

Mathematics Library
University of Illinois at Urbana-Champaign
FY 2015 UNIT ANNUAL REPORT

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I. UNIT NARRATIVE

The Mathematics Library serves the Department of Mathematics, the Department of Statistics, and other faculty, students, staff and researchers needing access to information resources in pure and applied mathematics. The Unit's staff, service desk, reading room, primary print reserve collection (~500 items) and physical book and serial collection of more than 100,000 volumes are housed in Altgeld Hall, room 216. A second (partial) copy of the mathematics print reserve collection is housed in the Grainger Engineering Library Information Center to provide access to these items at times when the Mathematics Library is closed.

Review of major activities & accomplishments

>>> *Collection Development & Maintenance*: Collection development and collection maintenance activities at the Mathematics Library focus on the selection and acquisition of print monographs and serials, the selection and licensing for campus-wide access of e-books and e-journals (including back files) and the ongoing development and maintenance of a cohesive, comprehensive academic collection dedicated to pure and applied mathematics research. Through this effort the Mathematics Library supports the instructional and scholarly work of the University generally and the Mathematics and Statistics Departments specifically, and contributes to the University Library's goal of maintaining one of the highest quality and most comprehensive research library collections in the world. In terms of overall scope and coverage, and as a research collection for undergrad upperclassmen majoring in mathematics or statistics and for graduate students and faculty in mathematics, statistics and other disciplines that rely on mathematics, the UIUC mathematics collection is considered one of the best in the world, on a par in the U.S. with research mathematics collections at the University of California at Berkeley, Princeton University, and the University of Michigan. It is one of a dwindling number of detached large academic library collections dedicated to pure and applied research mathematics and features one of the largest (if not the largest) collections of Slavic language print mathematical works in the U.S.

Though not able to collect quite as comprehensively as we did a decade ago due to budget constraints, in FY 2015 the Mathematics Library collection grew at a slightly faster rate than it grew in FY 2014. The 3 state-funded budget lines supporting statistics and mathematics collection development (a little over \$400,000 in total), backed by multiple gift funds and endowments, allowed us to acquire more than 650 new print monographic titles for the Mathematics Library in FY2015. Descriptions and/or holdings information for a total of 1,711 items (serials, monographs and select e-resources) were added in Voyager and affiliated with the Mathematics Library location, as compared to

1,340 items added last year (data provided by Michael Norman, CAM). The Mathematics Library collection includes ongoing subscriptions to 835 journal and other serial titles (including analyzed monographic series), with about 100 serials received on exchange for issues of the *Illinois Journal of Mathematics* (published by the Mathematics Department). This journal exchange program is a long-standing, highly successful collaboration between the Mathematics Library and the Mathematics Department; the Department disseminates exchange copies of their journal at no cost to the Library, helping us collect more cost-effectively and helping the Department distribute their journal to places around the world that would otherwise not be able to afford a subscription. In FY2015 we began piloting e-exchanges, i.e., exchange of access permissions to journals rather than print copies of journals. This will make exchanges even more cost effective and easier to maintain, especially with overseas partners (where postage costs can be high).

Increasingly Mathematics Library collection development focuses on the licensing of e-books and e-journals. Because these are available online campus-wide and 24/7, Mathematics Library users find e-resources especially convenient and supportive of their work style. In instances where the publisher deposits digital copies with trusted third-party digital preservation repositories, e-only licensed content tends to be more economical than purchasing in print alone or in print plus online format, allowing the Mathematics Library to maximize value for collection development dollar. New volumes for 475 of 835 journal and serial titles mentioned above are accessible to users campus-wide via the Web as soon as each volume becomes available. New issues of approximately 300 of these 475 serial titles are now received exclusively online, thereby effectively reducing subscription costs 5% to 15% (depending on publisher) as compared to print plus online subscriptions. Over the last 6 years, the Mathematics Library has converted 130 journal subscriptions to online-only, with 15 of these format flips happening in FY 2015. The Mathematics Library is proactively pursuing a similar strategy with regard to e-books, as illustrated by the addition last calendar year of the eBook Collections of the American Mathematical Society (more than 1,000 volumes including back files purchased) and the addition (in collaboration with the Mathematics Department and the Grainger Library) of the complete eBook collection of the Society of Industrial and Applied Mathematics (over 400 volumes). In cooperation with the Office of Collections and other PSED Libraries, the Mathematics Library also continues to aggressively pursue the licensing of back files of retrospectively digitized journals and monographs in mathematics and statistics.

