

# Policy on Faculty Workload for Computer Science

December 7, 2022

In accordance with the university-wide Policy Workload Policy (effective June 1, 2021) as well as the SLU School of Science and Engineering (SSE) Faculty Workload Policy, this document articulates the principles, policies, and procedures that govern the faculty workload and evaluation within the Department of Computer Science.

## 1 Workload Distributions

The university-wide Policy on Faculty Workload assigns 24 workload units for all faculty under a 9 month contract; any workload beyond this constitutes an overload, which must be approved by the provost and compensated accordingly. Within the Department of Computer Science, faculty members select the workload distribution that reflects their desired activity level in each area of teaching, research/scholarship, and service; these goals may be updated annually, as described in Section 6. Each individual's workload percentages must total 24 units, and under most normal circumstances, distributions among effort categories will be within the following ranges:

Teaching	6–23 units
Research/Scholarship	0–18 units
Service	1–6 units

Faculty may also have some percentage of efforts devoted to administrative duties. This might include roles such as Chair, Associate Chair, Graduate Program Director, or Undergraduate Program Director.

## 2 Research and Scholarly Activities

Data for determination of research activity level will be evaluated over a rolling 3-year interval. Such a multiyear evaluation better captures a typical cycle of activity as varying projects evolve from conception, to implementation, to dissemination. This also serves to smooth the effect of delays in the external evaluation of submitted publications and grant proposals, which are beyond the control of a faculty member. The criteria for determining a level of research activity are based on productivity indicators such as:

- Publication of original research or pedagogy, appearing in peer-reviewed journals or conference proceedings, or published texts and monographs
- Presentations of research or pedagogy in invited or contributed talks and posters at professional meetings and academic institutions

- Grant submissions, grants funded, and grants in force
- Other artifacts of research activity (e.g., software packages, data sets, patents)

As a general rule, more weight will be given to publications in higher impact venues, to invited presentations over contributed, and to higher value or prestige grants. Order of authors may also be considered, if the subarea lists them in non-alphabetical order. Differences in publication rates and grant opportunities among subareas within computer science will also be considered.

In general, faculty will fall into one of five levels of activity, ranging from high levels to no research at all. These rough levels will serve to inform workload distribution and annual percentage efforts; see Section 5 for more details.

### 3 Teaching Activities

A number of different factors will be used to evaluate overall teaching performance and workload, along with data from teaching evaluations. The SSE Policy on Faculty Workload states: “Each academic unit shall prescribe course-to-teaching workload articulations with a baseline of 1 workload unit = 1 semester credit hour but that should, by application of appropriate modifications, take account of differences in teaching modalities as well as course enrollments. Modifications may also be permitted for new course preparations and significant course redesign.”

In Computer Science, teaching a “standard” size class of about 30 students equates to the baseline transfer of 1 unit to 1 semester credit hour. For larger classes, we give two possible multipliers: a 1.2 multiplier to the workload if teaching in our larger lab (approximately 50 students), and a 1.5 multiplier if teaching a class in a larger lecture hall (more than 70 students). The multipliers are assigned based on planned course capacities, generally because of the room capacity or otherwise negotiated maximum capacity for the class. Note that these multipliers assume appropriate grading/TA support, of at least 1 grader or TA per 30 students in the class. If such support is not provided, faculty have the right to request a higher multiplier as appropriate to the time spent handling such duties. Course multipliers for new preparations or redesign will be set on an individual basis, through consultation between the chair and the faculty member teaching the new course.

While the majority of courses are traditional 3 or 4 credit hour offerings, there are some notable exceptions. Independent Study courses are not assigned in traditional fashion as part of a faculty member’s teaching assignment, yet they are recognized as a valuable part of a student’s educational experience, and thus of a faculty member’s teaching efforts. While difficult to quantify, a reasonable estimate of the formal effort contribution associated with teaching a 3-credit independent study is on par with teaching of 1-credit hour of traditional instruction. In addition, the management of the Capstone courses and the Internship/Co-op courses are significantly different in nature to traditional instruction, as well. As a result, workload units for these courses will be decided by the chair, in consultation with both the faculty teaching them and with the dean if any issues arise.

