

ECE Department Standards for Academic Review of Teaching Faculty

Teaching faculty (or “Teaching Professors”, the working title for faculty in the Lecturer with Security of Employment series in APM 285/210-3) play an extremely vital role in the ECE Department. Teaching faculty differ from faculty in the research-oriented professor series (referred to simply as faculty in the “Professor Series” in PPM 230-220) in that the role of the teaching faculty is primarily to advance the educational mission of our department and the university, and elevate the experience of our students, particularly our undergraduate students. Indeed, the role of the teaching faculty goes well beyond teaching classes. Teaching faculty are expected to be excellent teachers; develop teaching pedagogy and innovations; contribute to the ongoing development of undergraduate courses, particularly required courses that all or most undergraduate students take, including possibly developing new course and lab materials, or revising them; share in the workload for curriculum development, program reviews, and the accreditation process; run education programs and initiatives, some of which may be supported by internal and external grants as PI or Co-PI; and mentor undergraduate students and student organizations. Teaching faculty in ECE are also expected to be recognized leaders in engineering education.

This departmental policy document summarizes the general expectations in terms of teaching, professional and/or scholarly achievement and activity, and service for tenure-track teaching faculty in ECE. By determining normal merit advancement criteria for its members, the department intends to provide a measurement of a candidate’s achievements and to aid in evaluation when acceleration is proposed.

For teaching faculty, the three legs of the faculty stool are articulated as teaching, professional and/or scholarly achievement and activity, and service. However, leadership of the undergraduate educational mission involves all three legs of the stool and some elements cannot be easily categorized. In many cases, specific accomplishments and activities may be considered as contributing to more than one leg of the stool. In the document below, although certain activities are articulated in one category or another, we recognize that many activities cross over different categories.

Teaching

Workload: The ECE Department has a teaching workload policy for tenure-track teaching faculty of 6 courses per year in predominately core or large enrollment classes. Considerations of how to count courses with large enrollment, and of ad hoc modifications of course relief and counting of teaching credits are the same as for the Professor Series.

Each faculty member is expected to regularly upgrade his or her course materials and otherwise strive to regularly improve the quality of each course they teach. Such activities are considered to be part of the normative teaching workload.

From time to time, a faculty member might exceed or fall below the expected departmental teaching workload in a given year. The ECE department keeps track of such deviations and adjusts teaching assignments in subsequent years to ensure that the average teaching workload per faculty member is equivalent to the normative teaching workload. As such, neither higher-than-usual nor lower-than-usual teaching workloads during a given review period are considered to be relevant to promotion cases. In particular, higher-than-usual teaching workloads during a given review period are not considered to be evidence of higher-than-usual productivity when evaluating acceleration cases.

Evaluation: According to APM 210-3, “Clearly demonstrated evidence of excellent teaching is an essential criterion for appointment, advancement, and promotion” in the teaching faculty series. Therefore, teaching faculty are expected to exhibit excellence in teaching, as, for example, reflected in receiving highly positive teaching evaluations. The ECE Department believes that evaluation of teaching requires a holistic view of a candidate’s file, and this view must include the student voice. The department encourages the use of broad-based surveys of students that permit open-ended long-form answers (rather than just numerical ratings), as well as teaching statements and self-reflections. We acknowledge that students will tend to rate professors highly for creating low-workload classes and giving high grades and believe that faculty should not be penalized for having high expectations in their courses. We expect a faculty member to show intentional design and updating of course materials, engagement with pedagogical methods, effort towards each course and towards continuous improvement, and reflection on student comments and outcomes.

Documents that are not encouraged:

- The department does not encourage the use of individual letters from students. As stated in the 2022 *Where CAP Stood*, “unsolicited letters are usually glowing, because the student is preparing to ask for a recommendation letter, while letters solicited from a subset of students are invariably glowing when the instructor carefully chooses the subset to solicit. Thus, broad-based representation of the student voice is an important component of teaching evaluation.”
- The department also does not encourage the use of peer teaching evaluations as part of the review process. Peer teaching evaluations are of use for teaching improvement, but when the evaluation letter is included in the review file it is invariably supportive as faculty members are reluctant to criticize another instructor’s teaching performance in the context of academic review.

Professional and/or scholarly achievement and activity

Overview: For teaching faculty to be the leaders of the department’s undergraduate educational mission, it is expected that many elements of their professional and/or scholarly achievement and activity will be directly contributing to the success of this mission. It is critical for teaching faculty to engage in significant teaching-related activities which transcend their regular classroom teaching duties. This may include teaching-related research and/or pedagogical innovations. In addition to improving the quality of ECE education at UCSD, teaching faculty are expected to be recognized leaders relative

to their rank in the greater education community, including contributing significantly towards elevating the visibility of the ECE department outside of UCSD. While it is laudable for teaching faculty to engage in disciplinary research, such activities are not required, whereas strong engagement in, and leadership of, the department's undergraduate educational mission, are required.

