Texas A&M University.*
WILLIAM R. WOLTERS, Assistant Professor. Ph.D., Purdue University.
PHILLIP J. ZWANK, Adjunct Assistant Professor; Leader, Louisiana Cooperative Wildlife Research Unit (USDI). Ph.D., Utah State University.*

School of Home Economics

NEVA F. OLSEN, Professor; Director of School. Ph.D., Texas Woman's University.*
LENORE B. CHEEK, Assistant Professor. Ph.D., Purdue University.*
RINN M. CLOUD, Associate Professor. Ph.D., University of North Carolina.*
JOSEPH G. DELATTE, JR., Assistant Professor. Ph.D., Florida State University.*
PEGGY S. DRAUGHN, Associate Professor. Ph.D., Florida State University.*
CAROL L. ENGBRETSON, Professor. Ph.D., Michigan State University.*
MAREN HEGSTED, Assistant Professor. Ph.D., University of Wisconsin—Madison.*

*Also listed as member of instructional faculty.

GLADYS J. HILDRETH, Professor. Ph.D., Michigan State University.*
PAULA M. HOWAT, Associate Professor. Ph.D., Virginia Polytechnic Institute.*
DANIEL H. HWANG, Associate Professor. Ph.D., Colorado State University.*
ELEANOR A. KELLEY, Professor. Ph.D., Michigan State University.*
LINDA J. LAFFERTY, Assistant Professor. Ph.D., University of Missouri—Columbia.*
FRANCES C. LAWRENCE, Associate Professor. Ph.D., Florida State University.*
WILSON A. REEVES, Professor. Sc.D., Clemson University.*
TERESA A. SUMMERS, Assistant Professor; Associate Dean, College of Agriculture. Ph.D., Texas Woman’s University.*
MARGARET T. YOUNATHAN, Professor. Ph.D., Florida State University.*

Department of Horticulture

DONALD W. NEWSOM, Professor; Head of Department. Ph.D., Michigan State University.*
EARL P. BARRIOS, JR., Professor. Ph.D., LSU.*
JAMES E. BOUDREAUX, Assistant Professor. Ph.D., LSU.*
JAMES F. FONTENOT, Professor. Ph.D., University of Missouri.*
DONN M. LANCASTER, Assistant Professor. Ph.D., University of Arkansas.
CATHERINE A. LUNDERGAN, Assistant Professor. Ph.D., Purdue University.*
WARREN A. MEADOWS, Professor; Resident Director, Burden Research Plantation. Ph.D., LSU.
EDMUND N. O’ROURKE, JR., Professor. Ph.D., Cornell University.*
DAVID H. PICA, Assistant Professor. Ph.D., University of Florida.*
WILLIAM M. RANDLE, Assistant Professor. Ph.D., University of Minnesota.
LEON C. STANDIFER, Professor. Ph.D., University of Wisconsin—Madison.
FREDERICK J. SUNDESTROM, Associate Professor. Ph.D., Virginia Polytechnic Institute.*
KENNETH C. TORRES, Assistant Professor. Ph.D., University of Missouri—Columbia.*
DAVID W. WALKER, Assistant Professor. Ph.D., Texas A&M University.
PAUL W. WILSON, Assistant Professor. Ph.D., Purdue University.*
WILLIAM R. WOODSON, Assistant Professor. Ph.D., Cornell University.

Department of Microbiology

MARION D. SOCOLOFSKY, Professor; Chairman of Department. Ph.D., University of Texas at Austin.*
HUGH D. BRAYMER, Professor. Ph.D., University of Oklahoma.*

Department of Plant Pathology and Crop Physiology

DAVID R. MacKENZIE, Professor; Head of Department. Ph.D., Pennsylvania State University.*
LOUIS ANZALONE, JR., Professor. Ph.D., LSU.
JOHN B. BAKER, Professor. Ph.D., University of Wisconsin—Madison.*
GERARD T. BERGGREN, JR., Associate Professor. Ph.D., LSU.*
WRAY B. BIRCHFIELD, Adjunct Professor; Nematologist [USDA]. Ph.D., LSU.*
LOWELL L. BLACK, Professor. Ph.D., University of Wisconsin—Madison.*
WILLIAM J. BLACKMON, Professor. Ph.D., North Carolina State University.*
CHRISTOPHER A. CLARK, Associate Professor. Ph.D., Cornell University.
MARCI A. COHN, Associate Professor. Ph.D., Cornell University.
KENNETH E. DAMANN, JR., Associate Professor. Ph.D., Michigan State University.*
KENNETH S. DERRICK, Professor. Ph.D., Texas A&M University.*
GORDON E. HOLCOMB, Professor. Ph.D., University of Wisconsin—Madison.*
JEFFREY W. HOY, Assistant Professor. Ph.D., University of California.
JOHN P. JONES, Associate Professor. Ph.D., University of Georgia.*
LYNN M. KITCHEN, Assistant Professor. Ph.D., University of Kentucky.*
G. DON LINDBERG, Professor. Ph.D., University of Wisconsin—Madison.*
EDWARD C. MCGAWLEY, Assistant Professor. Ph.D., University of Kentucky.*
MILTON C. RUSH, Professor. Ph.D., North Carolina State University.*
RAYMOND W. SCHNEIDER, Assistant Professor. Ph.D., University of Illinois.
JOHNNIE P. SNOW, Professor. Ph.D., Texas A&M University.*
MAURICE E. TERRY, Assistant Professor. Ph.D., University of California, Davis.*
RAYMOND E. TULLY, Assistant Professor. Ph.D., University of California, Santa Cruz.

Department of Rural Sociology
FORREST A. DESERAN, Associate Professor. Ph.D., Colorado State University.*
WILLIAM A. FALK, Associate Professor. Ph.D., Texas A&M University.*
MARK A. FOSSETT, Assistant Professor. Ph.D., University of Texas at Austin.*
QUENTIN A. L. JENKINS, Professor. Ph.D., Iowa State University.*
GEORGE W. OHLENDORF, Associate Professor. Ph.D., Texas A&M University.*

Department of Veterinary Science
KIRKLYM M. KERR, Professor; Head of Department; Assistant Dean, School of Veterinary Medicine. D.V.M., Ohio State University; Ph.D., Texas A&M University; Diplomate, American College of Veterinary Pathologists.*
WILLIE V. ADAMS, JR., Instructor. M.S., LSU.
GRACE F. AMBORSKI, Professor. Ph.D., Ohio State University.*
RICHARD E. CORSTVET, Professor. Ph.D., University of California, Davis.
FREDERICK M. ENRIGHT, Professor. D.V.M., Oklahoma State University; Ph.D., University of California, Davis.*
WAYNE FLORY, Associate Professor. Ph.D., University of Texas at Austin.*
DENNIS D. FRENCH, Assistant Professor. D.V.M., University of Minnesota.
LEWIS T. HART, Professor. Ph.D., LSU.
RODNEY H. INGRAHAM, Professor. D.V.M., University of California, Davis; Ph.D., Iowa State University.*
CHARLES J. ISSEL, Professor. D.V.M., University of California, Davis; Ph.D., University of Wisconsin—Madison.*
THOMAS R. KLEI, Professor. Ph.D., Wayne State University.*
HELEN E. LEVY, Instructor. B.S., LSU.
CAMERON L. SEGER, Professor. D.V.M., Colorado State University; Diplomat, American College of Veterinary Pathologists.
WILFRED T. SPRINGER, Professor. D.V.M., University of Illinois; Ph.D., University of Georgia.
RONALD L. THUNE, Assistant Professor. Ph.D., Auburn University.*
WILLIAM J. TODD, Assistant Professor. Ph.D., Colorado State University.*
JAMES C. WILLIAMS, Professor. Ph.D., LSU Medical Center.

Branch Research Stations

Burden Research Plantation, Baton Rouge
WARREN A. MEADOWS, Professor; Resident Director. Ph.D., LSU.

