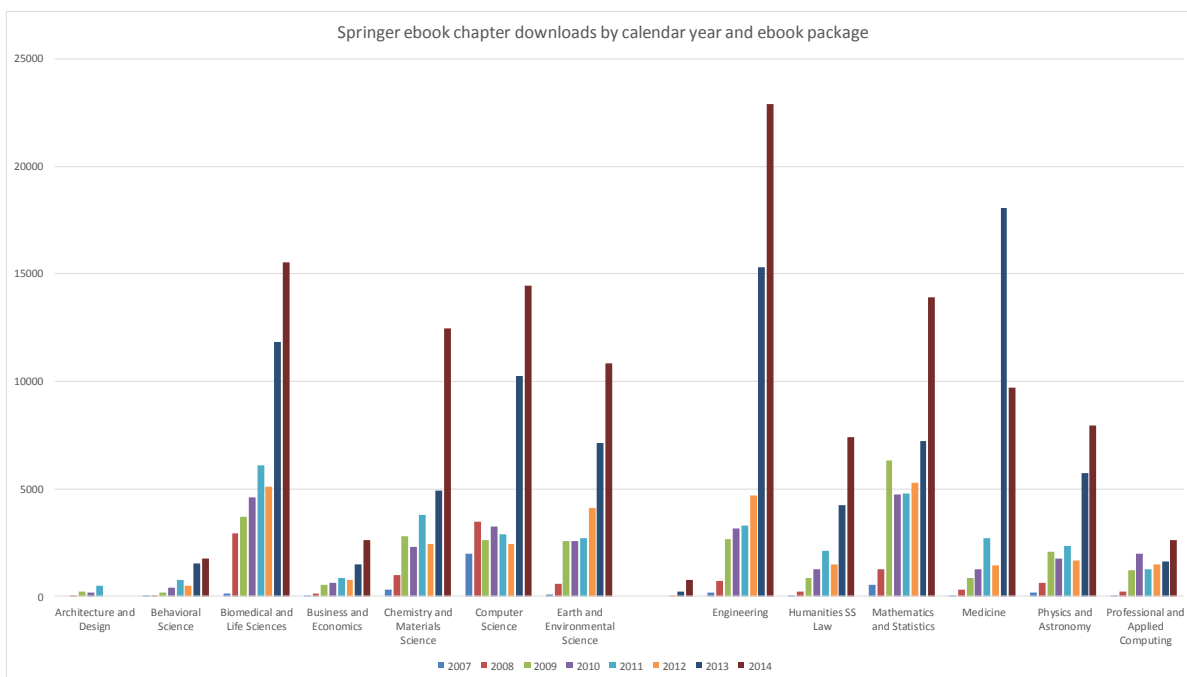
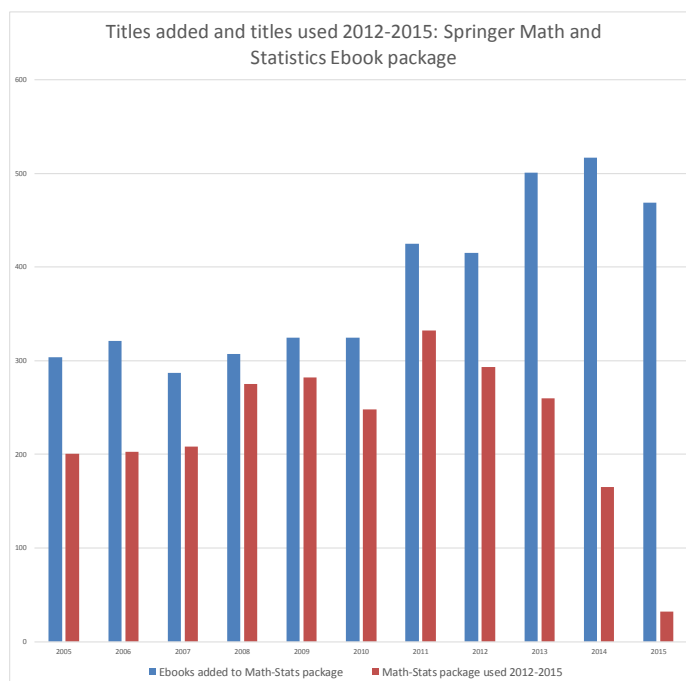


Mathematics library news 16 October 2016

This issue of Mathematics Library News reviews mathematics and statistics book collection development, explains some the methods used for selecting mathematics books, both print and electronic, and some of the relevant trends. This year, the Libraries’ collection development budget for Mathematics and Statistics books is somewhat greater than in recent years. So this report is more favorable than it might have been otherwise.