### 4 Service Activities

Strictly within the Department of Computer Science, the most significant activities requiring the shared efforts of its faculty include (but are not limited to):

- Department governance
- Academic mentorship of students

- Supervision of capstone projects
- Curriculum development/revision
- Program assessment
- Student recruitment
- Faculty recruitment
- Mentorship of junior faculty (by senior faculty)

As a general rule, these collective responsibilities must be shared amongst the faculty. As is the case with other aspects of workload, it is recognized that different faculty members may have different roles and responsibilities in service, that these roles naturally vary over a multiyear period, and that departmental service must be balanced with efforts to support related programs (e.g., mathematics, data science, or bioinformatics), the college, the university, the profession at large, and the community through professional outreach.

In general, one workload of service (out of 24) equates to about 1.6 hours per week over the 9 month appointment. Thus, a typical 3 unit allocation allows for the faculty to be spending almost 5 hours a week on regular service activities. As an example of this workload, a faculty member would gather course-level assessment for courses taught, serve on at least one significant department committee, serve as a faculty mentor to a typical share of majors/minors, and perform some professional service, on occasion, outside the department (either at the university or professional level).

Higher levels of service contribution (or displacement of some of the typical departmental service) might be achieved through participation in college- and university-level committees, or through service to the profession (e.g. as an organizer, program committee member, or steering committee member for professional meetings, as a reviewer or editor for publication, as a task force or advisory board member). In general, higher service workload levels such as these should be addressed on the annual review document as well as with the chair, so additional workload is approved and included in the faculty member's allocation of units. If changes occur during the course of the year, the faculty member should consult with the chair, although it may not always be possible to change the workload allocation on short notice for the coming year.

## 5 Representative Workload Distributions

To better illustrate a range of possible workload distributions, this section describes some typical faculty profiles. The ranges given are fairly typical for workload assignments in the CS department, but will be set for each individual faculty in a given year based on planned activities and recent performance, and hence may vary in individual cases.

Profile	Teaching	Research/Scholarship	Service
A	18–23 units	0 units	1–6 units
This is a profile of a faculty member with little to no research activity over the past 3 years, or who was primarily hired into a teaching-oriented position; while primary contributions are in teaching and service, continued professional development is expected, i.e. through participation in teaching development workshops or conferences.			
B	15–20 units	2–4 units	2–6 units
This is a profile of a faculty member with minimal research and scholarship, perhaps having one or two papers or presentations and no major grant activity over a 3-year period.			
C	12–15 units	4–8 units	2–6 units
This is the profile of a faculty member with moderate research activity, generally including three or more significant publications over a 3-year period, visibility at national or international meetings, and some form of grant expenditures.			
D	9–12 units	8–12 units	2–6 units
This is a profile of a faculty member with high research activity, typically demonstrated with above-average research productivity and consistent grant funding. Typical levels will include PI or co-PI on grants that cover at least one month of summer salary, as well as funding of one or more graduate students, and an average of at least 2 meaningful publications per year.			
E	6–9 units	12–18 units	1–4
This is a truly remarkable profile of a faculty member with outstanding national recognition, at least 3 significant publications per year, major project commitments, and grant funding that includes significant summer salary and academic-year salary buyout as well support for multiple graduate students.			

The above table contains only examples and thus does not represent a full range of possible workload distributions, and ranges are approximate in nature. Some faculty members may have distributions that fall in gaps between the above profiles. Given that teaching assignments are in essence discrete, assignments of teaching loads may take into consideration a multiyear window in order to achieve an approximate match to the desired teaching effort. Furthermore, the assignment of teaching loads for each year must, to some extent, depend upon Departmental needs.