Calhoun Research Station, Calhoun
WILLIAM A. YOUNG, Professor; Resident Director. Ph.D., LSU.
ALLEN C. GOODLING, Associate Professor. M.S., LSU.
CHARLES E. JOHNSON, Associate Professor. Ph.D., LSU.
DONN M. LANCASTER, Assistant Professor. Ph.D., University of Arkansas.

Citrus Research Station, Port Sulphur
ALVIN J. ADAMS, Associate Professor; Resident Director. M.S., LSU.
WAYNE J. BOURGOIS, Assistant Professor. Ph.D., LSU.
HANNA Y. HANNA, Assistant Professor. Ph.D., LSU.

Dean Lee Research Station, LSU at Alexandria
JACK L. KREIDER, Professor; Resident Director. Ph.D., University of Kentucky.
DANNY F. COOMBS, Assistant Professor. M.S., LSU.
ALVIN F. LOYACANO, Associate Professor. M.S., LSU.
JAMES G. MARSHALL, Professor. M.S., LSU.
JOHN E. PONTIF, Associate Professor. M.S., LSU.

*Also listed as member of instructional faculty.
Paul R. Vidrine, Assistant Professor. M.S., LSU.

Foundation Seed Program, LSU at Alexandria
Edward A. Drummond, Instructor; Manager. M.S., Mississippi State University.

Hammond Research Station, Hammond
Royse I. Constantine, Professor; Resident Director. Ph.D., LSU.
William L. Brown, Associate Professor. Ph.D., Mississippi State University.
Dennis W. Wells, Instructor. M.S., LSU.

Hill Farm Research Station, Homer
W. Nelson Philpot, Professor; Resident Director. Ph.D., Oklahoma State University.
Terry R. Clason, Associate Professor. Ph.D., University of Georgia.
Marcus M. Eichhorn, Jr., Associate Professor. Ph.D., University of Georgia.
Stephen C. Nickerson, Assistant Professor. Ph.D., Virginia Polytechnic Institute.
William M. Oliver, Professor. Ph.D., Texas A&M University.
Jeffrey L. Watts, Instructor. M.S., Louisiana Tech University.

Iberia Research Station, Jeanerette
Howard P. Viator, II, Professor; Resident Director. Ph.D., LSU.
William B. Hallmark, Associate Professor. Ph.D., Purdue University.
Wayne E. Wyatt, Assistant Professor. Ph.D., Virginia Polytechnic Institute.

Idlewild Research Station, Clinton
Freddie J. Peterson, Professor; Resident Director. Ph.D., Texas A&M University.

Northeast Research Station, St. Joseph
Robert L. Rogers, Professor; Resident Director. Ph.D., Auburn University.
Donald J. Boquet, Professor. Ph.D., LSU.
Stephen H. Crawford, Associate Professor. M.S., LSU.
Robert L. Hutchinson, Assistant Professor. Ph.D., LSU.
Michael R. Milam, Assistant Professor. Ph.D., Mississippi State University.
Ronald L. Mitchell, Assistant Professor. Ph.D., University of Tennessee.
Edward J. Retzinger, Jr. Assistant Professor. Ph.D., North Dakota State University.
Malvern P. Westcott, Assistant Professor. Ph.D., University of California.

Pecan Research-Extension Station, Shreveport
Richard D. O'Barr, Associate Professor; Resident Director. Ph.D., University of Georgia.
Larry J. Grauke, Assistant Professor. Ph.D., Texas A&M University.
Michael J. Hall, Associate Professor. Ph.D., Oklahoma State University.

Rand S. Sanderlin, Associate Professor. Ph.D., University of Kentucky.

Red River Research Station, Bossier City
Jere M. McBride, Professor; Resident Director. Ph.D., LSU.
William D. Caldwell, Associate Professor. M.S., LSU.
Patrick D. Colyer, Assistant Professor. Ph.D., University of Massachusetts.
John W. Knox, Professor. M.S., LSU.
James L. Rabb, Professor. M.S., LSU.

Rice Research Station, Crowley
Joseph A. Music, Associate Professor; Resident Director. Ph.D., University of Missouri.
D. Marlin Brandon, Professor. Ph.D., University of California, Davis.
Martin W. Brunson, Assistant Professor. Ph.D., Mississippi State University.
Susann Crouch, Instructor. Ph.D., University of California, Davis.
Timothy P. Crouch, Associate Professor. Ph.D., University of California, Davis.
Richard T. Dunand, Associate Professor. Ph.D., University of Illinois.
Wayne C. Faulk, Instructor. B.S., University of Southwestern Louisiana.
James L. Griffin, Associate Professor. Ph.D., Pennsylvania State University.
Donald E. Groth, Assistant Professor. Ph.D., Iowa State University.
Faraman Jodari-Karimi, Instructor. Ph.D., Mississippi State University.
Kent S. McKenzie, Associate Professor. Ph.D., University of California.
Maurice F. Miller, Assistant Professor. M.S., Oklahoma State University.
Elaine M. Nowick, Assistant Professor. Ph.D., Iowa State University.
John F. Robinson, Research Entomologist, USDA. Ph.D., Iowa State University.
Richard W. Taylor, Associate Professor. Ph.D., University of Connecticut.
T. Wayne White, Professor. Ph.D., University of Missouri.

Rosepine Research Station, Rosepine
Clyde P. Bagley, Associate Professor; Resident Director. Ph.D., Virginia Polytechnic Institute.
John I. Feazel, Assistant Professor. M.S., LSU.
David G. Morrison, Associate Professor. Ph.D., LSU.
Isabel M. Valencia, Assistant Professor. Ph.D., University of Florida.

St. Gabriel Research Station, St. Gabriel
Charles G. Richardson, Instructor; Resident Director. M.S., LSU.

Southeast Research Station, Franklinton
Lee F. Mason, Professor; Resident Director. Ph.D., University of Missouri.
Richard Joost, Assistant Professor. Ph.D., University of Georgia.
Ernest B. Morgan, Associate Professor. M.S., LSU.
BILLY D. NELSON, Associate Professor. M.S., LSU.

Sweet Potato Research Station, Chase
M. LeRON ROBBINS, Professor; Resident Director. Ph.D., University of Maryland.

LOUISIANA COOPERATIVE EXTENSION SERVICE

Administrative Staff (State Office)

DENVER T. LOUPE, Vice-Chancellor; Director, Louisiana Cooperative Extension Service. Ph.D., LSU.
BRUCE FLINT, Associate Director. Ph.D., University of Wisconsin.
LOWELL L. Mccormick, Associate Director (Programs). Ph.D., Auburn University.
BETTY H. FAIRCCHILD, Assistant Director (Personnel & Program Support). Ph.D., Florida State University.
BUCK GREENE, Assistant Director (Management Operations). Ph.D., Mississippi State University.

JACK L. BAGENT, Division Leader (Environmental Science). Ph.D., LSU.
THOMAS A. BURCH, Division Leader (Plant Science). Ph.D., LSU.
WILEY M. FUTRELL, Division Leader (Communications); Head, Associate Specialist. M.A., LSU.
PEGGY C. GENTRY, Extension Assistant (Field Operations). M.S., Louisiana Tech University.
PHILLIP A. LEWIS, JR., Associate State Agent (EEO & Civil Rights Coordinator & CRD Work). Ed.D., LSU.
BOBBIE B. McFATTER, Division Leader (Home Economics); Professor, Department of Extension and International Education. Ed.D., LSU.
C. O. MckERLEY, State Agent; Manager of Livestock Shows. M.S., LSU.
C. J. NAQUIN, State Agent (4-H and Other Youth). Ph.D., LSU.
CLYDE J. ST. CLERGY, Division Leader (Economics & Resource Development). Ph.D., LSU.
WILLIAM H. WATERS, Division Leader (Animal Science). Ph.D., LSU.
LEODREY WILLIAMS, Administrator (1890 Extension Program—Southern University). Ed.D., LSU.

