RPT Document for Department of Computer Science
College of Engineering and Applied Science
Approved by Interim Provost
May 12, 2016

Introduction:
Standards and processes for reappointment, promotion and tenure of faculty are governed by Regent Law Article 5. These processes and requirements are further delineated in Regent Policy, University of Colorado Administrative Policy Statements, and the "Faculty Statement of Principles of Professional and Ethical Responsibilities" approved in 2008 by the University of Colorado faculty. Campus guidance is supplied in UCCS Policy # 200-001. The Department of Computer Science incorporates the above processes and requirements into its departmental criteria, which are to be used throughout the review process.

These criteria are to be considered guidelines for the general review of candidates for reappointment, promotion and tenure in the Department of Computer Science at the University of Colorado Colorado Springs. The department is committed to quality teaching, strong research/creative work, and effective service to the university, the profession, and the community. The criteria are based on appropriate and current standards of professional performance in our discipline. Each candidate's case will be reviewed and judged on its individual merits and circumstances. The evaluation process assumes: possession of an appropriate terminal degree; competent education and training in the discipline(s); conduct which reflects the professional and academic standards for generating, validating, disputing, and transmitting knowledge; and an appreciation of and respect for the rights, duties, and privileges associated with academic freedom and collegial responsibilities.

When these criteria are applied to faculty who were granted time toward tenure, the work performed during the years granted toward tenure shall be considered equivalent to work performed at UCCS. While a faculty member's career record will be considered in personnel actions described here, the main emphasis of evaluation will be on work performed at UCCS and, in particular, progress since the last review.

The Computer Science Department has decided to recognize and reward scholarly activity and creative work related to the field of computer science such as peer-reviewed games and peer-reviewed graphics and films, but will not credit such activity towards promotion or tenure. Therefore, such activities will be restricted only to tenured faculty. Such activity will count towards workload, annual evaluation and post-tenure review but not towards tenure or promotion.

The faculty dossier shall include a copy of their Google-scholar page with only their papers.

The criteria detailed below can be amended by majority vote of the department faculty subject to approval by the Dean of the College of Engineering and Applied Science and the Executive Vice-Chancellor for Academic Affairs.

Definitions:

A *refereed publication* is a paper that receives multiple formal written reviews provide before acceptance and publication. The reviews shall be included in dossier.

Significant publications are those that are more likely to have long term impact, or have demonstrated significance by their level of citations. We define *Significant publications* to include journal, conference, workshop and other papers, which meet the following:

1. Multiple formal written reviews (which shall be included in dossier)
2. Publication in a venue named in Google metrics h-index and in the top 20 for some top listed subcategory or a venue with a Google metric h-index of at least 20. The portfolio should include supporting data.

<div align="center">OR</div>

1. Any paper with at least 30 non-self citations in Google Scholar. The candidate will need to list the citations in the dossier. Papers with higher citation number can be considered very significant papers, which may be counted as more than two regular papers.

A *significant proposal/grant* is defined as a competitively reviewed external proposal/grant in which the candidate is the PI and is responsible for funding of at least $100,000. