

VOILAND COLLEGE OF ENGINEERING AND ARCHITECTURE
PULLMAN CAMPUS FACULTY RESPONSIBILITIES GUIDELINES¹
Engineering and Computer Science Disciplines

Tenure-track and tenured faculty members (T-T/T faculty) at Washington State University participate in and contribute to the university's comprehensive land-grant and very high research activity institutional missions. Thus, the T-T/T engineering and computer science faculty members 1) teach and advise students at both the undergraduate and graduate levels; 2) conduct programs of independent, collaborative, and/or cross-disciplinary peer-reviewed scholarship and pursue external grant funding; and 3) provide service to the department, college, university, public and profession, including providing outreach/extension to the public that may benefit from the results of their research. The actual distribution of responsibilities and contributions within each category should reflect the interests and expertise of each faculty member, and will be determined in consultation between the faculty member and his/her Department Chair/School Director. The purpose of the present document is to provide guidance related to the distribution of responsibilities across these three activity areas. The department chair or school director is given the responsibility of personalizing these guidelines in cooperation with each individual faculty member, thus taking into account situations not spelled out in detail in this document.

This document is based upon the premise that our highly skilled faculty is very mobile and has selectively chosen WSU and the Voiland College of Engineering and Architecture (VCEA) based upon a belief in the university's missions as a land grant university and as a Research I institution. We also recognize that the VCEA is an important college to the university's aspirations of becoming a member of the Association of American Universities (AAU) – a collection of the best and most influential research universities in the country. As a result, this document is based further upon the assumption that our faculty members possess a true desire to be fully engaged, committed, and valued for their contributions to the overall missions and goals of WSU and the Voiland College of Engineering and Architecture (VCEA). Moreover, the metrics introduced in this document are consistent with the university's AAU aspirations. It is the intent that the guidelines presented in this document provide some flexibility so that different faculty members may make different, but equally valuable, contributions based upon their interests and skills. As a result, everyone who is fully engaged will feel valued and will understand the importance of the contributions they personally make.

This document is *not* intended to provide criteria for tenure or promotion, the guidelines for which are provided elsewhere (such as in documents published by the WSU Provost Office, the Faculty Manual, and the additional guidelines for faculty in the Voiland College of Engineering and

¹ These guidelines are adapted from the guidelines developed by the P.C. Rossin College of Engineering and Applied Science at Lehigh University. Our thanks to Lehigh for sharing their document with us.

Architecture and, where available, guidelines provided by individual departments or schools). Expectations for tenure in the VCEA at WSU are consistent with those expectations at land-grant universities and among our peer institutions and are based upon research productivity, peer-reviewed scholarly work, advising graduate students, as well as teaching well. Similarly, for promotion to full professor, our expectations are consistent with those among our peers, and are based upon establishing a national or international reputation for one's scholarly work, garnering competitive, external research funding, publishing with one's students in the peer-reviewed literature, and advising graduate students. Thus, faculty seeking tenure are expected to establish an externally and competitively funded research and scholarship program, successfully mentor graduate students, publish their research results in the appropriate peer-reviewed literature, and be effective teachers. Faculty seeking promotion to professor are expected to have established a national or international reputation for their scholarly work, have a successful record of obtaining competitive, external funding, publishing in the peer-review literature, and successfully advising graduate students seeking the terminal degree in their field.

Some faculty members in the VCEA have extension or outreach expectations associated with their appointments. Outreach activities are consistent with the land grant mission, and for faculty that have outreach responsibilities, these additional activities must be taken into account. This document does not directly address outreach activities but instead allows the department chair or school director the latitude to use her/his judgment in applying these guidelines.

Teaching Activities. Instructional assignments may be conducted face-to-face or over electronic media. Assignments to teach specific courses may vary from year to year, depending on the needs of the School/Department and/or College and should not be delegated to others, such as a TA or postdoctoral associate, except for short periods such as in cases where a graduate student shows exceptional promise as an instructor and has interest in an academic profession, where they teach under mentorship or independently for a single course on an occasional basis. Moreover, at a research-intensive institution like WSU, supervision of graduate and undergraduate student research embodies the best elements of face-to-face instruction and, as such, is considered part of faculty teaching activity. Consequently, the number of lecture-based courses taught and the number of MS and PhD students and postdoctoral associates supported and mentored by a faculty member figure prominently in these guidelines.