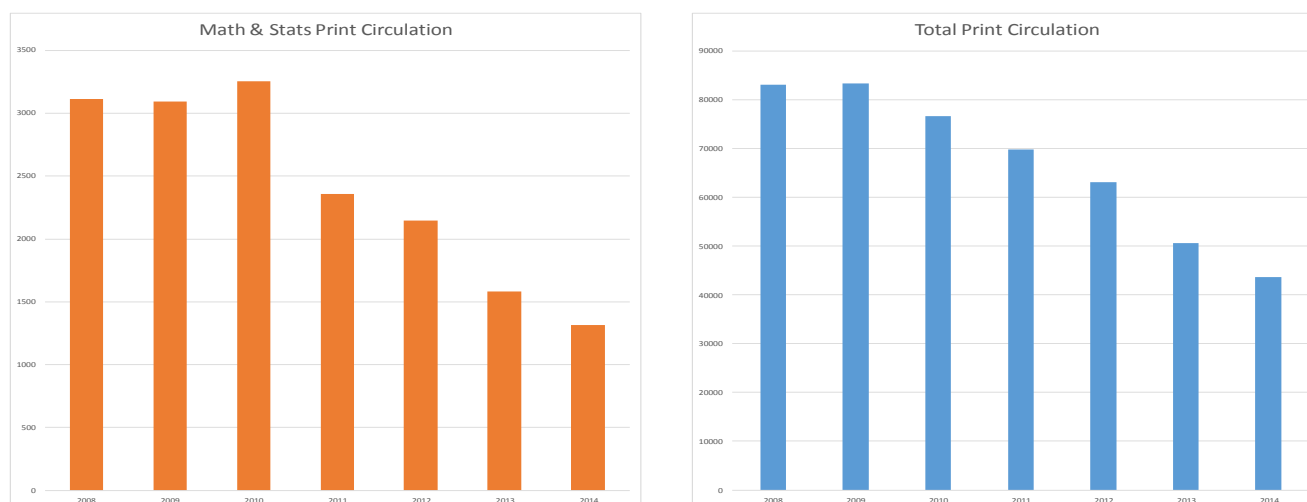


Since LSU Libraries continues to buy the Springer mathematics and statistics ebook package, the Library adds an average of 440 mathematics and statistics books to its collection annually, at a cost of roughly \$40 per book, rather than the average list price of \$116. The increasing trends of total usage by calendar year for Springer ebook packages are shown above. The titles added annually and the number of those titles used at least once during the 2012-2015 calendar years are shown at right. During 2012-2015, the book with the most chapter downloads, by far, was the assigned textbook, *Ordinary Differential Equations*. Next by was *Transcendental Numbers* by Ram Murty and Purusottam Rath (with all usage in Spring 2015, when one must suppose it was assigned in a course). The usage trends for print circulation are on the next page.



A recent study by four librarians at the University of Florida confirmed that large ebook packages are currently the most efficient way to buy books, in terms of cost per chapter download, and in comparison with individual purchases and automated purchasing systems (*Library Resources & Technical Services*, 59(3), 102-111).

Print Book Circulation Decline



Ebook Monograph Series

This year's collection development budget has enabled LSU Libraries to purchase the backlists of the monograph series (missing titles to be added when digitized):

- *Annals Studies in Mathematics*: 186 of 191 titles
- *Mathematical Notes* (Princeton UP): 27 of 36 currently available
- *Princeton Series in Applied Mathematics*: 27 of 28 titles
- *DeGruyter Expositions in Mathematics*: 62 of 64 titles
- *DeGruyter Studies in Mathematics*: 58 of 65 titles

In the *Cambridge Studies in Advanced Mathematics*, your mathematics librarian selected 43 print books in Mathematical Subject Classifications (MSC) 5, 11, 13, 14, 18, 20, 35, 43, 46, 49, and 53. This is based on the distribution of recent LSU mathematics research by MSC in MathSciNet.

These purchases follow the 2012 purchase of 400 titles in the SIAM ebook backlist, reported in *Mathematics Library News* 9 (March 2012).

Mathematics and Statistics Journal Subscriptions Summary

Overall, LSU Library subscribes to 588 mathematics journals and 123 statistics journals, according to the Library catalog and based on the Library of Congress subject classification. This overlaps with 274 Springer mathematics journals and 56 statistics journals (by Springer's classification); with 128 Elsevier mathematics journals and 21 statistics and probability journals (by Elsevier's classification); and with 63 Wiley mathematics journals and 51 statistics journals (by Wiley's classification). More understanding of the overlap would require thorough analysis of the different classification systems.

The Libraries subscribes to 8 of 8 AMS journals ranked by LSU mathematics and statistics faculty in a 2009 survey, 5 of 5 SIAM journals ranked by faculty, 9 of 14 journals published by other societies and ranked by faculty, and 14 of 16 university press journals ranked by faculty.

More detail about Library subscriptions to mathematics and statistics journals and the 2009 ranking by mathematics and statistics faculty members was in *Mathematics Library News* 11 (April 2014), with corrections in number 13 (May 2015).

Journal subscriptions are long-term commitments, in contrast with a one-time commitment to buy books. So it is correspondingly more difficult to make this commitment. I regret the gaps in Library subscriptions.