

Department of Mathematics and Computer Science Discipline-Specific Guidelines

Revised Fall 2020

Nature of the Discipline(s) in the Department of Mathematics and Computer Science in the Realm of Teaching

Discipline specific notes, additions, or deletions accompanying the Faculty Guide "Basic Expectations of Teaching"

No discipline specific notations.

Discipline specific notes, additions, or deletions accompanying the Faculty Guide "Teaching Effectiveness"

The Math Department values continuous improvement, and appreciates use of select instructional technologies including graphing calculators and software packages. Developing new courses can be an example of teaching effectiveness.

Nature of the Discipline(s) in the Department of Mathematics and Computer Science in the Realm of Research and Scholarship

Elements critical to scholarship which may be unfamiliar to faculty in other disciplines

Mathematics faculty are more likely to present at state, regional, national, and international conferences than they will be to publish in refereed journals or write a book. Presentation or publication research might include original research (such as expanding doctoral dissertation concepts) or publishing in pedagogical areas that include the Scholarship of Teaching and Learning (SoTL) and the effective use of technology in the math classroom. For evaluation of math faculty, presenting at peer reviewed conferences should be held in the same regard as publishing in a journal that is not considered to be a top journal publication.

Being a coauthor in a math journal publication is acceptable scholarship for the Wingate University math department. Journal articles in mathematics are rarely authored by a single mathematician. Being third or fourth author does not take away from the work contributed in getting that publication to press. Publication of books is rare.

Summer research grants often lead to conference presentations or published work with students and are considered to be a significant accomplishment. Larger grant opportunities are rare given teaching loads and other realities, as is external consulting. Mentoring undergraduate research of Wingate University math students is considered scholarship if the research culminates in a poster presentation or a conference presentation, either externally or internally.

The department values quality teaching over prolific publications and, as a result, publications in MathEd or SoTL should be viewed as on par with pure or applied mathematics. Such journals, focusing on the scholarship of teaching, learning, and student success have increased in recent years and, if peer reviewed and should count towards scholarly productivity. Examples in this category could include technical reports, workbooks, study guides and other pedagogical materials.

Meaning of Peer Review and circumstances where peer review is not necessary for the work product to be considered for scholarship.

Peer review for refereed journal articles is no different than other disciplines. It includes a hierarchy of academic peers carefully reviewing scholarly articles, including typically an associate editor and 4-5 reviewers. The typical peer review process in mathematics journals can take up to 2 years to complete. Generally, faculty publishing in these journals are R1 or doctoral institutions with doctoral programs and PhD students. Mathematics faculty have published in peer-reviewed journals that are not considered top-tier journals. Publishing in a top-tier journal typically requires collaboration with researchers from R1 or doctoral institution.



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Other peer reviewed accomplishments that are considered "scholarship" for the math department include presenting at state, regional, and international conferences with a peer review process for acceptance. For example, math department faculty have presented at the state NCCTM conference, the Southeast Regional MAA conference, the joint MAA/AMS meeting, and the T3 International conference.

What does and does not qualify as meaningful creative work

No discipline specific notation.

Can "Paid" work be considered scholarship

No discipline specific notation.

How 21st century forms of disseminating work product into the intellectual marketplace figure into accepted norms of scholarship

The majority of math journals are readily accessible as forms of scholarship alongside oral or poster presentations at professional meetings. Online formats and virtual conferences have become more prevalent.

Departmental assessment of scholarship quality

Since presenting at state, regional, and international conferences is viewed as quality scholarship, a faculty member should strive to achieve this goal every year. However, there is not a fixed number on what is expected for advancement in rank or security.

Departmental assessment of scholarship quantity

Given the nature of pure and applied mathematics research and long lead time to publication once the research is conducted and written, it can take several years to publish a single journal article. Hence, publication of a journal article is considered a greater accomplishment. One journal publication is adequate, but not required, for each promotion level. Alternatively, three conference presentations are adequate for each promotion level.

Nature of the Discipline(s) in the Department of Mathematics and Computer Science in the Realm of Service

Need, value, and expectation of departmental service

The Math Department requires service contributions from across the faculty including serving on search committees, contributing to course SLO revisions, maintaining social media sites, and evaluating adjuncts. The department has a coordinator named for Math 116 and there are plans to appoint a director of assessment.

Need, value, and expectation of university service

Serving on University committees and advising students is expected of our faculty. There are also opportunities to serve on special Task Forces such as retention. Service includes completing peer evaluations at the request of the Deans. Serving as an advisor to a student organization would be considered valuable service to the university.

Importance of service to the profession

Providing peer review or serving as a reviewer for a manuscript would be a valued role for anyone who can find the time to do such work. Maintaining an active teaching license is an example of service to the profession and, potentially, service to the community.

Importance of service to the community

Some faculty assist the community by tutoring elementary through high school students in math.



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Departmental assessment of service quality

No discipline specific notations.

Departmental assessment of service quantity

No discipline specific notations.