

## **Recommended Use of Standard Faculty Activity Profiles in the USC School of Engineering**

This recommendation was approved by a unanimous vote of the Engineering Faculty Council on March 6, 2002.

Faculty members should be motivated by their intellectual commitments to their fields, to their students, and to the continued ascent of the School and the University. Merit raises are important because they affect faculty morale by communicating the institution's recognition of the individual faculty member's skills, efforts, and achievements. Clear definition and consistent application of the metrics for faculty evaluation should be the overriding principle applied to the evaluation of faculty performance. The basic concept behind the Spitzer profile (Faculty Load Profile) is that a well understood default faculty activity profile can be combined with negotiable adjustments if these adjustments serve the interests of both the faculty member and his or her academic unit. This concept can be applied in a way that enhances consistency and transparency of the School's faculty evaluation procedures.

The language in the original University document describing Faculty Load Profile Guidelines (Spitzer profiles) is problematic. The University Department of Financial Analysis has alerted the Engineering Faculty Council to the importance of maintaining a defensible institutional audit posture with respect to research sponsors. The University document describing Spitzer profiles defines the components of the profile in terms of time allocated to activities, and this language must be avoided. It is important to separate the role of evaluation weights attached to the various dimensions in which faculty activities occur from measures of the % effort or % time associated with these activities. This is particularly true in the case of research. Faculty activity profiles should therefore be described in terms of evaluation weights, not in terms of % effort. This point must be emphasized. The language in the University document describing Spitzer profiles cannot be directly applied in the audit environment in which the University currently exists. All references to % time or % effort should be purged from language describing faculty activity profiles. As a result, School of Engineering policies in this area should be expressed in terms of "faculty activity profiles," rather than the existing labels of "Spitzer profiles" or "Faculty Load Profiles."

The following is a list of assumptions, issues, and concerns that should be addressed and taken into consideration by Department Chairs and the Dean's Office.

### *Assumptions*

Faculty performance is quantified by a sum of products. The products in this sum have two parts. These are activity weights (evaluation weights) accounting for the relative institutional importance of each component in the faculty member's activity profile, and a numerical score that measures the quality of the faculty member's performance in each of these dimensions.

Each faculty activity profile is defined in terms of three dimensions. These are research, teaching, and service. "Availability" has never been adequately defined as a dimension of faculty performance. The term is also troubling because it introduces a temporal standard into merit review procedures, and this presents risks in an audit context. References to "availability" as part of the School's merit review procedure should be eliminated.

- The research dimension includes all of the Scholarly Activities (SA) called out in the Faculty Load Profile Guidelines (the Spitzer Profile), plus the supervision of graduate students. The research dimension includes execution of funded and unfunded research; preparation of research proposals; supervision of student research assistants, other graduate students, and post-doctoral fellows; research development, including cultivation of new and current research sponsors; specialized activities such

as prototyping; preparation of research reports, conference papers, refereed publications, and books; and any reasonably similar activities.

- The teaching dimension includes the Student-Centered Activities (SCA) called out in the Faculty Load Profile Guidelines, minus undergraduate and graduate student advisement, and minus supervision of doctoral and other advanced graduate students. Teaching includes all activities associated with University instruction, including both delivery of existing courses and the design of new courses.
- The service dimension includes in combination the University Service Activities (USA) and Extramural Activities (EA) called out in the Faculty Load Profile Guidelines, plus student advisement. This includes service on Department, School, and University committees; special service to the Department, School, and University; curriculum development, external service to the field, the professional, and the community; and administrative service.

Activity weights will consist of positive numbers normally summing to 100% across the categories of research, teaching, and service, including most circumstances in which faculty members might buy out part of their teaching obligation.

Tenured and tenure-track faculty appointments apply to the nine month academic year, extending from late August to early May. The standard faculty profile does not account for summer activities, nor does it account for external consulting activities undertaken during the academic year. School of Engineering faculty members may consult up to one business day per week during the academic year. Neither summer nor consulting activities are accounted for by the relative magnitude of evaluation weights, though the work products associated with summer or consulting activities may very well contribute to the qualitative performance delivered in the various dimensions of the faculty activity profile.