In FY 2015, with the assistance of Grainger Library / PSED graduate assistants, we also continued to make progress on our small catalog backlog – reducing it from ~2,000 volumes to less than 500 volumes. (An inventory of the remaining backlog is maintained as an SQL database searchable by staff and patrons via a Web application.) We also made progress in FY 2015 with ongoing weeding, small-scale shelf-shifting, and assimilation of donated materials, e.g., reducing print reserve collections by ~100 items (about 17%) and processing several boxes of materials donated to us by the Statistics Department and the last few of more than 50 boxes of Slavic language mathematics materials donated to us by Mathematical Reviews.

>>> **Services & Outreach:** The Mathematics Library serves a core constituency (Departments of Mathematics and Statistics combined) of 82 current tenure system faculty, 12 visiting faculty, 2 post-docs, and 180 Graduate Student Assistants. Enrollment in the two Departments totals 1,301 FTE undergraduates and 324 FTE graduates. Total Instructional Units offered by the two Departments in 2013-14 was 102,290.¹ The Mathematics Department in particular also has several professors emeriti actively pursuing ongoing research who use the Mathematics Library and its online resources.

To this core constituency and to other users of the Mathematics Library we offer a range of services. In terms of in-person use, we saw another slight increase in through the gate traffic in FY 2015. The 12-month FY 2015 gate count was 86,319, as compared to 84,442 for FY 2014. The Mathematics Library was the 5th highest in terms of initial and renewal circulation at happening library (including reserves) among Campus Departmental Libraries (i.e., excluding IRRC, Main Stacks and Residence Hall Libraries – data provided by Robin Woodall / Jen Yu). Mathematics Library Faculty, Staff and student assistants answered 3,067 patron queries in FY 2015 (as logged in Desk Tracker).

Though we do not at this time participate in chat reference (to date our core users have expressed disinterest in chat reference), we do solicit and respond to email reference queries and recommendations for book purchases. Our current awareness service notifying users by email about newly received print journals is still used (and appreciated) by a handful of faculty, and our Website continues to get extensive use, especially pages describing and linking to online mathematics resources and detailing how to access and use these resources from both on campus and off. In FY2015 we added about a dozen new LibGuides – though many Mathematics Department faculty remain highly skeptical about the utility of LibGuides for mathematics (one reason we deferred creating such resources), we were able this year to obtain their assistance in designing and fine-tuning these new LibGuides, which we aligned with the Departmental Website. Also in FY2015 we migrated online finding aids, services and utilities from Grainger Library servers being retired to Main Library IT servers, taking advantage of the migration in multiple instances to update from now deprecated classic ASP applications to .NET MVC and JavaScript based applications.

On an ongoing basis, full-time Mathematics Library staff provide one-on-one bibliographic instruction to Library users as requested. Each fall we refresh and make available a 12-page print Guide to the Mathematics Library. Each fall we also provide Mathematics Library orientation and demonstration group sessions to Mathematics Department incoming MS and PhD students. In FY2015 53 graduate students attended these sessions.

On an ongoing basis, the Mathematics Department hosts several conferences, meetings and other similar events each year of varying scope – e.g., regional, national and international. The Mathematics Library supports many of these events by mounting

¹ Data Source: Campus Profile as provided by the University's Division of Management Information, <http://www.dmi.illinois.edu/cp/>

coordinated exhibits, adding opening hours for specific events, etc. In FY2015, we mounted 4 exhibits in support of Department activities:

- *Siméon-Denis Poisson: Mathematics in the Service of Science*. This exhibit, which originated at the Université Pierre et Marie Curie in Paris, France and was also displayed (subsequent to UIUC exhibition) at the University of California, Berkeley, was coordinated with the International Conference on Poisson hosted by the UIUC Math Department. We translated the catalog from French to English and modified for our display here in Urbana, working closely with one of the original curators, who also attended the conference. The catalog is available here: <http://www.library.illinois.edu/mtx/Poisson-Exhibit/>
- *Pi Day*. This exhibit to celebrate March 14, 2015, was coordinated with the Mathematics Department's Pi Day activities. The Mathematics Library also opened early (9:26 AM) and stayed open late (5:35 PM) as part of this event. Further details here: <http://www.library.illinois.edu/mtx/pi-day-exhibit/>
- *The Works of Martin Gardner*. This exhibit celebrating the birth and life of Martin Gardner was coordinated with the marking of Gardner's birthday (21 October 1914) by the Mathematics Department.
- *The Works of Robert Ash*. This exhibit in April and May marked the sudden and untimely death of Robert Ash on 15 April 2015. Ash was a long-time member of the Mathematics Department faculty and long-time supporter (and user) of the Mathematics Library.
- *The Works of Recent UIUC Mathematics PhD students*. This exhibit highlighted publications by several mathematicians who earned their PhD from the Mathematics Department in recent years.