Teaching load may also include developing new courses that serve the general interests of the students and benefit the overall curriculum, teaching an existing course for the first time, teaching course sections with an exceptionally large number of students, developing innovative teaching methods, writing text books, writing grant proposals to secure funding to develop new educational programs, coordinating a program's ABET accreditation activities, assuming an active role in advising undergraduate students, and/or other services as decided in consultation and mutual agreement with the unit Chair or Director. Thus, if the number of courses presently being offered in

a Program or Department/School is smaller than the total number of courses expected to be taught under these guidelines, some faculty members may be asked to contribute more to the teaching and development of new courses in interdisciplinary areas, distance learning, on-line courseware development, etc.

Research Activities. Externally obtained research funding provides additional resources and facilities that enrich the university experience for faculty and students. Moreover, our collective ability to compete for research funds serves as an important attribute in recruiting a highly qualified faculty and the best and brightest graduate students, all of which contribute to the intellectual vitality of the college. At the time of this writing, engineering colleges at our peer institutions averaged approximately \$400-450K per year in research expenditures, per T-T/T faculty member. Other significant indicators of extraordinary research activity include high-impact scholarship as indicated by publishing in top journals or citation indices, or extraordinary professional service that demands considerable time but contributes significantly to the unit's reputation, such as National Academy membership, or editorships of prestigious journals, for example.

Service Activities. All faculty members, regardless of their teaching, research, or outreach activities, are expected to contribute to the service requirements of the department/school, college, and university. This is consistent with the concept of shared governance of the academy. Without the participation of all faculty members in university/college/school service, shared governance cannot work. Moreover, faculty should also contribute to their professional communities and, indeed, a requirement for promotion to full professor includes the expectation that a faculty member will have established a national/international reputation within their scientific community that is commensurate with the sought-after rank.

To facilitate common understanding and uniform assignment of responsibilities for faculty members across the college, the Dean and the engineering Department Chairs/School Directors have developed the following guidelines. Research activities are categorized in part by the extent of support provided for graduate student equivalents (gse). A Ph.D. student or postdoctoral scholar mentored and supported by a faculty member's external research grants will be equivalent to one gse. A PhD student that is self-supported or supported on departmental or college funds will be considered equivalent to 0.5 gse. An MS student who is engaged in thesis work and supported and advised by a faculty member would be equivalent to 0.75 gse. It should be noted that this document does not attempt to quantify all possible metrics of research activity; for example, engineering research at a land grant university often leads to technology transfer opportunities and may require the faculty to engage in extension or outreach. These activities should be taken into account when assigning faculty responsibilities.

Teaching responsibilities are discussed in terms of courses. In general, a course in the discussions below refers to a 3-credit undergraduate course with approximately average course enrollments for

the VCEA. The chair or director is given latitude to adjust these guidelines for individual faculty depending upon course enrollments, level, TA support, or other features (such as labs or studios) or resources for the course.

General Categories

1. **Entry-Level Faculty**– should have a normal teaching load of 1 course per semester for a total of 2 courses per year for *at least* the first year of employment as a faculty member. Under normal circumstances, the recommended course load will then increase to a level equivalent to that of a *Research Active Faculty* member, 1.5 courses per semester for a total of 3 courses per year. Upon granting of tenure or promotion to a higher rank, the guidelines listed below will apply.

It should be emphasized that the above “reduced teaching load” is designed to enable entry-level faculty to establish their competency in teaching and to build their research programs. In order to be granted tenure, entry-level faculty members are expected to be actively engaged in research and scholarly activities, including writing and submitting proposals to funding agencies for external funding to support their research, which provides stipend and tuition support for graduate students. The support in start-up packages for entry-level faculty members is provided to launch research programs and to act as a “bridge” until external funding is secured and should not be viewed as a substitute for external funding. Each entry-level faculty member is expected to move to the “*Research Active*” category listed below within the pre-tenure period.

