

Department of Civil Engineering
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 in years 1-4. Candidates for promotion will use the disciplinary standards in effect in the year in which they apply for promotion

Michael W. Horvath
Department Chair

5/8/13
Date

Steve Schreiner
Dean

5/8/13
Date

Jacqueline Taylor
Provost

6/11/13
Date

The Department of Civil Engineering will next review its disciplinary standards in Academic Year 15/16.

Disciplinary Standards for Faculty of the Department of Civil Engineering

[Approved in December of 2012]

The disciplinary standards for the faculty of the department of Civil Engineering are consistent with the mission of the College, School of Engineering, and Civil Engineering Department. It is understood that TCNJ is a primarily undergraduate institution where faculty members are expected to be accomplished and engaged teacher-scholars and students are expected to be accomplished and engaged learners.

A significant amount of this document was adapted from The College of New Jersey's Promotions and Reappointment Document (PRD) February, 2011; however, it was amended to better reflect the scholarly activities of the faculty in the Department of Civil Engineering at The College of New Jersey. Specifically, the portions that were adopted were obtained from sections: II.D.2 and II.B -Scholarly/Creative/Professional Activity. It is clear that these standards are consistent with but not replacements for those discussed (in full details) and presented in the *PRD-February 2011*.

A separate application is necessary for Promotion to Associate Professor. The requirements for promotion at TCNJ are more stringent than those for 4th year reappointment and tenure. Taking guidance from the broadly defined attributes for each rank offered by the Promotions and Reappointment Document (PRD) February, 2011, standards relevant to the Engineering departments can be defined. Fundamentally, it is important to illustrate at each rank whether the program with which a faculty is associated with is better because of the contributions of that faculty member. Such contributions should be impacting, meaningful, positive, and sustainable. The difference of the standard for different ranks should be related only to the maturity level of those contributions, not the type. In other words, all faculty members should be involved in similar types of endeavors; however, the combination of quantity, quality, intensity, and success level would be expected to be higher for a faculty with full Professor rank than with an Associate Professor rank.

Disciplinary Standards for Scholarly Activity

As stated in the *Promotions and Reappointment Document (PRD), February 2011*, TCNJ embraces the model of a professor as a teacher-scholar. The College recognizes the need for faculty to actively engage in research projects relevant to their field, and to publish scientific findings in respected refereed journals. The range of modes of scholarship accepted by the Department are limited to Discovery, Integration, and Application:

1. The Scholarship of Discovery – the traditional research model in which new content knowledge is acquired;
2. The Scholarship of Integration – the creation of new knowledge by synthesizing and making connections across disciplines or sub-disciplines;
3. The Scholarship of Application – the bridging of the gap between theory and practice through both research and action;

A key facet of the teacher-scholar model is the role of a faculty member as a teacher of scholarship to undergraduate students. Engagement of students in undergraduate scholarly activities not only enhances a research project by allowing more efficient and consistent execution of its tasks, but also affords the students a learning experience that is not attainable in typical classroom settings. Faculty should thus strive to serve as mentors who pass their knowledge and expertise about a particular topic to their students, who can gain a sense of fulfillment from contributing to new knowledge or pedagogy.

Regarding scholarly activity, the committees involved in the evaluation of candidates should take into account the nature of the work and field (e.g. experimental vs. numerical, emerging technology vs. more mature technology, etc.), and the difficulties involved in completing research in each field. The quality of the research is of more importance than mere quantity; although candidates for re-appointment, tenure, or promotion are expected to consistently engage in new research and to bring new projects to fruition. The quality of the scholarly research is defined by its significance to one's field of study, and requires peer-review to validate the significance of the work; hence, the importance of the publication of research in refereed journals. The entire body of an applicant's research history is applicable for illustrating a pattern of continued scholarship, but works finished since appointment at TCNJ or since the last promotion are required for promotion, and carry greater weight.

There may be some years when the level of scholarly activity is reduced (but not eliminated) due to a significant increase in teaching or service, such as serving as a department chair. In such cases the reduction in scholarship should not be counted against the candidate, but there should be evidence that the candidate's scholarly/creative/professional activity has been maintained to some degree and has promise for full resumption when the other activities return to normal levels.

Faculty need to initiate and maintain a sustainable research program in a field of study relevant to Civil Engineering that will support faculty-oriented and student-supported research efforts. Adequate infrastructure to support both faculty and student-supported research should be established. Collaborations are encouraged, but not at a level that will limit the ability of the faculty to perform individually directed research programs. In a collaborative effort, the faculty member must be a major contributor to the work and must demonstrate that the work could not have been done without the individual's contribution.

Interdisciplinary Work:

The productivity of a faculty member in discipline-related research may be complemented by productivity in interdisciplinary scholarship. Types of interdisciplinary scholarship, either cross-departmental or interschool collaborations, include interdisciplinary research, pedagogical research, and development of interdisciplinary projects in education or practice.

For interdisciplinary work, scholarly activity should be evaluated in the same manner as previously, with primary emphasis being given to refereed journal publications and submitted grant proposals that initiated or sustained a significant research endeavor.

