

LAFAYETTE
COLLEGE
DEPARTMENT OF MATHEMATICS

Mathematics Department Scholarship Statement

[Revised March 2018]

Peer-reviewed articles, books, and monographs are the primary vehicles for dissemination of original scholarship in the mathematical sciences for faculty in the Department of Mathematics. Other scholarly achievements, including invited lectures, conference presentations, professional assistance provided to others, edited and expository works, grant proposals, reviews, or textbooks—while of value—are not normally sufficient by themselves to constitute a record of high-quality, original scholarship that will support an application for promotion or tenure.

Scholarship of teaching and learning, i.e., scholarly studies of student learning in the mathematical sciences that are based in pedagogical theory, backed by evidence, and published in peer-reviewed journals or books, will be considered among “other scholarly achievements.” Software development that has public distribution with acknowledgment of authorship and evidence of peer review will also be considered among “other scholarly achievements.”

For tenure review, the preponderance of the record of scholarly achievement should be comprised of peer-reviewed articles, books, or monographs presenting original scholarship in the mathematical sciences. In assessing a tenure candidate’s record for continued scholarly development and promise of further growth, particular attention is paid to scholarly work done while the candidate is at Lafayette. Evidence of individual initiative, such as identifying a suitable project and developing it to produce published scholarship, is especially valued. In reviews for promotion to Professor, candidates may compile records of continued scholarly achievement comprised of contributions spread more flexibly across the types described.

Several special aspects of scholarship in the mathematical sciences warrant additional comments.

1. The mathematical sciences include mathematics and statistics. Each of these fields includes a subfield that emphasizes the application of theoretical content to projects, often of a practical nature, arising from other disciplines. These subfields are known as “applied mathematics” and “applied statistics”, respectively. Appropriate areas of specialization for promotion or tenure include not only the mathematical sciences proper (mathematics, statistics and closely allied fields like operations research), but also applied mathematics and applied statistics.
2. Scholarship in applied mathematics or applied statistics may emphasize the development of new theoretical content in those fields, novel applications of known content from the mathematical sciences to basic research in other disciplines, or more routine uses of mathematical or statistical methods to address problems from other fields of study. For

applied mathematicians and applied statisticians, consulting with scholars in other disciplines can be a very important activity. For this reason, we value scholarly consulting, and recognize the positive role it can play in the professional development of an applied mathematician or an applied statistician. However, a scholarly program that is limited to routine consulting on projects from other fields normally will not be sufficient to support an application for promotion or tenure.

3. Articles in the mathematical sciences that appear in venues focused on the mathematics itself traditionally list coauthors' names in alphabetical order. Consequently, no inference regarding the relative importance of individual contributions to such articles should be drawn from the order in which the authors are listed. Indeed, even discerning the precise contributions of the various coauthors can be problematic. Other disciplines may follow different conventions. Consequently, candidates for promotion or tenure should be certain to explain (whenever possible) the nature and significance of their contributions to coauthored publications.
4. Skills of mathematics faculty may be in demand outside the academic setting, and it may not be possible to use the traditional peer-review process to assess the contributions made by faculty to proprietary work. In these cases, other forms of documentation may be of value in judging the overall contributions of the faculty member.
5. Characteristics of records of scholarly achievement:
 - a. Records of accomplishment indicative of continued scholarly development in the mathematical sciences vary widely in quantity and regularity of publication. Consequently, a record of scholarly accomplishments might seem irregular or uneven but still reflect continued scholarly development and promise of further growth.
 - b. At the time of a review, a candidate may submit work in varying degrees of completeness, possibly including some work that is still in progress and not yet peer-reviewed. Ideally, most of the works in the Scholarship Portfolio will be in print; however those with evidence of acceptance for publication will be considered complete.
 - c. A successful record of scholarly achievement in mathematics may also vary in content. That is, a body of work could be a series of interdependent papers that build on each other or could be papers in disparate fields of the mathematical sciences. In all cases, when considered for promotion or tenure, a candidate should try to formulate a list of external reviewers that would be appropriate to review the entire record.
6. It is commendable for department members to involve undergraduate students in their scholarly work, but many research projects in the mathematical sciences require more background than undergraduates can be expected to have. Consequently, we do not require such involvement from any of our faculty.