BONNIE G. CARTER, Associate Specialist (Family Resource Management). M.S., LSU.
LLOYD A. CARVILLE, Specialist (Farm Management). M.S., LSU.
HOLLIS D. CHAPMAN, Associate Specialist (Animal Science). Ph.D., Texas A&M University.
JERRY C. COCHRAN, Associate Specialist (Family Life). M.S., University of Tennessee.
OLEN D. CURTIS, Specialist (Agronomy). Ph.D., LSU.
FRANCES W. DAIGLE, Associate Specialist (Extension Homemaker Council Coordinator/Furnishings). M.S., LSU.
DOUGLAS L. DEASON, Specialist (Agricultural Engineering). Ph.D., Purdue University.
LAWRENCE W. de la BRETONNE, JR., Assistant Specialist (Marine Advisory Program). M.S., LSU.
CLINTON G. DEPEW, Associate Specialist (Horses). Ph.D., Virginia Polytechnic Institute.
GEORGIANA K. DIXON, Associate Specialist (4-H). M.H.E.E., University of Oklahoma.
SANFORD B. DOOLEY, Specialist (Resource Development). Ph.D., Purdue University.
JOHN P. DUKE, Assistant State Agent (Programs and Personnel). Ed.D., LSU.
TERRY L. DUMAS, Extension Assistant (Animal Science). M.S., LSU.
WADE F. FAW, Specialist (Agronomy). Ph.D., West Virginia University.
DANIEL FONTENOT, JR., Specialist (4-H). Ed.D., LSU.
DONALD B. FONTENOT, Assistant Specialist (Sugar Cane and Fuel Alcohol). Ph.D., LSU.
JAMES F. FOWLER, Specialist (Wildlife). Ph.D., LSU.
HELLEN P. FUTRELL, Associate Specialist (Clothing). M.S., LSU.
EDWARD W. GASSIE, Specialist (Extension Education); Professor and Head, Department of Extension and International Education. Ph.D., LSU.
GERALD G. GIESLER, Specialist (Farm Management). Ph.D., LSU.
CHARLES D. GRIFFIN, Specialist (Dairying). Ph.D., University of Tennessee.
MARY L. GRODNER, Associate Specialist (Pesticide Safety). Ph.D., LSU.
WILLIAM A. HADDEN, Specialist (Agricultural Engineering). M.S., LSU.
DONALD R. HAMMATT, Extension Assistant (4-H). M.S., LSU.
KEILLET HATHORN, Specialist (4-H). M.S., University of Wisconsin.
V. H. HEBERT, Specialist (Editorial). M.S., LSU.
CLAYTON A. HOLLIER, Assistant Specialist (Plant Pathology). Ph.D., Mississippi State University.
TED R. HOLMES, Specialist (Editor); Coordinator of Agricultural Information. M.A.J., LSU.
NANCY J. HONEYCUTT, Associate Specialist (Editorial). M.A., LSU.
LAWRENCE E. JOHNSON, Specialist (Marketing). Ph.D., University of Mississippi.

State Office Staff

JAMES C. ARCHIE, Associate Specialist (Animal Science); Manager, Livestock Shows, Southern University. M.S., Southern University.
SANDRA AVANT, Assistant Specialist (Editorial). M.A., University of Mississippi.
FRED E. BAKER, Specialist; Project Leader (Agricultural Engineering); Extension Energy Coordinator. M.S., LSU.
JACK L. BALDWIN, Associate Specialist (Cotton Pest Management). Ph.D., Oklahoma State University.
JOSEPH D. BANKSTON, JR., Associate Specialist (Marine Resource Engineer). Ph.D., University of Notre Dame.
JAMES F. BEATTY, Specialist; Project Leader (Dairying) Ph.D., LSU.
KAREN S. BEHM, Associate Specialist (Family Resource Management). M.S., University of Kentucky.
JOHN W. BRANCH, JR., Associate Specialist (Agricultural Engineering). M.B.A., California State University.
JAMES M. CANNON, Specialist; Project Leader (Horticulture). Ph.D., LSU.
JOSEPH H. JONES, JR., Program Analyst; Professor, Department of Extension and International Education. Ph.D., University of Kentucky.

BOBBY L. KILPATRICK, Specialist (Dairying). M.S., LSU.

THOMAS J. KOSKE, Associate Specialist (Horticulture). Ph.D., University of Georgia.

SARA B. LINDEY, Specialist; EFNEP Coordinator. Ed.D., LSU.

STEVEN D. LINSCOMBE, Assistant Specialist (Agronomy). Ph.D., Mississippi State University.

JACK V. LORD, Assistant Specialist (Editorial). M.A., LSU.

ALDEN MAIN, Specialist (Forestry). Ph.D., Auburn University.

PHILLIP H. MASSEY, Specialist (Editorial). M.A., LSU.

JAMES A. MAZILLY, Assistant to Livestock Show Manager. B.S., LSU.

WILLIAM F. MCKNIGHT, Specialist (Poultry). Ph.D., LSU.

RAY V. McMANUS, Associate Specialist (Farm Safety). M.S., Central Michigan University.

WARREN A. MEADOWS, Specialist (Horticulture); Resident Director, Burden Research Plantation. Ph.D., LSU.

ROBERT H. MILLS, Associate Specialist (Forestry). Ed.D., LSU.

DONNA E. MONTGOMERY, Associate Specialist (Consumer Education). M.S., LSU.

MICHAEL W. MOODY, Specialist (Seafood Technology). Ph.D., LSU.

MARGARET M. MOORE, Associate Specialist (Resource Management and Energy). M.S., LSU.

WALTER C. MORRISON, III, Specialist (Agronomy). Ph.D., Oklahoma State University.

STEVEN S. NICHOLSON, Specialist (Veterinary Science). D.V.M., Texas A&M University.

MERRIBEL J. OTTENHOUSE, Specialist (Marketing). M.S., Texas Woman’s University.

CHARLES OVERSTREET, Extension Assistant (Plant Pathology). M.S., North Carolina State University.

RUTH M. PATRICK, Specialist (Nutrition). Ph.D., LSU.


CHARLES W. POPE, Specialist (Animal Nutrition). Ph.D., Michigan State University.

THOMAS E. POPE, Specialist (Horticulture). Ph.D., Ohio State University.

E. EARL PULS, JR., Specialist (Horticulture). Ph.D., University of Missouri.

ELIZABETH S. REAMES, Associate Specialist (Nutrition). Ed.D., LSU.

CLAUDETT H. REICHEL, Extension Assistant (Housing). M.S., Florida State University.

DARRYL L. RESTER, Associate Specialist (Agricultural Engineering). M.S., LSU.

KENNETH J. ROBERTS, Specialist (Marine Resource Economics); Professor, Department of Marine Sciences. Ph.D., Oregon State University.

NORMA O. ROBERTS, Assistant State Agent (4-H). Ed.D., LSU.

DANIEL R. ROBERTSON, Assistant Specialist (Marketing). Ed.D., LSU.

WAYNE ROBICHAUX, Specialist (Recreation). Ph.D., LSU.

CRAG M. ROUSSEL, Extension Assistant (Plant Sciences-Horticulture). M.S., LSU.

DEARL E. SANDERS, Assistant Specialist (Weed Science). Ph.D., LSU.

BARBARA D. SCHILDE, Specialist (Health & Safety). M.S., LSU.

VICTOR B. SCOTT, Associate Specialist (Swine). Ph.D., LSU.

SARALENE B. SEALS, Extension Assistant (Nutrition). M.S., West Virginia University.

JOSEPH L. SMILIE, Specialist (Energy & Engineering); Coordinator, Extension Energy Programs. M.S., LSU.

ROBERT R. SOILEAU, Specialist (Rural Sociology); Associate Professor, Department of Extension and International Education. Ph.D., LSU.