For interdisciplinary work between two disciplines which typically do not share a common background (i.e. – engineering and business), the school recognizes that the end result of the collaboration may not be of a substantial technical nature as to be published in the typical refereed engineering journals. Therefore, a net result of this sort of collaboration leading to peer-reviewed conference papers, national presentations, publications in refereed journals not of a technical nature, etc. should be given equal weight as if the end result was a publication in a refereed technical journal, or a submitted grant proposal that initiated or sustained a significant research endeavor. Additionally, in keeping with the mission of the College and its emphasis on student involvement in scholarly activity, interdisciplinary collaboration between two unlike disciplines which utilizes significant student involvement between both disciplines should be looked upon very favorably and be recognized as scholarly activity.

Guidelines for Scholarly Achievement:

A successful scholarship program can be defined by: 1) several projects in different stages of development or a systematic plan for one's projects; 2) primary responsibility for a significant portion of one's scholarship; 3) research initiated at TCNJ; and 4) an appropriate history of the dissemination of scholarly product(s) in peer-reviewed formats; 5) student involvement;. The following list is not all-encompassing, but does offer several avenues for acceptable endeavors that are acceptable paths for the fulfillment of scholarly activities for faculty seeking reappointment and tenure, and promotion. All faculty members should strive to excel in a combination of endeavors.

Faculty need to publish relevant research in high-quality, peer-reviewed journals. The quality of a journal can be quantified using a combination of the following characteristics:

- Professional sponsorship or other affiliation status
- Status of the journal editors within their respective fields
- Total circulation of the journal
- Article citations five or more years after the publication date
- Average citation record for the journal
- Acceptance/rejection rates for the journal

When publishing the results of their research, if the publication has multiple authors, faculty need to explicitly state the contents of their individual contribution. The individual contribution of the faculty member will be considered when evaluating the overall scholarly record of the candidate.

In addition to the publication of scholarly work, faculty members are expected to further their scholarship through a combination of the following endeavors:

- ◆ Present and/or publish relevant research in high-quality conferences. The quality of a conference or conference proceeding can be quantified using a combination of the following characteristics:
 - A peer review process
 - The scope of the professional organization sponsoring the conference, i.e. international, national, or regional
 - Acceptance/rejection rates for submissions
- ◆ Seek external funding for equipment and research. Potential sources include not-for-profit organizations, government sources, and private companies.
- ◆ Be active in the consulting and/or professional arena. Such activities are considered scholarly when they are within the faculty's scholarly area and involve the creation, rather than the application, of knowledge and impacts significantly on one's discipline
- ◆ For invited publications and presentations (including invited presentations at professional meetings and conferences or contributions to printed publications), the quality of the work can be quantified according to:
 - The scope of the professional organization extending the invitation (international, national, or regional)
 - The stature of the editor of the book or journal requesting the article
 - The academic standing of the publisher
 - The readership of the journal or book
- ◆ Engage in the development of book materials, which has been contracted by a reputable publishing entity. The quality of a published book can be quantified using a combination of the following characteristics:
 - The academic standing of the publisher, e.g. national recognition as an academic publisher
 - Published reviews of the work
 - Evidence of readership, e.g. size of the press run or sales
 - Citation frequency

Reappointment and Tenure:

Faculty is expected to initiate an individual and original research program in an area of interest that adds to the diversity of research in the department of their appointment. Integral to this program should be the involvement of undergraduates as active participants who learn new skills and gain insight into current topics of research and development. *The scholarly activity and*

professional endeavors should be evidenced by at least one publication in a refereed journal. Additionally, the faculty must show scholarship in one of the following forms: one additional publication in a refereed journal (published or accepted), or two (2) refereed Technical Conference Papers at the National or International level, or a grant proposal of at least \$50,000 that has been funded or well received. Evidence of growth and potential for a sustained scholarly effort must be established.

Promotion to Associate Professor:

Faculty are expected to maintain a pattern of continuing achievement since the initial appointment, with specific evidence of previous and continuing scholarly activity and professional endeavors. *The evidence should include at least two (2) publications in refereed journals. Additionally, the faculty must show scholarship in one of the following forms: one additional publication in a refereed journal (published or accepted), or two (2) refereed Technical Conference Papers at the National or International level, or a grant proposal of at least \$50,000 that has been funded or well received, . An external review may be requested by the applicant as one component of this evidence.*

Promotion to Professor:

The candidate is expected to sustain and expand a pattern of achievement since the attaining of the rank of Associate Professor, with evidence indicating the maturation of the scholarly and professional record. Evidence of maturation of scholarly activities since promotion to associate professor include: *at least two (2) publications in refereed journals. Additionally, the faculty must show scholarship in one of the following forms: one additional publication in a refereed journal (published or accepted), or two (2) refereed Technical Conference Papers at the National or International level, or a grant proposal of at least \$50,000 that has been funded.* External review is a mandatory component of this evidence for promotion to Professor. Those promoted to the rank of Professor should be held in high regard by their peers and should be role models for their junior colleagues.