

Criteria for Faculty Evaluation, Reappointment, Promotion, & Tenure

Computer Science, School of Computing and Information Science

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The purpose of this document is to provide criteria for evaluating Computer Science faculty: those faculty of the School of Computing and Information Science whose primary responsibilities are to the School's degree programs in computer science. The individual will be assessed on their contributions toward achieving the goals and objectives of the Computer Science faculty and the School of Computing and Information Science, as well as the goals and objectives of the College of Liberal Arts and Sciences, the Graduate School, and the University of Maine in general. This document will be used as the guideline for making decisions concerning promotion, tenure, and other University rewards and compensations.

Evaluation Criteria and Levels of Performance

The three categories for evaluating performance are teaching, research, and service. The criteria for evaluations within each category shall be identical for all faculty members, but it is not expected that all faculty attain the same level of performance in each category. In weighing an individual's contributions, recognition shall be given not only to the accomplishments achieved, but also to the constraints and the opportunities affecting the achievements as a consequence of that individual being a member of program and school teams.

The strength of the Computer Science faculty within the school lies in the effective combination of teaching, research, and service. Indeed, some faculty activities may contribute simultaneously to more than one area and may be evaluated accordingly. Because it is unrealistic to expect that all faculty will demonstrate outstanding performance in all three areas, the criteria for promotion and tenure can be fully satisfied in a number of ways, as described below. The criteria outlined below are for a standard appointment, and at all reappointment and promotion points, the Peer Committee will adjust expectations within the criteria for consideration of faculty members with appointments that vary from this standard.

Teaching

Each faculty member is expected to be both an effective teacher and an effective advisor. Teaching is a major responsibility of every faculty member in the School. It includes keeping abreast of recent

developments in computer science and disseminating these to colleagues and students. Advising includes not only interactions with students during scheduled advising times, but also informal interactions. The advisor is expected to help broaden students' awareness of the latest career, research, and graduate education opportunities in computer science and to fully support them making well-informed choices during each year of their studies at the University.

Although both are important, for faculty evaluation, teaching effectiveness will be given more weight than advising.

Teaching performance is rated as *excellent*, *satisfactory*, or *not satisfactory*. Criteria for *satisfactory* and *excellent* are described below; failure to achieve at least satisfactory criteria will result in a rating of *not satisfactory*.

Satisfactory: Over the considered time period, the faculty member should have done all of the following:

- Established or maintained a record as an effective teacher of undergraduate and graduate (if assigned) courses.

Evidence for this includes overall positive course evaluations (including evaluations from any overload, summer, or other continuing education courses taught) and written evaluations of classroom teaching by peers who have observed the faculty member during classes. Teaching a mix of courses at different levels will be seen as positive. Occasional negative outliers for which no mitigating circumstances can be established may be compensated for by evidence of significant improvement in subsequent classes. Example mitigating circumstances include it being the first time a course is offered, the first time the course is offered by the faculty member, or when shifts in the curriculum change the course's content or which courses the students have taken beforehand.

The faculty member is expected to keep courses taught up to date and responsive to curricular needs.

- Established a record of effective undergraduate academic advising (if such duties are assigned).

Faculty are expected to be available and responsive to and supportive of their advisees, especially during the registration period each semester. At minimum, the faculty member should meet with their advisees during or prior to registration each semester. Consequently, evidence for advising effectiveness can include such things as adequate availability during registration advising times (e.g., number of hours devoted to advising appointments, lack of complaints from students about availability, efforts to get in touch with students), and positive signed notes from students. The faculty member should be knowledgeable about the current requirements and policies.

- Demonstrated effectiveness advising and mentoring graduate students (if such duties are assigned).

This includes advising graduate students as well as serving on MS or PhD committees in the School or other disciplines. Evidence of effectiveness for the former may include feedback from graduate students advised, number of students completing their thesis/dissertation in a timely fashion, faculty evaluation of the quality of the students' theses/dissertations, etc. Evidence of effectiveness for the latter may include feedback from the students' advisors and others who

served on the committees. Evidence for effective advising and mentoring may also be serving on a thesis committee for a student in another department or serving as an external member for a student at another institution.

- Participated in required assessment activities (e.g., those motivated by ABET accreditation).