JOHN S. SULLIVAN, JR., Specialist (Animal Science). Ph.D., LSU.

GRACE E. TASKER, Assistant Specialist (Family Resource Management). Ph.D., LSU.

N. RUTH THOMPSON, Specialist (Editorial Artist). M.A., LSU.


JAMES S. TYNES, Specialist (Entomology). Ph.D., Mississippi State University.

SITISH VERMA, Specialist (Extension Education); Professor, Department of Extension and International Education. Ed.D., LSU.

KENNETH N. WEGENHOF, Specialist (Farm Management). Ph.D., Oklahoma State University.

HARRY K. WHITAM, Specialist (Plant Pathology). Ph.D., LSU.

CARROL WILSON, Specialist; Project Leader (Animal Science). Ph.D., LSU.

EVVA Z. WILSON, Extension Assistant (Clothing). M.S., LSU.

BETTY D. WOOD, Specialist (Family Resource Management). M.S., LSU.

Administrative Staff (Field Operations)

KERMIT J. COULON, District Agent (Cane Belt Area). M.S., LSU.

BOBBY H. FLETCHER, Associate District Agent (Metropolitan Area). M.S., LSU.

ALVIA F. FUGLER, District Agent (Mississippi Delta Area). Ed.D., LSU.

MINUS J. GRANGER, District Agent (Southwest Area). M.S., LSU.

DAVID L. JONES, District Agent (Red River Area). Ph.D., LSU.

STANLEY J. LAMENDOLA, Associate District Agent (Eastern Area). Ph.D., LSU.

CHARLES A. MILLER, District Agent (Acadian Area). Ph.D., LSU.

DONNA M. MOORE, Assistant District Agent (North Central Area). M.S., LSU.

LELAND C. SCOOGINS, Associate District Agent (Cenla Area). Ph.D., LSU.
Field Personnel

Acadia Parish—Crowley
RAYMOND R. DILLY, County Agent. M.S.
KENNETH P. SEILHAN, County Agent. M.S.
ROBERT E. VERRET, County Agent. M.S.
TED P. JOHNSON, Associate County Agent. M.S.
MARY A. SAGGERA, Home Economist. B.S.
DEBRA M. DEVILLE, Assistant Home Economist. M.S.
ADRIANNE L. ORHIEL, Assistant Home Economist. M.S.
STEVEN J. GABEL, Assistant Area Agent (Aquaculture). M.S.

Allen Parish—Oberlin
FRANK L. MOUGEOT, JR., County Agent. M.S.
MATT A. MARTIN, Associate County Agent. B.S.
SANDRA R. KARAM, Assistant Home Economist. B.S.
CHARLON J. MONCEAUX, Associate Home Economist. B.S.
THOMAS C. STRAWN, JR., Area Agent (Forestry). M.S.

Ascension Parish—Donaldsonville
WILLIAM L. DAVIS, County Agent. M.S.
FRANK H. GORDON, County Agent. B.S.
SIDNEY L. PITTMAN, Associate County Agent. B.S.
NORMA M. BLANCHARD, Home Economist. M.S.
SHERI L. RICHARD, Associate Home Economist. B.S.

Assumption Parish—Napoleoville
ARTHUR J. BERGERON, County Agent. M.S.
DONALD J. NOLAN, County Agent. B.S.
ADRIENNE G. BRAZAN, Associate Home Economist. B.S.
MARY E. HOLLOWAY, Associate Home Economist. B.S.

Avoyelles Parish—Marksville
JOHN M. HARRIS, County Agent. B.S.
CARLOS A. SMITH, Associate County Agent. Ph.D.
DALE L. BENNETT, Assistant County Agent. B.S.
JOHNNY L. BORDEN, Assistant County Agent. B.S.
EARNEST L. FREEMAN, Associate County Agent. B.S.
SHERIAN H. REED, Home Economist. M.S.
CALLIE T. LEMOINE, Home Economist. M.S.
MONICA J. COLEMAN, Assistant Home Economist. B.S.

Beauregard Parish—DeRidder
S. T. SELF, County Agent. M.S.
STEPHEN R. SCHAFER, Associate County Agent. B.S.
FRANCES R. CORMIER, Home Economist. M.S.
SYLVIA R. HAWKES, Associate Home Economist. B.S.

Bienville Parish—Arcadia
BILLIE B. NUTT, County Agent. M.S.
E. E. LETLOW, County Agent. M.S.
MARY S. DUCHANEY, Home Economist. M.S.
AZZIE P. BLOW, Home Economist. M.S.
LINDER D. SCOTT, Assistant Home Economist. B.S.

Bossier Parish—Benton
ALBERT L. DOUGHTY, County Agent. M.S.
BARTON E. BAKER, Assistant County Agent. M.S.
WILMA O. JOHNSON, Home Economist. M.S.

ANN P. PATTERSON, Associate Home Economist. B.S.
CHARLOTTE E. CALDWELL, Home Economist (Special Programs). M.S.
WILLIAM T. POWELL, Area Agent (Community Resource Development). M.A.

Caddo Parish—Shreveport
JON V. LOWE, County Agent. M.S.
WINZER R. ANDREWS, Associate County Agent. B.S.
MARION E. FARRIS, Associate County Agent. Ph.D.
EDDIE F. CLANTON, Assistant County Agent. B.S.
ELLEN P. MURPHY, Home Economist. M.S.
MARY C. WALKER, Home Economist. M.S.
LOUISE W. MCDONALD, Home Economist. B.S.
JULIA A. BEESON, Associate Home Economist. B.S.
CONNIE Q. ACLIN, Assistant Home Economist. B.S.
HELEN M. HUNT, Assistant Home Economist. B.S.
FRANCES A. MESSER, Home Economist. M.S.
JOE W. WHITE, Area Agent (Horticulture Production & Marketing). Ph.D.

Calcasieu Parish—Lake Charles
L. F. SWOPE, JR., County Agent. M.S.
JERRY G. WHATLEY, Associate County Agent. M.S.
STEPHEN M. EMANUELE, Assistant County Agent. M.S.
THOMAS H. SHIELDS, III, Assistant County Agent. B.S.
PATSY A. GRANGER, Home Economist. M.S.
JARMILA C. HAZMUKA, Home Economist. M.S.
DONNA J. JONES, Associate Home Economist. B.S.
CYNTHIA K. CHILDS, Assistant Home Economist. B.S.

Caldwell Parish—Columbia
JOHN W. BARNETT, County Agent. M.S.
JOSEPH D. BARRETT, Assistant County Agent. B.S.
CYNTHIA H. FORD, Assistant Home Economist. B.S.
CLOVIS G. JOHNSON, Home Economist. B.S.

Cameron Parish—Cameron
CLIFFORD P. MYERS, County Agent. M.S.
JOHN G. WICKE, Associate County Agent. B.S.
NANCY C. CRONAN, Associate Home Economist. B.S.
PAUL D. COREIL, Associate Area Agent (Fisheries). B.S.

Catahoula Parish—Harrisonburg
RODNEY D. EWING, County Agent. M.S.
ROBERT D. NEAL, Associate County Agent. M.S.
LARRY D. BECKWITH, Associate County Agent. B.S.
MARY G. YORK, Home Economist. B.S.

Claiborne Parish—Homer
THURMAN W. MORGAN, County Agent. M.S.
JOHN W. DOLDEN, Assistant County Agent. B.S.
SHERLINE Z. CARVER, Associate Home Economist. B.S.
RENEE H. FORD, Associate Home Economist. B.S.
JAMES E. DIXON, Area Agent (Dairy Production & Marketing). Ed.D.
CLARENCE L. HICKS, Associate Area Agent (Community Resource Development). B.S.
LUBERTHA B. POWELL, Area Agent (Community Resource Development). B.S.
Concordia Parish—Vidalia
OTIS E. RANDALL, County Agent. M.S.
JIMMY G. TODD, Assistant County Agent. B.S.
GLENDA W. BYARGEON, Home Economist. M.S.
SUSAN B. GIBSON, Assistant Home Economist. B.S.
GEEN E. DANIELS, Associate County Agent. M.S.