2. **Moderately Research Active Faculty**– are faculty members who have a modest amount of research funded by external grants and contracts and have been supervising and providing stipend and tuition support for one to two gse. Moderately Research Active Faculty are expected to provide significant service to their Department, College and/or the University and should have a nominal teaching load of 2 courses per semester or a total of 4 courses per year.
3. **Research Active Faculty**– are faculty members who have active research and scholarship programs supported through grants and contracts, including stipend and tuition support for 3 to 5 gse supervised primarily by that faculty member. Research Active Faculty are also expected to provide significant service to their Department, College and/or the University, and should in most instances have a normal teaching load of 1.5 courses per semester, or a total of 3 courses for the year.
4. **Exceptionally Active Faculty**– are faculty who are exceptionally active in either teaching or research. In general, faculty holding endowed, named professorships should be exceptionally active, and bring prestige to the program and university through their activities.

- a. **Exceptionally Instructional Active Faculty** – typically have an exceptionally strong interest in instruction and desire to teach effective courses. Often because they have emphasized the development of effective teaching technologies, these faculty have little or no externally funded research programs and therefore do not supervise and provide stipend and tuition support for graduate students. Consequently, these faculty members will be expected to contribute primarily through teaching and development of undergraduate and graduate courses. Their normal teaching load should be equivalent to 3 courses per semester or a total of 6 courses per year.
 - b. **Exceptionally Research Active Faculty** – are faculty members who have extensive and continuing research programs and scholarship supported through grants and contracts including stipend and tuition support for the equivalent of 6 or more gse. These faculty should have a normal teaching load of 1 course per semester, or a total of 2 courses for the year. They are also expected to provide service to their Department, College and/or the University.
 - c. **Exceptionally (Professional) Service Active Faculty** – are faculty members who provide extraordinary professional service at the national or international level. Examples of such service activity might include National Academy membership, editorship of a major journal, special professional assignments, or other time-demanding activities that bring visibility and prestige to the university. The Chair/Director is given latitude to take into account these exceptional service activities, along with the research activity of a faculty member, when other responsibilities are assigned.
5. **Transitional Faculty** - During the academic career of an individual faculty member, his/her level of research activity may drop to levels lower than she/he desires due to a variety of reasons, including but not limited to a shift of interest, an inability to obtain external funding to support research and students at the levels described above, or a transition from one research area to another. A number of mechanisms can be used to restore research activities to the desired level and/or develop new research thrusts– professional leaves, collaborative work with other professionals, independent study and proposal preparation, etc. Such research transitions should be planned in consultation with the Department Chair/School Director and may involve a modified distribution of the workload, which will include higher levels of teaching and service or reduced teaching workloads for those moving to new research areas and to facilitate proposal preparation. Typically, however, research activity is expected to rebound, so these transitional assignments should be limited in duration. In any case, Department Chairs/School Directors will work with faculty members to maximize the individual’s contribution to the mission of the University.

Course Buyout

Despite efforts to balance workload, at particular points in their careers, some faculty may prefer to devote even more time to research or other professional activities. Recognizing that course buy-outs may be beneficial to the faculty member's career, this policy enables such practices. In such cases, faculty may use extramural (as allowed by agencies) or philanthropically-provided funds to buy-out of instructional responsibilities, at the rate of 15% of the individual's annual nine-month salary and benefits per course (i.e., 1/6 of 90%, thus allowing for 10% service). Note that, for any given semester, no more than 75% of the faculty member's time may be charged to any single grant/contract. All released salary funds will be retained in the Department's or School's reserve account and will be used to cover the costs of hiring other instructors and other activities needed to support the department/school's instructional (TA's, instructors, clinical faculty, support staff) or research (RA's, startup, cost sharing, equipment acquisition) programs, or to advance the intellectual climate (guest speakers, colloquia, seminar series).

Conclusions

The intention of these guidelines is to provide faculty members and their Department Chairs/School Directors with a common set of expectations for discussions of faculty teaching, research, and service responsibilities. The Department Chairs/School Directors are responsible for interpretation and implementation of these guidelines. The College seeks to balance each faculty member's contributions to help ensure that all faculty contribute to the College's success. Those who excel in research should support and advise more developing scholars, while those who excel in classroom instruction should teach classes. Moreover, all faculty should participate in service to the department, college, university, public and/or profession at levels commensurate with their rank. While the Dean will support these guidelines, the process of teaching load assignment is implemented under the discretion of the Department Chairs, not the Dean's office.