Although not required of the faculty member, other available evidence of satisfactory teaching, advising, and mentoring will also be considered. Examples of such evidence might include:

- Signed student comments from course evaluations.
- Signed, written comments from current or former students.
- Seeking and/or obtaining grants to support teaching projects or to purchase education-related equipment.
- Teaching innovations, including design and approval of new courses, significant effective re-design of existing courses, or use of innovative methods of instruction.
- Continuing education activities, such as participation in teaching workshops or conferences.
- Attendance at campus workshops on teaching (e.g., those sponsored by the Center for Innovation in Teaching and Learning [CITL]) or advising (e.g., hosted by CLAS Advising and Academic Services Center).
- Election to teaching-related honor societies or receipt of teaching, mentoring, or advising awards.
- Internal or external research or scholarship awards for graduate students supervised by the faculty member.

Other evidence of satisfactory teaching as appropriate for the faculty member will also be considered.

Excellent: Excellent teaching goes beyond the criteria for satisfactory teaching. For a rating of excellent, the faculty member should have done both of the following:

- Have predominantly above-satisfactory course evaluations from undergraduate and graduate students (if graduate teaching is assigned). In this context, “above-satisfactory course evaluations” means evaluations above those that would be considered to warrant a satisfactory rating for teaching for others in the unit.
- Have contributed substantially to improving the overall quality of the School’s teaching.
This can include contributing to curriculum development or engaging in teaching innovations, designing/redesigning courses, or use of innovative methods of teaching going beyond what is expected for a satisfactory rating.

Although not required of the faculty member, other evidence of excellent teaching, advising, and mentoring can also be considered. Examples of such evidence might include:

- Above satisfactory undergraduate advising, for example, helping students succeed in times of personal hardship or providing encouragement and helping struggling students find the resources to succeed.

Evidence for this could come, e.g., from letters from advisees or information collected for other purposes (e.g., senior surveys).

- Effective student advising/mentoring for Capstone or Honors theses or guided research (formal or informal).

Example evidence of effectiveness includes student theses, student authored or co-authored publications, student awards, successful job placement, or acceptance to competitive graduate programs due in part or whole from the advising/mentoring activities.

- Receipt of internal or external funding for improvement of teaching, including, for example, Maine Learning Assistant grants.
- Internal or external research or scholarship awards for graduate students supervised by the faculty member.
- Publishing a textbook or other pedagogical material.

Other evidence of excellent teaching appropriate for the faculty member will also be considered.

Research

Faculty involvement in research is essential to a high-quality program and is one of the avenues by which a faculty member can contribute to the growth of knowledge in the field as well as the quality of the Computer Science unit and the School. The criteria for *satisfactory* and *excellent* ratings for a faculty member's performance in research are below¹. Failure to meet at least the satisfactory criteria will result in a rating of *not satisfactory*.

Satisfactory: For satisfactory performance over the evaluation period, the faculty member should have done all of the following:

- Have demonstrated the development or continuation of a significant research program in scholarly contributions to computer science or closely-related fields.
- Have established or maintained a track record of sound scholarship as evidenced by publications in recognized, peer-reviewed research outlets.
 - Number of publications: Faculty are typically expected to have authored or co-authored on average over the evaluation period at least one such publication per year. This is in accordance with the Computing Research Association's (CRA's) best practice guidance that candidates be evaluated for promotion and tenure in computer science on the basis of "the contributions of their most important three to five publications (where systems and

¹For those faculty whose appointment has a 50% or higher research component; for others, the faculty member's Peer Committee should adjust the expectations accordingly.

other artifacts may be included).² For a co-authored publication the faculty member is expected to define their contributions.

– Appropriate outlets for publication:

- * Due to the extraordinary pace of research in computer science, and unlike many other disciplines, conferences, symposia, and workshops are often the publications of choice rather than (or in addition to) journals. Many such venues are more highly-reviewed and have lower acceptance rates than the journals in corresponding areas. Thus appropriate publication venues for CS faculty members include not only journals, but also peer-reviewed national or international conference, symposium, and workshop proceedings where acceptance is on the basis of peer-review of full papers.
- * Regardless of venue, published work should be rigorously peer-reviewed.
- * In most cases, review should be on the basis of the full paper or article. In some cases, for example when publishing interdisciplinary work in areas where conference paper review is solely on the basis of extended abstracts, then the Peer Committee can decide to accept such publications as counting the same as those reviewed on the basis of full papers.
- * Publication of books or book chapters is also considered an acceptable publication venue.