DeSoto Parish—Mansfield
CHRIS G. NOLES, County Agent. M.S.
STEVEN M. JONES, Assistant County Agent. B.S.
DANIEL SMITH, Assistant County Agent. B.S.
BEVERLY G. BRUCE, Home Economist. M.S.
DOROTHY F. HUBIER, Home Economist. B.A.

East Baton Rouge Parish—Baton Rouge
GEORGE J. SIMONEAUX, County Agent. M.S.
JOHN D. ROY, County Agent. M.S.
TERRENCE S. MARSHALL, Associate County Agent. B.S.
ROBERT J. SOUVENATRE, Associate County Agent. M.S.
RUBY MIRE, Home Economist. B.S.
SARAH K. HARRISON, Home Economist. B.S.
CAROLYN M. PERKINS, Associate Home Economist. M.S.
JEANETTE A. TUCKER, Home Economist. M.S.
JANIS M. SOUVENATRE, Home Economist. M.S.
JEAN F. CLOY, Area Agent (Clothing). M.S.

East Carroll Parish—Lake Providence
SAMUEL D. WESTON, Associate County Agent. M.S.
ROBERT L. GOODSON, Assistant County Agent. M.S.
GALEN B. WILSON, Assistant County Agent. B.S.
ELOISE D. EDWARDS, Home Economist. M.S.
HARRIET K. BRIDGES, Home Economist. M.S.

East Feliciana Parish—Clinton
CLAY M. SAMSON, County Agent. M.S.
KENNETH SPOTO, Assistant County Agent. M.A.
BEVERLY A. ROBERTS, Associate Home Economist. M.S.
SHARON D. ARNOLD, Assistant Home Economist. B.S.
BRIAN R. CHANDLER, Associate Area Agent (Forestry). M.S.

Evangeline Parish—Ville Platte
J. AUBREY MIRE, County Agent. M.S.
WILLIAM A. HOGAN, Associate County Agent. B.S.
GERALD P. ROBERTS, Associate County Agent. B.S.
KEITH A. FONTENOT, Associate County Agent. B.S.
ELAINE P. VIDRINE, Home Economist. B.S.
SHARON M. FONTENOT, Home Economist. M.S.

Franklin Parish—Winnsboro
WILLIE W. RUSSELL, JR., County Agent. M.S.
WESLEY M. CRAWFORD, County Agent. B.S.
GENE P. BOQUET, Associate County Agent. M.S.
SUE S. NUGENT, Home Economist. M.Ed.
ARNIECE A. SWAZER, Home Economist. M.S.
MICHELE A. COOPER, Home Economist. M.Ed.
WILLIAM O. REE, JR., Assistant County Agent (Pest Management). M.S.
RICHARD M. LETLOW, Assistant County Agent. B.S.

Grant Parish—Colfax
S. J. CARTER, County Agent. M.S.
JAMES R. HOUSTON, County Agent. M.S.
OPHELIA L. ALLEN, Associate Home Economist. B.S.
ADA L. PALERMA, Assistant Home Economist. B.S.
JANE B. JONES, Associate Home Economist. M.S.

Iberia Parish—New Iberia
JAMES W. ABAD, County Agent. M.S.
NORRIS J. GRABERT, JR., County Agent. M.S.
RONALD J. CORMIER, Assistant County Agent. B.S.
PAULA A. LALUMANDIER, Home Economist. B.S.
DENISE C. POCHE, Assistant Home Economist. B.S.
WARREN J. MERMILLIOD, III, Associate Area Agent (Fisheries). M.S.

Iberville Parish—Plaquemine
L. A. FAVARON, County Agent. M.S.
MARK G. TASSIN, Assistant County Agent. B.S.
LORRIS M. ROCHON, Home Economist (Energy). M.S.
DEBRA T. ACOSTA, Assistant Home Economist. B.S.

Jackson Parish—Jonesboro
SAMUEL W. HAILE, County Agent. M.S.
EDDIE D. WHITE, Associate County Agent. B.S.
PATRICIA B. STAGGS, Home Economist. M.S.
GUSSIE L. McCONNELL, Associate Home Economist. B.S.
JOANN G. TAYLOR, Area Agent (Clothing). M.S.
WILLIAM A. LOE, Area Agent (Forestry). B.S.
CHARLOTTE A. NELSON, Assistant Home Economist. M.S.

Jefferson Parish—Marrero
CHARLES SCHERER, County Agent. Ph.D.
MAX F. MCKENZIE, Associate County Agent. B.S.
MARGARET H. WARREN, Home Economist. M.S.
MARThA B. MILLER, Home Economist. M.S.
CELVA E. DOBBINS, Associate Home Economist. B.S.
ANN S. GAUTHIER, Assistant Home Economist. M.S.
SEVERN C. DOUGHTY, Area Agent. M.S.
JERALD W. HORST, Associate Area Agent (Fisheries). M.S.

Jefferson Davis Parish—Jennings
THURMAN L. MORGAN, County Agent. M.S.
CHARLES E. ESKEW, County Agent. M.S.
RONALD J. LEVY, JR., Associate County Agent. B.S.
PATRICIA A. VIDRINE, Home Economist. M.S.
MARGARET L. BURLEW, Associate Home Economist. M.Ed.

Lafayette Parish—Lafayette
J. WARREN BEAUCH, County Agent. M.S.
RUSSELL GUARINO, County Agent. M.S.
HERBERT THOMPSON, County Agent. M.S.
PERRY A. DAUTREUIL, Associate County Agent. B.S.
STANLEY J. DUTILE, Assistant County Agent. B.S.
ELSIE H. CASTILLE, Home Economist (Energy). M.S.
JANIS B. COUSSAN, Associate Home Economist. B.S.
SANDRA B. DUGAS, Associate Home Economist. M.S.
LYNN A. BONDURANT, Assistant Home Economist. M.S.
LARMARA HOLLIER, Assistant Home Economist. M.S.
Lafourche Parish—Thibodaux
DALTON P. LANDRY, County Agent. M.S.
MICHAEL C. HEBERT, Associate County Agent. B.S.
RICK M. LOUQUE, Associate County Agent. B.S.
BETTIE M. BROCK, Associate Home Economist. B.S.
DEBORAH S. MELVIN, Associate Home Economist. B.S.
CYNTHIA CROUCH, Assistant Home Economist. M.S.
RAYMOND J. FOLSE, Area Agent (Horticulture). M.A.

LaSalle Parish—Jena
ALBERT C. WHITE, County Agent. M.S.
JAMES S. SUMMERS, Associate County Agent. B.S.
KIMBERLY A. ENANO, Assistant Home Economist. B.S.

Lincoln Parish—Ruston
EMMETT L. LONG, County Agent. M.S.
MICHAEL D. BURNS, Associate County Agent. B.S.
PATSY J. BOND, Home Economist. M.S.
REBECCA W. RICH, Associate Home Economist. B.S.
TERRY L. SHIRLEY, Area Agent (4-H). M.S.
DOROTHY B. BARTON, Associate Area Agent (Nutrition). B.S.

Livingston Parish—Livingston
R. H. D'ARMOND, County Agent. M.S.
KENNETH W. SHARPE, Associate County Agent. B.S.
BARBARA F. CHATELAIN, Home Economist. M.S.
LAURA T. ROY, Assistant Home Economist. B.S.

Madison Parish—Tallulah
JOHN M. ROME, Associate County Agent. M.S.
JOHN D. YANDELL, Assistant County Agent. B.S.
BONNIE H. McDaniel, Home Economist. M.S.
BERTEAI E. LEWIS, Associate Home Economist. B.S.
E. KAROL BROADWAY, Assistant Home Economist. B.S.