Professional and/or scholarly activities may include, but are not limited to:

- Publishing teaching-related research results in a top-tier, peer-reviewed academic journal, such as the *IEEE Transactions on Education*
- Presenting teaching-related research results at a top-tier, peer-reviewed academic conference such as the ASEE Annual Conference
- Garnering extramural research funding to support teaching enhancements
- Writing textbooks
- Designing new courses or substantially redesigning existing courses
- Developing educational materials which reach beyond the faculty member's courses and are made available to relevant communities
- Developing and rigorously assessing new teaching pedagogical innovations
- Developing and coordinating educational programs across campus
- Developing community outreach or community-oriented programs relevant to ECE
- Running education/student support programs
- Publishing research results with undergraduate or graduate students in peer-reviewed venues

Additionally, evidence of activities or recognition which transcend a faculty member's normal classroom teaching include but are not limited to:

- Major teaching awards
- Adoption of a faculty member's teaching materials by other institutions
- Leadership in the educational community

Evaluation: Multiple activities and/or forms of recognition per year along the lines of the above examples are considered normal productivity for teaching faculty. In cases of publication in academic journals and conferences, the same considerations apply to teaching faculty as apply to faculty in the Professor Series with respect to issues such as how to count papers with multiple authors, how to count conference versus journal papers, etc. The activities and forms of recognition span a broad range and are likely to vary in significance and impact on a case-by-case basis. Therefore, it is incumbent upon each teaching faculty member to make a compelling argument when preparing promotion documents that at least two of their activities and/or forms of recognition are significant, and it is incumbent upon the Academic Personnel and Ad Hoc Committees to carefully evaluate the merit of such arguments.

Flexibility: The normative expectations presented above in numerical terms are intended to be general guidelines and not hard-and-fast rules. For a variety of reasons, individual faculty members may deserve regular merit advancement if they fall short of the

normative expectations, or may deserve accelerated advancement with rates below twice the normative expectations. Examples of such reasons include especially impactful work, evidence of which might be in the form of one or more prestigious awards, and engaging in exceptionally time-consuming activities such as writing a textbook. Each profile should be examined holistically in terms of productivity, quality, and impact. We also note that a case for accelerated advancement will typically rest on two legs of the stool, or on all three, as discussed below.

Service

Like other faculty, teaching faculty are expected to be active in service both within and/or outside of UCSD. Such service can take many forms and does not all have to relate to education, but it is expected that teaching faculty will be particularly active in, and in many cases lead, education-related service activities. Examples of education-related service activities include but are not limited to:

- Curriculum review committees (e.g., as related to ABET accreditation, external program reviews, etc.)
- Time-to-degree committees
- Curriculum revision committees
- Mentoring undergraduate students and student organizations
- ASEE service committees
- ASEE conference organizational committees
- ASEE journal editorial boards

Expectations for service rise with rank and step. While assistant professors may be considered to have adequate service by participating on a couple of departmental committees, associate professors should begin engagement at wider levels, including committees for the Jacobs School of Engineering, the Academic Senate, the Colleges, or other service opportunities that transcend the ECE Department. The Academic Senate Committee on Academic Personnel has stated in *Where CAP Stood* documents that Full rank appointees are expected to provide University-wide service outside of one's own research area, and this includes Academic Senate committees, committees for the colleges, Senate-Administration Workgroups, and system-wide committees. For faculty at Step VI and above, especially for faculty Above Scale, leadership is expected in these service roles, and university-wide service is expected in each review period. We also consider mentoring junior faculty to be an important part of departmental service, and such service should be discussed in addition to explicit departmental committee service.

The ECE Department is in alignment with campus CAP on these service expectations. Faculty will be judged on their effort and leadership in their activities, and faculty are expected to document their service contributions in terms of specific time commitments, descriptions of the impact of the committee's work to the department or school, and the particular contributions made by the candidate.

Accelerations

For faculty in the Professor Series, accelerations are typically granted to candidates who have demonstrated double the normative research productivity for their respective areas, provided their teaching and service activities and accomplishments are in the range of good to excellent. However, such a simple formulation for acceleration is not possible for teaching faculty for two reasons:

1. Teaching is the most critical activity for teaching faculty, whereas the professional and scholarly achievement and activity component has lower prominence. This component represents a smaller fraction of the overall workload for teaching faculty than the research component does for faculty in the Professor Series. Therefore, it would not make sense to base teaching faculty accelerations primarily on the achievement of double the normative level of productivity in this component.
2. Teaching faculty activities tend to be more intertwined among the categories of teaching, professional and/or scholarly achievement, and service, than those of faculty in the Professor Series. For example, updating of a lab is clearly part of good teaching practice, but it could also be considered a service contribution, and potentially if other departments or universities adopt the work it could be considered a professional achievement. Because of the overlapping of these categories, it is not practical to consider double productivity in any one category to be a basis for acceleration.

Instead, accelerations are considered when contributions to all three areas are strong, and multiple accomplishments beyond normative expectations demonstrate truly exceptional performance in at least one of the areas. Such accomplishments may include, but are not limited to, receipt of a major campus teaching award, an unusually high number of high impact publications on which the candidate is a primary contributor, a significant teaching innovation, and substantial leadership in a service effort that has a major impact on the educational mission of the department, campus, or outside community. As it is not possible to provide a simple metric for productivity and teaching excellence, all aspects of a file must be considered together in assessing the quality and impact of contributions.