#### *Issues Related to the Overall Evaluation Process*

There is a very strong need for consistency in evaluating faculty. It is not intellectually or ethically appropriate to significantly vary the yardstick when comparing faculty performances. There should be sufficient flexibility to allow faculty members to focus on the activities in which they are strongest, because this is a policy that in general will strengthen and benefit the various departments. However, there should be consistency across Departments with respect to interpretation of what evaluation weights mean, and there should be fundamental fairness in the nature of the trade-offs permitted across these performance dimensions.

Departments and individuals should be able to play to their strengths, but there should be perceived equity both within and across departments. These objectives do not have to be competing. Moreover, high visibility research and professional standing may load on more than one category of faculty activity. Such activities may, for example, provide contributions in terms of both research and service.

#### *Setting a Faculty Activity Profile*

The most pervasive faculty activity profile reported by the current Department Chairs is a vector of evaluation weights consisting of [40%, 40%, 20%] for research, teaching, and service, respectively. This standard is pervasive enough to qualify as a default, but it is not ubiquitous and the Dean should not feel compelled to make it ubiquitous. There are very real differences in the economic opportunities available in different engineering fields; in the level and nature of agency, foundation, and industry interest in the research associated with different fields; and in the intensity of demand for instructional services and credentials. Thus, different Departments may need to establish incrementally different default faculty activity profiles. These default profiles represent a standing agreement between the Dean, and the faculty of each department, and should be ratified by a vote of each department faculty.

Department Chairs should have the authority to make individual arrangements with faculty that result in faculty activity profiles that differ from the departmental default profile. However, all profiles agreed to by Chairs and individual faculty members should be public information; and, with the exception of the department's default profile, should not be of indefinite term. Three years is a reasonable time frame for revisiting and reviewing individual profiles.

Further, faculty activity profiles should not be defined in ways that make them punitive. Chairs should not have the latitude to unilaterally increase the teaching loads of faculty members they consider unproductive in the research dimension. This would constitute a unilateral change in the faculty member's activity profile, and this should not be acceptable. Such changes should be the result of a bilateral agreement between the Chair and the faculty member. Faculty members who are not performing in the research dimension, or who are not otherwise conforming to the expectations defined in their faculty activity profiles, should receive low qualitative assessments in these dimensions, and small merit increases.

A substantial majority of the individual faculty profiles within a Department should consist of the Departmental default profile. A small set of standing alternatives is feasible, and highly preferable to a large number of individually different arrangements. This might include a standard service intensive profile, for example, or a standard teaching intensive profile. The form of these standing variations should involve a vote of the departmental faculty. More importantly, such standing alternatives should be of limited duration in the case of tenured faculty, typically three years. Individualized faculty profiles should also be possible in exceptional circumstances, and should still be of limited duration..

In some Departments, probationary faculty are permitted to teach fewer courses than tenured faculty, with the expectation that probationary faculty will invest their attention in research. Departments might quite reasonably establish different default profiles for tenured and probationary faculty. A defined probationary faculty profile would logically be research intensive, and might persist for the duration of the probationary period. Hopefully, a probationary faculty profile would also afford probationary faculty a degree of protection from extraordinary service obligations.

In sum, an a priori understanding of each faculty member's activity profile by both the faculty member and the Chair is absolutely essential. An individual faculty member and his or her Chair might feasibly agree on a sequence of nonstandard activity profiles for the individual involved. Since this outcome will be public information, the Chair might be called upon by other members of the faculty to explain or even defend this agreement.

#### *Distribution of Evaluation Weights Among Faculty Activities*

In most cases, an increase in one activity weight should necessarily imply a decrease in another or others. While a Department and Dean might choose to allow the Department to establish a default faculty activity profile that is different from the School's default, there should be School-wide standards that define the range of admissible adjustments in individual faculty activity profiles. In the event that the departmental default values are modified for some individual faculty members, minima should be defined for the weights Chairs and faculty members agree to in individual faculty profiles.