• Have actively engaged in obtaining adequate resources to support research activities, especially to support graduate students. This may be evidenced by:

- Preparation and submission of research proposals as PI or co-PI to competitive grant programs, including internal programs and grants given by government agencies, foundations, or industry. The faculty member is expected to provide information about the nature and portion of their contribution to the work.
- Receipt of internal or external research grants from competitive grant programs, where external grants will have more weight. The faculty member is expected to provide information about the nature and portion of their contribution to the work.

Although not required of the faculty member, other evidence of satisfactory research can also be considered. Examples of such evidence might include:

- Interdisciplinary research: interdisciplinary work is encouraged and will be viewed favorably.
- Scholarly activities (peer-reviewed publications or presentations) in teaching and learning.
- Participation in grant proposals/awards as one of the listed senior personnel.
- Participation in working groups that produce significant products, for example, Internet Engineering Task Force (IETF) working groups.
- Receipt of internal or external grants for equipment to support research activities.

²B. Friedman and F.B. Schneider, *Incentivizing Quality and Impact: Evaluating Scholarship in Hiring, Tenure, and Promotion*, Computing Research Association Best Practices Memo, adopted February 2015.

- Other scholarly publications, including edited volumes, non-peer-reviewed articles, short papers, abstracts, editorials, letters etc.
- Presentations (talks or posters) at recognized professional meetings.
- Election to research-related honor societies or receipt of awards for research.
- Consulting at a level that enhances one's knowledge and/or standing in the field; this may also be considered service.
- Participation in workshops where attendance is invited or decided competitively.
- Publication of technical or user-oriented reports.
- Publication of data or software of use to the research and user communities by, for example, using GitHub or other repositories to distribute the data/software.
- Involvement of commercialization or technology transfer of research results, including application for or receipt of patents.
- Direction of student research as indicated by completed theses and dissertations or publications resulting from student research.

Other evidence of satisfactory research as appropriate for the faculty member will also be considered.

Excellent: Excellence in research goes beyond the criteria for satisfactory. Examples of evidence for this might include:

- National or international recognition as a researcher in the professional community. Evidence from this may include external letters, serving as an officer in an international conference, NSF review panel invitations, and/or a large number of citations of the faculty member's publications by others.
- Sustained high research productivity. Evidence for this may include:
 - Authorship or co-authorship of more than the satisfactory average number of peer-reviewed scholarly publications.
 - Peer-reviewed publications in top publication venues, where evidence of quality may include acceptance rate, impact factor, or other accepted ratings of journals and conferences.
 - Being the principal author of peer-reviewed publications.
 - Peer-reviewed publications with advised/mentored students as co-authors.
 - Award of significant research grants, such as very large grants, CAREER (awards for early-career faculty), or grants where the acceptance rate was very low. The faculty member is expected to provide information about the nature and portion of their contribution to the work.
 - Any other evidence of sustained high research productivity.
- Publication of books or monographs that organize the field, advance the state of the art, or significantly influence teaching in the field through recognized national or international publishing outlets.

- National or international prizes recognizing research or scholarship.
- Invited presentations and keynotes at recognized national or international professional meetings.
- Internal or external research or scholarship awards for graduate students supervised by the faculty member.

Any other evidence of excellent research as appropriate for the faculty member will also be considered.

Service

Each faculty member is expected to devote time to service. Service includes activities on behalf of the School, College, University, State, the profession, and/or the general public.

The level of service expected of the faculty member depends on rank; more service is expected from senior faculty than junior faculty, who should be concentrating more on developing their research program and honing their teaching skills.

Evidence of service should include a description of the organization (e.g., committee name, the publication involved for an editorial board, the conference for review or program committees, the agency for proposal reviews, etc.) as well as the number of instances and dates as appropriate. The faculty member should describe their role(s) and level of participation and the committee's accomplishments and impact during the time the faculty member was involved. Letters from others documenting the faculty member's participation are welcome.

A faculty member's performance in service is rated as *satisfactory* or *excellent*; failure to achieve at least satisfactory is considered to be *not satisfactory* performance.

