

Department of Mathematics and Statistics
The College of New Jersey
Disciplinary Standards for Reappointment, Tenure, and Promotion

The attached disciplinary standards have been reviewed and approved by the Committee on Faculty Affairs, the Council of Deans, and the Provost.

To avoid creating a moving target for candidates for reappointment, the disciplinary standards in effect during a faculty member's first year of employment will be used for reappointment and tenure applications. Candidates for promotion will use the disciplinary standards in effect in the year in which they apply for promotion



Department Chair

11/9/2022

Date



Dean

11/10/22

Date



Provost

12/5/2022

Date

The Department of Mathematics and Statistics will next review its disciplinary standards in Academic Year 2027-28.

Disciplinary Standards for Faculty Scholarly, Creative, and Professional Activities

I. Introduction

The College of New Jersey (TCNJ) expects faculty seeking reappointment and promotion to demonstrate exemplary achievement in their scholarly, creative, and professional activities. To fairly and equitably apply this standard to all faculty, the *TCNJ Reappointment and Promotions Document* (RPD) calls for each department to describe the standards that mark excellence in scholarly, creative, and professional activities for faculty in the department. As scholars in the mathematical sciences, which throughout is intended to include applied mathematics, data science, mathematics, mathematics education, and statistics, the faculty members in the Department of Mathematics and Statistics embrace the opportunity to outline the standards in our fields that are appropriate for assessing excellence in our disciplines.

To provide the institutional context for these standards, we begin with excerpts from the mission statements of the College and School, which describe the role of a teacher-scholar at The College of New Jersey. We then provide a comprehensive description of the scholarly, creative, and professional activity expectations for the faculty in the Department of Mathematics and Statistics.

The College's Definition of "Teacher-Scholar"

The College describes teacher-scholars as faculty who "...grow as disciplinary or interdisciplinary experts, pursuing productive programs of scholarly research or creative endeavor that may engage students through a variety of activities such as introducing students to controversies within their fields, providing opportunities for participation in faculty scholarship, or creating assignments that expose students to the fundamental tenets of scholarship." The faculty in the Department of Mathematics and Statistics are committed to this vision of growth. Furthermore, we embrace the model presented in this definition as "mentor[s], creating a learning environment that cultivates analytical and creative problem solvers and inspires students to be scholarly themselves."

The School of Science Mission Statement:

The application of the college's mission statement to educational experience in the sciences is outlined in the School of Science Mission Statement, which states that "students will interact with outstanding teacher-scholars as instructors, advisors, and mentors" and they will do so because "faculty members integrate comprehensive undergraduate research experiences into their scholarship, actively preparing students to meet future career or graduate school goals ."

II. Standards for Scholarly Activity

Based on combining our twin departmental goals of producing new knowledge in the mathematical sciences, and delivering a high-quality education to our undergraduates, the Department of Mathematics and Statistics supports a model whereby the scholarly record of a teacher-scholar in the department will be reflected by suitable accomplishments.

First and foremost, the individual must establish a viable research program within one or more of the mathematical sciences. It is expected that this research program will lead to publication in peer-reviewed journals. Interdisciplinary work within the mathematical sciences or with other fields is also valued. Other measures of an established research program include:

1. Publication of a book or monograph.
2. Presentations of scholarly work at regional, national and/or international meetings.
3. Funded, peer-reviewed grant proposals that support the research program of the faculty member or support the enhancement of the educational experience of students.
4. Scholarship in support of teaching in mathematics or statistics (the scholarship of pedagogy), reflected by authored textbooks within the discipline.
5. Engagement and mentoring of undergraduates in discipline-appropriate research experiences. Whenever possible, this activity should result in student presentations of their work at external regional, national, and/or international meetings.

III. Role of the Department Promotion and Reappointment Committee (PRC)

The PRC consists of all tenured faculty members in the department. Committee members who are either applying for promotion themselves or who are serving on the institution-wide College Promotions Committee are excused from service on the PRC when the PRC is considering candidates for promotion.

The PRC has the on-going responsibility to maintain the department's standards for scholarship. Starting with the date of hire of a new faculty member, the PRC is responsible for monitoring a probationary faculty member's progress in meeting the department's disciplinary standards for reappointment and tenure.

The Department of Mathematics and Statistics expects candidates for tenure and promotion to have peer-reviewed publications in the mathematical sciences in selective venues. All candidates for tenure and promotion are required to submit to the PRC for approval the names of the venues in which they intend to publish their work. The PRC will initiate a consultative process involving the individual and the evaluation of the intended peer-review venue.

In evaluating the venue in which research might be published, the PRC may consider acceptance rate, impact factors, and other quantitative measures of the strength of the journal; however, these measures are recognized to vary widely among the mathematical sciences, so that no precise minimum standards can be specified. The conclusion of the consultative process will inform the individual how the intended venue for publication will be viewed as far as meeting the disciplinary standards.

IV. Collaborative Work

The Mathematics and Statistics Department recognizes and supports collaborative work. Moreover, we understand that in some fields of mathematics collaboration is the predominant mode of research. Candidates for tenure and promotion whose work is collaborative should strive to develop their own research program even where their work is part of a larger endeavor. They are expected to have had a significant role in the work that meets the specific criteria listed below. They should clarify their contributions to jointly authored publications and describe how such work is part of their research program.

When making recommendations, the PRC may take into account the scale of the project/publication along with the number of authors.