Challenges

An ongoing challenge for several years has been limited budget, for undergraduate and graduate student assistants. The Mathematics Library no longer has funding for a dedicated graduate assistant which has impacted in particular service and outreach activities, especially when the Mathematics Librarian has to be away from the unit. The support of PSED/Grainger graduate assistants (employing unit is the Grainger Library) has helped mitigate some of these impacts, but the lack of a dedicated graduate assistant has meant increased load for permanent staff. Chronic underfunding for undergraduate student assistant hours has meant less flexibility in scheduling and more frequent need for permanent staff to cover weekend and evening shifts missed due to student illness or educational event conflict. As of September 2015, additional funds have been provided for FY2016, which should help mitigate this issue, especially during spring semester and summer I.

An ongoing challenge for several years has been the now reduced size of PSED, especially in terms of tenured faculty count (i.e., 3). Given the number Library committees requiring representation by division, this spreads Division faculty thin (a common problem for several other Divisions). It also results in a somewhat reduced voice for PSED units in larger Library discussions which often tend to be dominated by Main Library units and units from more populous Divisions. The seniority of tenured

PSED faculty mitigates this challenge somewhat, but many in the Main Library are unaware of outlying Library unit operations and issues and vice versa.

A challenge specific to FY2015 was the retirement of Senior Library Specialist Margart Lewis (see next).

Staffing Changes

Margaret Lewis, Mathematics Library Senior Library Specialist, retired 30 June 2014. Becky Burner, Mathematics Library Senior Library Specialist, assumed most of Margaret's responsibilities. Burner also took on the responsibility for supervising and training Angela Gruendl, who was hired 16 June 2014 as Mathematics Library Library Specialist. Under Burner's direction and oversight, Gruendl has now taken on the responsibilities that Burner had prior to Lewis's retirement. Gruendl has proven a remarkably fast study, so while there was unavoidably some impact of losing Lewis, overall impact was relatively modest. Now, a year after these changes went into effect, the unit is nearly back to normal.

Timothy W. Cole, Mathematics Librarian, increased his operational time in the unit from 50% to 75% fully effective 1 January 2015 (beginning earlier), his responsibilities as Digital Content Access Librarian ending with the retirement of the Grainger Library server room (November 2014), the reorganization of Library IT (December 2014), and the effect that the reorganization of repository and digital content creation work has had on responsibilities for digital content access systems (e.g., CONTENTdm, Medusa, etc.) since the summer of 2014. This increased time in the unit help in dealing with the retirement of Margaret Lewis and the training of Gruendl and Burner (in her new role). Cole still has external-to-the-Mathematics-Library responsibilities as CIRSS Coordinator for Library Applications in the Graduate School of Library and Information Science and for helping at the Grainger Library with GLID2 initiative.

Goals for FY 2016

Continue to provide high quality services to Mathematics Library users

Continue to sustain the high quality and comprehensiveness of the Mathematics Library collection; continue the trend in Mathematics Library collection development toward an increased emphasis on digital resources (and reduction in print collecting). Continue to weed print reference collection. Refresh analysis of journal and CRC MathNetBase resources (and similar), to help in developing short list of possible cancellations

Update web pages with up-to-date information and in anticipation of new, Wordpress-based CMS. Continue to refine LibGuides and add LibGuide(s) addressing how to better access and use most important online mathematics resources, taking advantage of new affordances made possible by the Web. For example, a new LibGuide on how to use math journal RSS feeds and/or math journal email alert services.

II. Statistical Profile

Facilities

110 user seating, Mathematics Library Reading Room, library tables
13 user seating, Mathematics Library Stacks, 1-person desks

Open 35 hours / week, 2014 Summer II.
Open 63 hours / week, 2014 Fall.
Open 63 hours / week, 2015 Spring.
Open 63 hours / week, 2015 Summer I.

Personnel

Becky Burner, 100%, Senior Library Specialist.
Angela Gruendl, 100%, Library Specialist.
Timothy Cole, 75%, Mathematics Librarian

Undergraduate student assistant wages: \$14,290 (budgeted) / \$14,848 (spent, 50% FWS)

User Services

Gate Counts:

8,396 – 2014 Summer II
36,141 – 2014 Fall
39,020 – 2015 Spring
2,792 – 2015 Summer I
86,319 – Total for FY2015

Circulation:

FY2015 Circulation Summary (with RESERVES), by happening library location,
provided by Robin Woodall & Jen Yu:

8,302 – Initial Charges.
249 – Renewals.

FY2015 Circulation Summary (NO RESERVES), provided by Robin Woodall:

9,572 – Initial Charges.
10,076 – Renewals.

Manual circulation (not reported elsewhere):

165 – new book circulations.

3,067 Patron interactions logged in DeskTracker for FY2015,
1,069 (35%) of Question Type 3 or higher.

773 items bound for the Mathematics Library collection during FY2015.