In general, reliable data about expenditures is not available; in addition, yearly workload is set for the following academic year, but expenditure data by its nature is only historical even when available. Roughly speaking, Profile D above (with one month of summer salary and one student) would correspond to about \$75,000 per year in expenditures assuming standard NSF/NIH overhead rates, and is the equivalent of about one NSF small award. Profile E would correspond to a faculty holding either multiple awards or larger awards; assuming two months of summer salary, at least

two students, and some buyout, this would approximately equate \$200,000 in expenditures per year, again assuming standard overhead rates. However, it is worth emphasizing that overhead rates are variable, and the numbers listed above do assume the general NSF/NIH overhead rates of about 50%. Faculty who get grants from industry or with lower overhead may assume that lower overhead sources will have appropriate multipliers included, so that pre-overhead numbers for such sources will count equally to NSF or NIH grants.

Appropriate workload will also be assigned for administrative roles, such as Chair, Associate Chair, and Graduate or Undergraduate Program Director, in consultation with the dean.

As new faculty members enter the Department, every reasonable provision will be made to support their success. In line with this, junior tenure-track faculty members will automatically qualify for profile C as outlined above (unless they obtain major funding, in which case they might qualify for “profile D” or “profile E”). In addition, junior faculty will qualify for one extra course release during each of their first two years at SLU, placing them starting at profile D for at least the first two years. Newer members of the department (on either tenure track or non-tenure track) will also typically be encouraged to avoid taking on more significant service responsibilities in their first few years.

## **6 Procedures**

Faculty are required to report their research, teaching, and service contributions as part of the Annual Activity Reports each winter. As part of that report, faculty are to declare their desired workload percentages for the upcoming year. Those goals will be discussed with the Department Chair, in determining the workload distribution for the following year.

## **7 Sample workload rubric**

As part of the annual review process, each faculty will be given a numeric rating for each of teaching, research, and service, based upon the following rubric. Faculty members with administrative duties reflected in their workload percentages will also be assigned a rating for those administration activities. A faculty member’s overall rating for the year will be calculated as the weighted average of the categorical ratings, with weights matching the relative workload percentages for that faculty member for that calendar year.

Note that the sample rubric below is roughly tailored for a faculty member on profile C or D; it will be adjusted appropriately for faculty on different profiles, particularly in regards to research outputs and expectations.

Rating	Teaching	Research <sup>1</sup>	Service <sup>2</sup>
1	not meeting basic teaching obligations	no recognizable research program	absence from department meetings, refusal to accept service assignments
2	weak evaluations and syllabi; little variety; no attempt to improve	ongoing program, but little or no output; no publications, grants, or submissions	minimal participation; unwillingness to work on department activities
3	mediocre evaluations and syllabi; minimal contribution to departmental efforts; some attempt to improve	lower than average output or quality; some evidence of submission of publications and/or grants	minimal service to U.D. and the profession, or some tradeoff between these
4	moderate evaluations, syllabi, and contributions, or a similar balance; some capstone supervision	about one-half publication of good quality per year; some effort for funding; some external recognition	basic service to both U.D. and the profession, or medium to one and minimal to the other
5	good evaluations, syllabi, and contributions, on balance; capstone supervision	about one publication of good quality per year; good funding efforts; moderate visibility of work	medium service to both U.D. and profession, or good to one and basic to the other
6	strong evaluations, syllabi, and contributions; capstone supervision	about one and a half publications of good quality per year; internal funding and/or good effort for external funds	good service to both U.D. and profession, or very good to one and medium to the other
7	excellent evaluations/syllabi; capstone supervision; one of curriculum level, innovative practices, indiv. supervision	two or more good publications per year; moderate funding; good visibility of work	very strong commitment to both U.D. and profession, or exceptional to one and medium to the other
8	excellent evaluations/syllabi; capstone supervision; two of curriculum level, innovative practices, indiv. supervision	prolific publication (more than two per year) with demonstratable impact; significant external funding	outstanding to both, or exceptional to one and good to the other
9	outstanding evaluations and contribution plus external recognition outside the department	clear international reputation; outstanding productivity; strong external funding	leadership positions at university, department, or profession, and very good service to others

<sup>1</sup>Given typical timeframe for research projects and for external evaluations of publications and proposals, annual evaluation of research should be based on a sliding window of the recent three years of activity.

<sup>2</sup>Use of phrase "U.D." in descriptions shorthand for University/Department