Satisfactory: For satisfactory performance, the faculty member should have over the considered time period done all of the following:

- Contributed to the governance, planning, and programs of Computer Science, the School, the College, the University, or the System through committee work (including ad hoc committees) or other documented means (e.g., being undergraduate coordinator, graduate coordinator, serving as an advisor for a student organization, etc.).
- Contributed to the professional community as evidenced by *some* of the following:
 - Reviewing manuscripts for professional journals or conferences.
 - Reviewing grant proposals or serving on review panels for funding agencies.
 - Chairing or serving on the editorial board of recognized professional journals.
 - Editing a professional book or special volume of a journal.
 - Serving on the program committee, organizing, chairing, or otherwise contributing to the organization of recognized national or international professional meetings, such as conferences, seminars, workshops, or symposia.

- Serving in an official capacity for a professional society.
- Supporting academic program review of entities outside University, such as participating as a member of an accreditation team or other program review committee.
- Direction of student research as indicated by completed theses and dissertations or publications resulting from student research.

Although not required of the faculty member, other evidence of satisfactory service can also be considered. Examples of such evidence might include some or all of the following:

- Professional consulting.
- Serving as an advisor or as a member of an advisory committee for private industry, government or non-profits at the international, national, state, or local level.
- Participating in open houses for accepted or prospective students or similar events.
- Outreach to industry, government, K-12, or the general public that makes information or expertise of the University available to professionals or the public via short courses, seminars, public lectures, answering questions of prospective students, advising state or national agencies, helping the media interpret events in the computer science field, or similar means.

Other evidence of satisfactory service appropriate for the faculty member will also be considered.

Excellent: For excellent performance, the faculty member should show substantial service activities both within and outside the University, for example, as evidenced by activities listed above. The faculty member is expected to exhibit leadership in service activities to be rated at this level, for example as a committee officer and/or as a primary contributor to the work of the committee.

Tenure, Promotion, and Post-Tenure Reviews

The Peer Committee will use the criteria presented in the previous section for all evaluations of the faculty members for all purposes related to tenure and promotion. If there are deviations, for example, for a faculty member with a joint appointment, they will be captured in a memorandum of understanding (MoU) between the units involved. Any such changes must be made and made known to the faculty member well in advance of any evaluation, and the faculty member's personnel file must include a record of the changed criteria.

Constitution of the Peer Committee

The Computer Science Peer Committee is constituted of all tenured members of the School of Computing and Information Science whose primary responsibilities lie with the computer science programs of the School. The Director is a non-voting, *ex officio* member of the Committee. A consultative non-voting member may be added from each of the other SCIS faculty units (i.e., New Media and Spatial Informatics) at the invitation of the Computer Science faculty peers on the

committee. The Peer Committee also has discretion to expand its membership beyond the bounds of the School through 2/3 majority vote. For a decision regarding promotion, a subcommittee of all Committee members at or above the desired rank will make the decision.

For faculty members whose work is highly interdisciplinary, letters will be solicited from colleagues outside the unit with whom the faculty member has worked or who is familiar with their research. For faculty with joint appointments, a joint peer committee is necessary, as specified in an MoU.

Tenure-Track Faculty Reappointment Without Tenure

Each tenure-track faculty member who has not yet achieved tenure will be reviewed each year by the Peer Committee, with this review being used as needed for reappointment decisions. Reappointment requires a record that indicates it is probable that the candidate will be granted tenure at the end of the probationary appointment. Evaluations will be done using the criteria outlined above for teaching, research, and service, and projections as to the likelihood of achieving tenure will be based on the requirements for tenure described below, i.e., a rating of excellent in one of teaching or research, with ratings of at least satisfactory in the other and in service.

Assistant professors hired before they have obtained a PhD will be expected to obtain the degree before they can be recommended for reappointment, unless an exception is made (by the Peer Committee and any relevant elements of the Administration) based on reasonable progress towards the degree. The degree requirement may be waived under truly exceptional circumstances based on exceptional experience in the field; such a waiver shall be at the discretion of the Peer Committee, the CS program faculty, the CIS faculty, and any relevant elements of the Administration.

In exceptional cases, if consecutive reappointment evaluations result consistently in excellent scores in all three areas, the Peer Committee may indicate its support for the candidate to apply early for promotion and tenure. For early promotion and tenure, the same standards will apply as for applications at the usual time.