#### *Research*

The University of Southern California is research University. The School of Engineering is a research intensive School. Research is a fundamental component of Engineering faculty members' activities. There should be a 20% floor on the research activity weight attached to individual faculty activity profiles.

#### *Service*

The service weight should not be less than 5%. The administrative duties of faculty members serving as associate deans, department chairs, center directors, associate chairs, and similar

posts should be recognized as service, and accounted for in merit review procedures. Service activities should not be restricted to departmental responsibilities. Service to the department, the School, and the University at large are legitimate service contributions, as is work for professional societies and the engineering profession.

Activities that may benefit a department in an administrative sense may not necessarily be equally beneficial to the School, and vice-versa. For example, faculty participation in high visibility research, e.g., Director or Co-Director of major research center or research consortium, or participation on high-level panels or boards sponsored by the NAS, NAE, NIH, NSF, EPA, NASA, DOE and other agencies brings nonlinear benefits to the School's quest for reputation. Accomplishments of this nature will have to be recognized and rewarded appropriately in the merit review process, even though their benefit is mostly related to the School and not so directly to the department per se. The appropriate shares of internal and external University service remain undefined, but it is clear that faculty have a substantial responsibility to the institution, and that faculty service should not be entirely external to the University.

### *Teaching*

Research accomplishments, whether peer-reviewed publications or extramurally funded contracts and grants, are subjected to a global external evaluation. This is normally a very high quality evaluation with a high degree of objectivity. By comparison, teaching is subjected only to local evaluation by undergraduate or graduate students. Student opinion is relevant, but when considered alone provides a fairly low quality evaluation of teaching performance. The quality of teaching evaluation procedures should be improved or revised to include evaluation by academic peers so as to make the evaluation criteria for teaching and research more comparable.

There should be a 13.3% (1 course) floor on the teaching activity weight in individual faculty activity profiles. This weight was derived in two ways. It was derived first by referring to the standard defined for full time CSCI/ISI research faculty who teach. What share of these scholars' full time load should be accounted for by the single course these research faculty members often teach during the course of the year? Full time Lecturers and Senior Lecturers in CSCI teach six courses over nine months, and have significant undergraduate advisement, laboratory, and service responsibilities. Further, teaching by CSCI research faculty members is independent of any other responsibilities they might have for student advisement or service activities. In the hypothetical case of a Lecturer who teaches and has no service responsibilities, eight courses taught over nine months is defined as the standard for full time activity during this period. Thus, one course should correspond to approximately 12.5% of academic year annual salary.

An alternative algorithm leads also to a similar percentage. Assuming that the School's default teaching weight is 40%, and given that the SOE default teaching load for a nine-month academic year is three courses, then the evaluation weight attached to one class should be equivalent to  $40\% / 3 = 13.3\%$ .

The only Department in the School that does not currently define the standard teaching load to be three courses is the CEE Department. The CEE Department defines the standard load to be four courses, with a reduction to three courses when an overhead recovery level defined by the Chair has been met or exceeded. The committee suggests that this standard change to conform to the practices in the remainder of the School, unless the CEE faculty explicitly feels that a four-course standard is an appropriate departmental default.

At present CSCI faculty teach three courses per year with a weight of 30%, and CEE faculty teach four courses with a weight of 40%. This should not imply that the minimum annual weight on teaching is lower for CSCI or CEE faculty members than for other faculty members. A minimum teaching evaluation weight of 13.3% is still feasible in both cases at a teaching load of one course.

*Example:* If CSCI continues with a default teaching weight of 30% for 3 courses, the weights associated with course release could logically scale linearly between 30% and 13.3%. This would place the teaching weight for a CSCI faculty member teaching two courses at 21.7%. The same approach would apply to other departments that might subsequently adopt a nonstandard teaching weight.

There should be no explicit cap on the teaching weight, other than the limit implied by the minimums in the other two categories.

Classes cancelled due to low enrollment should create an obligation for the faculty member to teach in a subsequent semester, but this obligation should not exist indefinitely, and it should be permissible for faculty to meet this obligation with summer teaching. Chairs and faculty members have a shared responsibility to ensure that deferred teaching obligations are met in a timely way.