V. Scholarly, Creative, and Professional Activity Expectations for Pre-tenure Reappointment

The Department of Mathematics and Statistics expects that candidates should show steady progress toward a productive program of scholarship or creative activity in their discipline throughout their probationary period. By the time of the tenure decision, there should be a record of finished work conducted while at TCNJ and clear promise of continued scholarship.

- Year 1 - During the first year there should be evidence that the faculty member has begun doing research at TCNJ. This evidence may consist of a partial draft of a research article, book, or book chapter, a presentation of scholarly work at a scholarly meeting, participation in a research group, a research proposal submitted for approval to the IRB, partial research results, the development of computer software (e.g., to test conjectures and complete simulations), or similar types of evidence.
- Year 2 - By the time of the second-year review there should be evidence of progress toward productive scholarship. At a minimum, a faculty member should be able to demonstrate ongoing or concluded studies, planning for manuscript preparation, grant writing, and/or attendance at a professional conference, ideally for presentation.
- Year 3 - During the third year there should be clear evidence of productivity as shown by a submitted manuscript to an approved peer-reviewed venue based at least in part on work done at TCNJ, as well as other measures of an established research program.
- Year 4 - During the fourth year there should be clear evidence of productivity as shown by a submitted manuscript to an approved peer-reviewed venue based at least in part on work done at TCNJ, as well as other measures of an established research program.
- Year 5 - During the fifth year there should be clear evidence of productivity as shown by submitted manuscripts to approved peer-reviewed venues based at least in part on work done at TCNJ, as well as other measures of an established research program.

VI. Scholarly, Creative, and Professional Activity Expectations for Tenure and Promotion to Associate Professor

Candidates for tenure and promotion to Associate Professor must have a demonstrated record of

recent scholarship along with a demonstrated ability to continue a scholarly program as measured by the following:

Criteria for Tenure and/or Promotion to Associate Professor

All candidates for tenure and promotion to Associate Professor must satisfy the following criteria:

1. A paper accepted for publication in an approved peer-reviewed venue.
2. A candidate must also satisfy one of the following (all valued equally):
 - a. A second paper accepted for publication in an approved peer-reviewed venue.
 - b. A presentation of scholarly or creative activity at a juried or peer-reviewed regional, state, or national conference or professional organization that appears in their published proceedings.**
 - c. An accepted book manuscript or monograph.**
 - d. A funded grant proposal.**
 - e. Creative or Professional activity.**

In exceptional circumstances* the single publication in (1) may be deemed by the PRC to be sufficient to satisfy the expectation for scholarly and creative activities.

*Examples of exceptional circumstances might be a single paper that is awarded a prize or results in an invitation to deliver a series of lectures.

**The PRC, through a consultative process involving the candidate, will determine the appropriateness of the item in (b), (c), (d), (e).

The work satisfying item 2 must contain significant scholarly work not published in the work satisfying item 1 and vice versa.

In addition, candidates must demonstrate evidence of a commitment to continue their scholarly program. Examples of evidence could include: a draft of a paper, a paper submitted for review, or an invitation to make a future presentation.

In those cases where a candidate, prior to his/her appointment to the college, has already reached a productive and coherent program of scholarly and creative activities commensurate with promotion to Associate Professor at TCNJ, he/she will need to provide evidence of continued scholarly/creative accomplishments since his/her appointment.

VII. Scholarly, Creative, and Professional Activity Expectations for Promotion to Professor

TCNJ's Reappointment and Promotions Document states, "Promotion to Professor requires a sustained pattern of achievement since attaining the rank of Associate Professor, with evidence indicating the maturation of the scholarly/creative/professional record." The quantity of output is not specified, but it is the expectation of the Department of Mathematics and Statistics that it would typically take at least five years beyond the time of promotion to Associate Professor to produce a substantial body of work that demonstrates a sustained, productive research program in the mathematical sciences. The Department of Mathematics and Statistics believes that a

faculty member has a sustained, productive research or creative program when the criteria listed below are met.

Criteria for Promotion to Professor

From the time of their promotion to Associate Professor, candidates for promotion to Professor must satisfy the following criteria:

1. A paper accepted for publication in approved peer-reviewed venue.
2. One of the following:
 - a. A second paper accepted for publication in an approved peer-reviewed venue.
 - b. A presentation of scholarly or creative activity at a juried or peer-reviewed regional, state, or national conference or professional organization that appears in their published proceedings.
 - c. An accepted book or monograph whose quality is reflected in reviews, adoptions, and citations.
 - d. Sustained supervision of student research experiences. When possible, such experiences should result in publication or presentation of the work at regional, national and/or international meetings.

The work satisfying item 2 must contain significant scholarly work not published in the work satisfying item 1 and vice versa.

3. Demonstrated recognition of the candidate's scholarly work at the regional, national, and/or international level. Evidence of this recognition could be one or more of:
 - a. Invited presentations at juried or peer-reviewed regional, national and/or international conferences or professional organizations.
 - b. Review or referee invitations.
 - c. A leadership role in consulting activities.
 - d. Writing and obtaining grants.
 - e. Serving as a member of a dissertation committee.

For faculty whose initial appointment at TCNJ was at the Associate Professor level, scholarly work done before starting their TCNJ appointment may be considered by the PRC, if credit for scholarly work done in prior years of professional experience was awarded in the initial employment contract, and suitable scholarly work continues after their TCNJ appointment.

The above standards for promotion to Professor may be relaxed under circumstances when, as stated in the RPD, "there may be periods when the level of scholarly activity is somewhat reduced (but not eliminated) due to a significant increase in teaching or service, such as serving as Department Chair."

Approved by the Department of Mathematics and Statistics
November 7, 2022