

# Policy on Faculty Workload for Computer Science

May 2, 2016

In accordance with the university-wide Policy on Faculty Workload, 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 provides the following guiding principle:

“Individual faculty members are responsible for performing their assigned workload in ways that promote academic excellence and are consistent with the University’s mission. Nonetheless, faculty members differ in their interests, needs, talents and strengths. The University embraces, values, and encourages this diversity among its faculty. Accordingly, workload policies should be sufficiently flexible to facilitate and encourage each faculty member to do what they do best, subject to the needs, objectives, and strategic priorities of the program, department, or academic unit(s) to which the faculty member is assigned.”

Within the Department of Computer Science, faculty members select the workload distribution that reflects their desired activity level in each area of teaching, research, and service; these goals may be updated annually, as described in Section 6. Each individual’s workload percentages shall total 100%, and under most normal circumstances, distributions among effort categories will be within the following ranges:

Teaching	30–85%
Research	0–45%
Service	10–20%

It is also possible to have some percentage of efforts devoted to administrative duties. This might include roles such as Chair, Associate Chair, and Graduate 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 grants with more significance. Differences in publication rates and grant opportunities among subareas within computer science will also be considered.

### 3 Teaching Activities

The university-wide Policy on Faculty Workload defines a “workload unit” as approximately equal to teaching a one-credit-hour class, and defines 100% effort as equivalent to 24 such workload units. However, that policy notes, “since classes vary according to size, level, degree of preparation and other factors, a given three credit hour class may count for more or less than three workload units.”

Computer science is an exceptionally demanding field in terms of teaching workload. This is due in part to the great importance of project-based learning within a successful curriculum, and thus an increased burden on faculty members for the preparation and evaluation of such projects. Furthermore, with the rapid pace of changing technologies, the “shelf life” of typical computer science course materials is significantly shorter than for many academic fields.

For these reasons, each credit hour of computer science instruction will be considered as 1.14 workload units. Note that by this measure, teaching 18 credit hours of computer science during an academic year would constitute approximately 20.5 workload units, and thus over 85% effort using the university’s definition of 24 workload units. Additional consideration should be given to the number of distinct topics that a faculty member teaches during a given semester, year, or multiyear period, with more significant effort needed for new course preparations. Interdisciplinary courses that are co-taught with a faculty member from another department will still be considered a “full” course for the Computer Science member.

While the majority of the Computer Science courses are traditional 3 credit-hour offerings, with 150 minutes of instruction per week, there are some exceptions to this rule.

Two of the most significant courses in the curriculum (CSCI 1300 and CSCI 2100) are 4 credit-hour courses, meeting four days a week and requiring proportionally more assignments and projects of the students. It is therefore natural that teaching one of these 4-credit courses be considered as 33% more effort than for a 3-credit course.

The Independent Study courses (CSCI 2980, 3980, 4980) 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.

The management of the Capstone courses (CSCI 4961 and 4962) and the Internship/Co-op courses (CSCI 3910, 4910, 4915) are significantly different in nature to traditional instruction; efforts devoted to those courses are considered as service, and addressed in the next section.

## 4 Service Activities

The university-wide policy states that “service encompasses a faculty member’s contributions to departmental, college, or university activities or to a faculty member’s academic community beyond SLU.” Strictly within the Department of Computer Science, the most significant activities which depend upon 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 rules naturally vary over a multiyear period, and that departmental service must be balanced with efforts to support related programs (e.g., mathematics, bioinformatics), the college, the university, the profession at large, and the community through professional outreach.

As an example of a minimal share of this workload (constituting a 10% workload effort toward service) a faculty member would participate in regular department meetings, gather course-level assessment for courses taught, serve on at least two significant department committees, as a faculty mentor to a typical share of majors/minors, as a supervisor of at least one capstone team throughout an academic year, and perform some professional service, on occasion, outside the department.

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 or program committee member for professional meetings, as a reviewer or editor for publication, as a task force or advisory board member). It is recognized that some committees have significantly more work than others, and that serving as a committee chair may typically require two to three times more effort than a member of that committee.

The two-course capstone sequence, required of all undergraduate majors, is traditionally delivered with the supervision of student projects distributed among the faculty-at-large within the department, but with one faculty member serving as instructor-of-record for both CSCI 4961 and 4962 each semester, to handle the administration of the course (e.g, scheduling, grading). Serving as the instructor-of-record is considered as additional service to the department, with effort each semester approximately on par with instructing a 1-credit hour class (and thus approximately 5% additional annual effort for each semester as instructor).

## 5 Representative Workload Distributions

To better illustrate a range of possible workload distributions, this section describes some typical faculty profiles.

Profile	Research	Teaching	Service
A	0%	85% (3-3 course load)	15%
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; primary contributions are therefore through teaching and service.			
B	15%	71% (3-2 course load)	14%
This is a profile of a faculty member with moderate research and scholarship, perhaps having one or two papers or presentations and no grant activity over a 3-year period.			
C	30%	57% (2-2 course load)	13%
This is the most typical profile of research-active faculty members. Such faculty would likely have three or more meaningful publications over a 3-year period, some visibility at national or international meetings, and perhaps some form of grant activity.			
D	45%	43% (2-1 course load)	12%
This is a profile of a faculty member with exceptionally high research productivity, typically demonstrated with above-average research productivity and consistent grant funding.			
E	60%	30% (1-1 course load)	10%
This is a truly remarkable profile of a faculty member with outstanding national recognition, major project commitments, and grant funding that includes academic-year salary buyout.			

The above are only examples and thus do not represent a full range of possible workload distributions, and percentages 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 will take into consideration a multiyear window, and the mix of 3-credit and 4-credit courses taught, 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.

As new faculty members enter the Department, every reasonable provision will be made to support their success. In line with this, the Department will typically provide a one-course reduction for each of a faculty member's first two years at SLU. Furthermore, 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"). Newer members of the department will typically be encouraged to avoid becoming overburdened with service responsibilities.

## 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.

The teaching load for the Department Chair will be determined based on Departmental needs and in consultation with the Dean of the College of Arts and Sciences.