Morehouse Parish—Bastrop
JOHN D. ANDREWS, County Agent. B.S.
TERRY L. ERWIN, Associate County Agent. M.S.
J. CHESTON STEVENS, JR., Associate County Agent. M.S.
WILLIAM R. WOODMAN, Assistant County Agent. M.S.
DEBORAH L. BROWN, Home Economist. B.S.
POLLY H. DOLES, Home Economist. B.S.
JACKIE P. MITCHELL, Assistant Home Economist. M.S.

Natchitoches Parish—Natchitoches
HAROLD O. LOYD, County Agent. M.S.
CLARENCE H. JORDAN, JR., County Agent. M.S.
CHARLES L. JOHNSON, County Agent. M.S.
IDELL W. SNOWDEN, Home Economist. B.S.
NONA G. DEZENDORF, Home Economist. B.S.
ANITA D. WEAVER, Assistant Home Economist. B.S.

Orleans Parish—New Orleans
BILLY J. GREENE, County Agent. M.S.
ANN M. COCO, Associate County Agent. B.S.
GORDON C. JOHNSON, Associate County Agent (Energy). M.S.
MARION RILEY, JR., Associate County Agent. M.S.

Oshea B. FRANKLIN, Home Economist. B.S.
ELIZABETH C. GAMBLE, Home Economist. M.S.
GRACE L. GARNIER, Home Economist. B.S.
PAMELA B. HODSON, Home Economist. M.S.
EDITH C. SAUNDERS, Associate Home Economist. B.S.
JANET H. ANISE, Associate Home Economist. B.S.
DORIS M. MACKIN, Assistant Home Economist. M.A.
DORA G. MORTON, Assistant Home Economist. M.S.
OLGA M. DUMAS, Extension Associate. B.S.
JOHNNIE M. McCOY, Extension Associate. B.S.
GEORGIE W. WARREN, Extension Associate. B.S.
NOELLA F. JOHNSON, Extension Associate. B.S.
DANIEL J. GILL, Associate Area Agent (Horticulture). M.S.
CARL G. KAHLICH, Assistant Area Agent (Horticulture-1890 Program). B.S.

Plaquemines Parish—Pointe a la Hache
DONNIE R. FRAZIER, Associate County Agent. M.S.
J. ALAN VAUGHN, Associate County Agent. M.S.
PAUL D. THIBODEAUX, Assistant County Agent (Fisheries). M.S.
DONLENE M. BUTLER, Home Economist. Ed.D.
IRIS L. MERMILLIOD, Associate Home Economist. B.S.

Pointe Coupee Parish—New Roads
S. J. DEVILLE, County Agent. M.S.
MILES J. BRASHIER, Associate County Agent. M.S.
SAMUEL HANCHETT, JR., Associate County Agent. B.S.
MAXINE M. OLINDE, Home Economist. M.Ed.
MONICA LABORDE, Assistant Home Economist. B.S.

Rapides Parish—Alexandria
JOHN A. CHANEY, County Agent (Energy). M.S.
ISSAC ODOM, County Agent. M.S.
BEN T. SIMPSON, County Agent. M.S.
ROBERT M. TURLEY, Associate County Agent. M.S.
JOE P. BAINRFATHER, Assistant County Agent. B.S.
LEONIDA M. ALTAZAN, Home Economist. M.S.
FLORA C. HOVER, Home Economist. M.Ed.
HELEN B. RACHAL, Home Economist. M.A.
LOIS E. WINGFIELD, Assistant Home Economist. B.A.
BARBARA J. WOODS, Assistant Home Economist. M.S.
THOMAS E. PRINCE, JR., Area Agent (Forestry). M.S.

Ouachita Parish—West Monroe
HOWARD D. GRYDER, County Agent. M.S.
JAMES F. KENT, County Agent. M.S.
MICHAEL H. MILLER, Associate County Agent. B.S.
LARRY M. RYALS, Assistant County Agent. B.S.
MARGARET S. HAYES, Home Economist. B.S.
IRMA M. PHILLEY, Home Economist. M.Ed.
JANETTE L. BOWMAN, Associate Home Economist. B.S.
MARY J. YOUNG, Associate Home Economist. M.S.
PEGGY L. YOUNG, Assistant Home Economist. B.S.
HENRY BONNER, JR., Area Agent (CRD & Health Education). M.S.
R. C. WHITTEM, Area Agent (Forestry). M.S.
GARY K. WILSON, Assistant Area Agent (Cotton Pest Management). M.S.
JOHN R. PYZNER, Associate Area Agent (Pecan Pest Management). Ph.D.
MILDRED R. REEVES, Area Agent (CRD). B.S.

GORDON C. JOHNSON, Associate County Agent (Energy). M.S.
MARION RILEY, JR., Associate County Agent. M.S.
Red River Parish—Coushatta

STEVEN E. SCHUTZ, Assistant County Agent. M.S.
MARY F. SHAUBERGER, Home Economist. M.S.
JUANITA J. ALLEN, Associate Home Economist. B.S.
MARY E. PATE, Assistant Home Economist. M.S.
JOE D. POWELL, Area Agent (Pest Management). M.S.

Richland Parish—Rayville

BILLY J. WATKINS, County Agent. M.S.
GORDON R. LEE, Associate County Agent (Pest Management). M.S.
CHARLES WHITTINGTON, Assistant County Agent. B.S.
KAY J. PARNELL, Home Economist. B.S.
MARY D. DENAIS, Assistant Home Economist. B.S.
REATAGAE K. WOODEN, Area Agent (Clothing). M.S.
E. E. HODGKINS, Area Agent (Farm Management). Ed.D.

Sabine Parish—Many

BILLY C. SMITH, County Agent. M.S.
PAUL F. MORRIS, Associate County Agent. M.S.
MARGARET F. FARRAR, Home Economist. M.S.
RENEE B. NUNEZ, Assistant Home Economist. B.S.

St. Bernard Parish—Chalmette

SCUDDY J. LeBLANC, County Agent. M.S.
CHERYL A. GEIGER, Home Economist. M.S.
J. SALLYANN ARMEU, Associate Home Economist. M.S.
ALAN J. MATHERNE, Assistant Area Agent (Fisheries). B.S.
JULES J. COUSIN, Assistant County Agent. B.S.

St. Charles Parish—Hahnville

FENWICK A. SWANN, JR., County Agent. M.S.
DAVID L. PICHON, Assistant County Agent. B.S.
KATHARINE A. ORDENEAUX, Home Economist. M.S.
GRACE W. BRASHER, Assistant Home Economist. M.S.

St. Helena Parish—Greensburg

RONALD D. BARDWELL, Associate County Agent. B.S.
JAMES N. BATTY, JR., Associate County Agent. B.S.
ELLA VEE A. VARNADO, Associate Home Economist. M.S.
JOAN M. McCORRY, Area Agent (4-H). M.S.

St. James Parish—Convent

JAMES N. GARRETT, JR., County Agent. M.S.
DESIREE A. DOREST, Associate County Agent. B.S.
KENNETH J. GUIDRY, Assistant County Agent. B.S.
COLEEN B. LAICHE, Associate Home Economist. B.S.
CHERYL LANDRY, Extension Associate. B.S.

St. John Parish—Edgard

LARRY T. BROCK, County Agent. M.S.
RENE SCHMIT, Associate County Agent. B.S.
KASUNDRA C. LeBEOUF, Associate Home Economist. B.S.
CATHY J. MULLEN, Associate Home Economist. B.S.