Tenure and Promotion to Associate Professor

Granting tenure and promotion from assistant professor to associate professor requires that the faculty member has demonstrated excellent performance either in research or teaching and satisfactory performance in the other two areas. The faculty member should demonstrate high promise for continued development and growth. Normally, the evaluation of performance will be based on information and documentation supplied by the faculty member, by the Peer Committee, by letters from five peers external to the University of Maine System, and/or by other sources from within the University.

In accordance with University and AFUM policy, the Peer Committee members will prepare a letter to the Director indicating their recommendation and the reasoning behind it. Members will have the opportunity to sign the letter, with abstentions being noted. It is expected that the letter will be an accurate record of the Committee's deliberations with a record of the vote (unanimous or the specific vote tally as appropriate). In the case of serious dissent, the letter shall document the dissenting members' concerns.

In the event of major life changes (birth of a child, loss of a spouse, etc.), major illnesses, etc., the faculty member should consult the AFUM and University policies for “stopping their tenure clock.”

Promotion to Professor

Promotion from associate professor to professor requires a record, since promotion to associate professor, of excellent performance in either teaching or research and satisfactory performance in the other two areas. The faculty member should be recognized by peers as having made a significant contribution to her/his area of expertise at a national or international level, demonstrated leadership abilities, and enhanced the reputation of the University of Maine.

Moreover, the faculty member should demonstrate a likelihood for continued excellence. The level of accomplishment will be determined from evaluation of the unit member’s reputation among knowledgeable individuals external to the University as well as evaluation of information and documentation supplied by the unit member relevant to activities in teaching, research, and service.

Since there is no mechanism for “stopping the clock” for promotion to full professor, the Peer Committee has discretion in taking into account some lapses in productivity due to major life changes (birth of a child, loss of a spouse, etc.), major illnesses, etc., when deciding on the faculty member’s record of performance since promotion to Associate Professor.

Granting Tenure at Rank

If hired at the rank of associate professor or professor without tenure, granting of tenure requires in general satisfying the same criteria as required for promotion to the rank. The period of time prior to review for tenure is typically a matter of negotiation as part of the hiring process.

For those faculty coming from industry, government, or other non-academic settings where their record may *not* for valid reasons meet the criteria required otherwise for promotion to the rank, the committee shall have latitude to base their decision on their evaluation of the faculty member’s likelihood of achieving success based on their past record.

Post-Tenure Review

The expectation is that all Computer Science program faculty members will make sustained contributions toward the goals and objectives of the CS programs and of the School. The considered period of evaluation begins at the last promotion or the last post-tenure review, whichever is more recent. Evaluation is carried out by the Peer Committee.

Criteria for a satisfactory post-tenure review are that the faculty member in the review period has been an effective teacher and academic advisor, has an ongoing program of research (for those with research as part of their appointment), and has been engaged in service. The faculty member will have during the period carried out their duties as required by the contract and as expected based on School norms as appropriate for their rank.

For an above satisfactory review, the faculty member will have carried out their duties in a manner beyond what was required and expected, as recognized and determined by the post-tenure review subcommittee of the Peer Committee.

The post-tenure review committee shall make their recommendation known to the faculty member being reviewed in a timely enough manner that the member will have one week to respond to the review. The committee can change their recommendation after the response, but are under no obligation to do so. The committee's recommendation, along with a response from the member being reviewed if they desire, shall be forwarded to the Director by the review deadline.

Reappointment and Review of Lecturers

Reappointment of lecturers requires that the faculty member has demonstrated excellent performance in one of teaching or service and at least satisfactory in the other since the last reappointment. For a lecturer, service contributions to the profession are not required for a satisfactory or excellent performance in service.

Reappointment of lecturers ends after six years. At that point, lecturers are regularly reviewed using the same cycle and process for post-tenure review. A satisfactory post-tenure review is given for satisfactory performance in both areas of teaching and service (as amended above). If the faculty member does not meet the criteria for satisfactory performance in service while performing at an excellent level in teaching, it is at the discretion of the Peer Committee to rate the overall performance as satisfactory or not satisfactory. An above-satisfactory post-tenure review requires excellence in teaching and at least satisfactory in service.

Scholarly work, such as publications in CS pedagogy or other research, will be viewed favorably both for reappointment and for post-tenure reviews for lecturers.