### *Course Size*

Course size matters. The extra time, effort, and attention needed to deliver especially large courses should be accounted for in the merit review process. Some of the very large courses taught in the College of Letters Arts and Sciences count as two courses when accounting for faculty activities. ECON 203: Principles of Microeconomics, is an example. Enrollments in this large service class typically run between 200 and 300 students. The College provides one model, but there are several ways the burden associated with large School of Engineering courses can be accounted for.

- If a faculty member teaches three courses per academic year, one of which is large, counting the large course as two courses would mean adjusting the faculty member's teaching weight upward. It also means adjusting other weights downward.
- The teaching weight (and thus other weights) might be left unchanged for faculty members teaching three courses per year, one of which is large, if the qualitative score assigned for performance in the teaching dimension is adjusted upwards. This would require a more explicit evaluation of teaching performance than a simple review of student opinions.
- The teaching weight (and thus other weights) might be left unchanged for a faculty member teaching a large course if he or she teaches a total of two courses during the academic year (assuming the faculty member has not bought out a course).
- The teaching weight (and thus other weights) might be left unchanged for a faculty member teaching three courses per year, one of which is large, if the faculty member is offered other forms of supplemental support intended to help maintain his or her qualitative performance in the teaching or other dimensions.

*Examples:* Consider a Department with a default teaching activity weight of 40%. If a faculty member teaches one large course and two standard courses during the course of the year, this should count as four courses, and the weight assigned to teaching in the faculty member's profile should be  $40\% + 13.3\% = 53.3\%$ .

Consider a Department with a default teaching activity weight of 30%. If a faculty member teaches one large course and two standard courses during the course of the year, this should count as four courses, and the weight assigned to teaching in the faculty member's profile should be  $40\% + 8.3\% = 48.3\%$ .

### *Course Buy-Out Policies*

Though there are certainly variations across departments; the current, most pervasive course buy-out policy in the School is that a tenured faculty member can be excused from teaching

one course in exchange for recovering 25% of his or her nine month base salary from intra- or extramural sources. Junior faculty members might be permitted additional latitude with respect to course buy-outs. In most circumstances, course buy-outs should lead to a linear decrement in the weight attached to teaching activities, and an attendant increase in the weights attached to other activities.

The resources needed to buyout courses would most often come from extramural research awards, but this is not inevitably so. Teaching might also be traded off against service activities. Some faculty might be relieved of teaching in exchange for special service, such as overseas recruitment activities, or administrative responsibilities. Faculty might rely on accumulated funds from gift accounts rather than research awards dedicated to specific projects. In most cases, such adjustments in faculty activity profiles will imply an adjustment in evaluation weights. Making such adjustments is normally to the advantage of the faculty member involved, because it allows the faculty member to increase the evaluation weight in categories in which the he or she will be in a position to deliver particularly strong qualitative performances.

In some exceptional circumstances, faculty members may want to buy-out courses for personal or family reasons rather than professional or academic reasons. Under these circumstances, it may be appropriate for the faculty member and the department Chair to agree to allow the sum of the faculty member's evaluation weights to total less than 100%. *Example:* If the SOE standard of 3 courses corresponds to a default teaching effort of 40% weight, this implies that reduction of the teaching load to 2 courses is equivalent to a teaching weight of  $40\% - 13.3\% = 26.7\%$ . If this reduction in teaching load is accomplished by recovering 25% of the faculty member's nine-month salary from extramural research sources, then the weight attached to research activities would increase to  $40\% + 13.3\% = 53.3\%$ .

#### *Sabbatical and Special Leaves*

Faculty members on sabbatical or special leaves should be required to define a merit review profile for the period of the leave that is consistent with the stated objectives of the leave request. This stated profile should be a standard response required on the standard sabbatical or special leave request form. This activity profile should remain under the unilateral control of the faculty member, with no constraints imposed on evaluation weights. In most cases, faculty members on leave will elect a research weight of 100%, but other choices are possible. For example, the faculty member might intend to continue advising graduate students, to provide oversight to an academic program, or to pursue other similar activities.