St. Landry Parish—Opelousas

LEE A. HAMPTON, County Agent. M.S.
THOMAS K. NORMAND, County Agent. M.S.
WILLIAM D. LANDRENEAU, Associate County Agent. B.S.
RONALD J. NICHOLAS, Associate County Agent. B.S.
BLAKE J. VIDRINE, Assistant County Agent. B.S.
SHARON T. CORTEZ, Home Economist. M.S.
MARGARET H. FREY, Home Economist. M.S.
KATHLEEN F. WALKER, Home Economist. Ed.D.
SALLY S. BIEBER, Associate Home Economist. M.S.
LEE A. PORCHE, Associate Home Economist. B.S.

St. Martin Parish—Breaux Bridge

JAMES E. DEVILLIER, County Agent. B.S.
ROBERT F. RICHARD, County Agent. M.S.
ALFRED J. GUIDRY, Extension Associate. M.E.
ETTA H. BREW, Home Economist. M.S.
WANDA B. LANDRY, Associate Home Economist. B.S.
EDITH R. MATTE, Associate Home Economist. B.S.
BARBARA T. TUMLIN, Assistant Home Economist. B.S.
CHRIS R. ROBICHAUX, Assistant County Agent (1890). B.S.

St. Mary Parish—Franklin

LYNN J. SIMON, County Agent. M.S.
DICK J. PLAISANCE, Associate County Agent. B.S.
MARIO RIVAS, Assistant County Agent. B.S.
MARIYIN M. LANGSTON, Home Economist. M.S.
SUSAN M. BROWN, Assistant Home Economist. M.A.
SANDY L. CORKERN, Associate Area Agent (Fisheries). M.S.

St. Tammany Parish—Covington

J. M. BANKSTON, County Agent. M.S.
JOHNNY B. ANDERS, JR., Assistant County Agent. B.S.
SYLVIA H. RIVERS, Home Economist. M.S.
LELIA C. WISSELT, Associate Home Economist. B.S.

Tangipahoa Parish—Amite

LEVI BATTE, County Agent. M.S.
JESSE RAINREV, County Agent. M.S.
CLYDE T. THOMPSON, County Agent. M.S.
CHIC A. CORE, Associate County Agent. B.S.
SANDRA H. MUSE, Assistant County Agent. B.S.
LAURA L. LAURENT, Associate Home Economist. B.S.
DEBRA A. SOUTHWORT, Assistant Home Economist. B.S.

Tensas Parish—St. Joseph

ELVADUS FIELDS, JR., County Agent. M.S.
C. B. JAMES, County Agent. M.S.
NANCY B. RETZINGER, Assistant Home Economist. M.S.

Terrebonne Parish—Houma

ALFRED E. COOLEY, County Agent. M.S.
GEORGE M. TOUPS, Associate County Agent. M.S.
JEAN H. PICOU, Home Economist. M.S.
ROSE M. PEARCE, Home Economist (Clothing & House Furnishings). M.S.
MICHELLE M. GAUTREAUX, Assistant Home Economist. B.S.
BENNETT B. JOFFRION, Associate Area Agent (Fisheries). B.S.

Union Parish—Farmerville
HUEY P. ROBERTS, County Agent. M.S.
DAVID M. WILLIAMS, Associate County Agent. B.S.
KAY LYNN D. STELLMAN, Home Economist. M.S.
SANDRA M. ADAMS, Associate Home Economist. B.S.
JESSE M. KEES, Area Agent (Community Resource Development). B.S.
WILLIE T. SENSLEY, Area Agent (Community Resource Development). M.S.

Vermilion Parish—Abbeville
HOWARD J. CORMIER, County Agent. M.S.
JAMES L. DARDEAU, County Agent. M.S.
TERRIL D. FAUL, County Agent. M.S.
J. CECIL McCORY, County Agent. M.S.
MARK G. SHIRLEY, Assistant County Agent. M.S.
ALICE H. LANCON, Home Economist. M.Ed.
MARY J. FERRINGTON, Associate Home Economist. M.Ed.

Vernon Parish—Leesville
DALTON M. WALDROP, JR., County Agent. M.S.
CLEVELAND F. WEISGERBER, JR., Associate County Agent. B.S.
MARIE D. WILLIAMS, Home Economist. B.S.
KAY K. CHADWICK, Assistant Home Economist. B.S.

Washington Parish—Franklinton
HENRY HARRISON, County Agent. M.S.
AUBREY L. POSEY, County Agent. M.S.
SALLY K. THOMAS, Associate County Agent. M.S.
DARLENE H. JONES, Home Economist. M.S.
KATHERINE M. DAVID, Associate Home Economist. M.S.
PAMELA J. JAMES, Associate Home Economist. M.A.E.
EDWARD W. DAYTON, Area Agent (Livestock). Ph.D.

Webster Parish—Minden
BUDDY D. THOMAS, County Agent. M.S.
JOHN P. JOHNS, JR., Assistant County Agent. B.S.
JOAN P. ALMOND, Associate Home Economist. B.S.
DEBORAH C. CROSS, Assistant Home Economist. M.S.
MARY A. JOHNSON, Assistant Home Economist. B.S.

West Baton Rouge Parish—Port Allen
HARRY L. LAWS, County Agent. M.S.
BARRETT A. COURVILLE, Assistant County Agent. B.S.
ALWYN V. WEGENHOFT, Associate Home Economist. B.S.
SARA L. SCHEXNAYDER, Assistant Home Economist. B.S.

West Carroll Parish—Oak Grove
S. C. FERGUSON, County Agent. B.S.
ROBERT E. MARTIN, Associate County Agent. M.A.
MYRL W. SISTRUNK, Associate County Agent. B.S.
TERRY L. WASHINGTON, Assistant County Agent. B.S.
CHERYL J. HADEN, Assistant Home Economist. B.S.
HELEN C. VINSON, Assistant Home Economist. M.S.

West Feliciana Parish—St. Francisville
CHARLES W. WILSON, County Agent. M.S.
STEPHEN R. BOREL, Assistant County Agent. B.S.
MADELINE J. COOK, Home Economist. M.S.
PAMELA J. MYERS, Assistant Home Economist. M.S.

Winn Parish—Winnfield
RONALD D. ADAMS, County Agent. M.S.
CAROLYN R. PHILLIPS, Home Economist. B.S.
KATHRYN C. MAXWELL, Associate Home Economist. B.S.
Advertising, curriculum, 135
Aerospace Studies, Department of, 127
Agriculture, 280
Agricultural business, curriculum, 87
Agricultural Center, LSU, 85
Academic, 462
Agricultural Economics & Agribusiness, Dept. of, 87
Agricultural education (see Vocational Agricultural Education), 113, 415
Agricultural Engineering, Department of, 88, 223
Agricultural Experiment Station, faculty listing, 462
Agricultural mechanization, curriculum, 89
courses, 287
Agriculture, College of, 83-115
admission to, 85
curricula, 87-115
degree requirements, 86
scholarships, 43
Agriculture (general courses), 288
Agriculture (general), curriculum, 97
Agronomy, Department of, 89
courses, 288
Air Force Reserve Officers Training Corps, 273
Alexandria (LSU-A) Residence Program, 181, 240
Allied health programs, 243
Alumni Federation, 26
scholarships, 53
Alumni professors, listing of, 425
Alumni scholars program, 53
American College Testing Program (ACT), 31, 260
Anglo-American Art Museum, 31
Animal Science, Department of, 91
courses, 289
Anthropology
courses, 290
curriculum, 133
Apartments, University-owned, 58
Application, for admission, 29
fee, 29, 38
for housing, 57
Approved elective, definition of, 10
Architecture, School of, 185
combined curriculum, 186
courses, 293
Army Reserve Officers Training Corps, 273
Art education, K-12, curriculum, 204
courses, 293
Art history, curriculum (B.A. degree), 147
courses, 294
Art, School of, 188
courses, 293
Arts and Lecture Series, 23
Arts and Sciences, College of, 117-149
admission to, 119
combined curricula, 124
curricular requirements, 120
degree requirements, 119
preprofessional education in medical sciences, 124
Scholarships, 1, 5
Arts and sciences—medicine or dentistry, curriculum, 124
Arts and sciences—social work, curriculum, 125
Astronomy, courses, 297
(option), curriculum, 162
Athletic programs, 27
facilities, 27
Athletic training (see Curriculum in Physical Education), 217
Attendance (of classes) regulations, 69
for Junior Division students, 263
Audit, definition of, 10
Auditing courses, 67
fee for, 41
Auditions, School of Music, 266
Audubon Sugar Institute, 245
Automobile registration, fee, 41
Average, cumulative, definition, 10
grade-point, definition, 10, 11, 70
rounding of, 72
Awards, academic (see Degrees with Honors), 76
Awards (monetary), listing, 43-53

B
Baccalaureate degree, requirements for, 75
Basic engineering design technology, curriculum, 229
Basic Sciences, College of, 151-164
admission to, 152
courses, 297
curricula, 155-163
degree requirements, 153
pass-fail option, 154
scholarships, 46
Basin Research Institute, 164
Binding fees, graduate, 41
Biochemistry, Department of, 155
courses, 297
Biology (education), curriculum, 207
Blowout Control School, 181
Board plan, 59
fees for, 38
refund of, 59
Board of Supervisors, listing, 421
Books and libraries, courses, 299
Botany, Department of, 157
courses, 299
Boyd professors, listing of, 426
Brass, curriculum, 267
Broadcast journalism, curriculum, 135
Building management (option), curriculum, 112
Business Administration, College of, 165-177
admission to, 166
curriculum, 170-177
degree requirements, 166
scholarships, 46
Business administration (general), curriculum, 170
courses, 300
Business administration (options), curriculum, 175
Business communication courses, 301
Business law, courses (see Finance), 335
Business and office occupation education, curriculum (see Vocational Education), 108
Business and public administration, curriculum, 171

C
Calendar, academic, 4
1986-87 (tentative), 6
Second bachelor's degree, requirements (see also individual colleges), 76
Secondary physical education (see Physical Education), 215, 347
Semester hour, definition of, 11
requirement, maximum, 75
Senior, classification as, 68
graduate registration of, 249
Senior college, definition of, 11
admission to, from JD, 261
scholastic requirements, 74
Senior college at Alexandria, 181, 240
Seniors, graduating, procedural requirements for, 76
Sequence in subject-matter fields (College of Education), 200; (Vocational Education), 108
Short courses, 182
fees for (summer), 41
Social security benefits, 56
Social studies (education), curriculum, 212
Social Work, School of, 251
courses, 404
fees, 39, 40
Sociology, Department of, 143
courses, 404
Soil science, curriculum, 91
courses (see Agronomy), 288
Sophomore, classification as, 68
honors, 72
Sororities, listing of, 64
Southern Review, 23
Southern University, cooperative programs with, 79-81, 240
Spanish, courses, 406
Spanish and Portuguese, Department of, 143
Special education, curriculum, 214
courses (see Curriculum and Instruction), 314
Special Services Program, Junior Division, 261
Speech Communication, Theatre, & Communication Disorders, Department of, 144
courses, 408
Speech, curriculum, 146
Speech (education), curriculum, 213
Speech and Hearing Clinic, 145
Speech, language, and hearing specialist, curriculum, 215
Speech pathology and audiology, concentration, 145
Sports, recreational, 60
Stained glass (option) curriculum, 190
courses, 296
State Student Incentive Grants, 55
Statistics, courses (see Experimental Statistics), 332;
and (see Quantitative Business Analysis), 400
Strings, curriculum, 270
Structures (see Civil Engineering), 305
Student, academic appeals, procedure for, 72
conduct, code of, 77
employment, 55
handbook, 77
health center, 60
fee for, 38
housing, 57
insurance, 41
loan funds, 55
media, 60
organizations, 61
records, privacy of, 77
Student teaching, requirements for, 197
vocational, 180
Studio art, curriculum (B A degree), 147
Study skills, courses (see Junior Division), 366
Sugar engineering, curriculum, 225
Summa cum laude degree, 76
Summer short courses, fees, 41
Summer term fees, 40
Summer-term-only student, definition of, 30
registration as, 34, 241
Supplemental Educational Opportunity Grants (SEOG), 55
Surveying, courses (see Civil Engineering), 305
System, LSU, 17, 422
System Network Computer Center, 24
Teacher Education Council, 199
Teaching majors and minors, sequence in subject-matter field (education), 200; (vocational education), 108
Telecommunications, courses (see Journalism), 364
Test of English as a Foreign Language (TOEFL), 35, 248
Testing (see Measurement and Evaluation Center), 244
Textiles and clothing communication, curriculum, 106
courses (see Home Economics), 355
Theatre program (see Speech Communication, Theatre, & Communication Disorders), 145
courses (see Speech), 409
Transcript, how to obtain, 77
Transfer credit, 33, 67
Transfer student, undergraduate, admission of, 32, 34, 261
definition of, 11, 30
Junior Division, 263
Transportation, courses (see Civil Engineering), 305
curriculum in, 172
Tropical Studies, Organization for, 23
Undergraduate fees, 38
Union, LSU, 61
University-owned apartments, 58
University, courses, 412
University fees, 38
University Laboratory School, 218
University medal, 76
Upper division courses, who can enroll, 260
Veterans' benefits, 56
Veterinary Anatomy and Fine Structure, Department of, 252
courses, 412
Veterinary Clinical Sciences, Department of, 252
Veterinary medicine, preprofessional, 101
Veterinary Medicine, School of, 252
courses, 413
fees, 39
graduate program, 255
professional program, 253
Veterinary Microbiology & Parasitology, Dept. of, 253
courses, 413
Veterinary Pathology, Department of, 253
courses, 414
Veterinary Science, Pharmacology, & Toxicology, Dept. of, 253
courses, 414
Vocational Agriculture Education, Department of, 113
courses, 415
Vocational Education and Technology, School of, 107
courses, 416
Vocational education - business & office occupations education, curriculum, 108
Vocational education - distributive education, curriculum, 110
Vocational Home Economics Education, Department of, 114
courses, 417
Vocational rehabilitation grants, 55
Vocational trade and industrial education, 418
Voice, curriculum, 271
W
"W" grade regulations, 70, 263
Water Resources Research Institute, 233
Wood science, courses, 313
Wetland Resources, Center for, 255
Wetland Soils and Sediments, Laboratory for, 257
Wildlife, courses, 418
(opion), curriculum, 103
Withdrawal from the University (see Resignation), 68
for JD students, 263
Woodwinds, curriculum, 271
Work/study program, engineering, 222
Year classification of students, 68
Z
Zoology and Physiology, Department of, 163
courses, 418
Zoology short courses, fees, 40
Where to Write

Campus zip code is 70803 and area code is 504
Campus office hours are 8:00 a.m.-12:00, 12:30-4:30 p.m., Monday-Friday

Requests for information and application forms for admission to divisions at LSU should be addressed as indicated below.
Undergraduate divisions and Graduate School: Office of Admissions
School of Library and Information Science: Dean, School of Library and Information Science
School of Social Work: Dean, School of Social Work
School of Veterinary Medicine: Dean, School of Veterinary Medicine

The following is a selected list of offices most frequently contacted for information.

Office of Admissions
110 Thomas Boyd Hall • 388-1175

Office of the Dean of Students
114 David Boyd Hall • 388-4423

Office of High School Relations
208 Coates Hall • 388-6652

Office of Housing
149 Graham Hall • 388-5201

International Student Office
International Center
Raphael Semmes Rd. • 388-5350

Junior Division
150 Allen Hall • 388-6822

Measurement and Evaluation Center
51 Himes Hall • 388-1145

Office of Student Aid and Scholarships
202 Himes Hall • 388-3103

Student Government Association
330 Union Building • 388-8727

Office of Student Records and Registration
112 Thomas Boyd Hall • 388-1686

Produced by LSU Publications
30M • May 1985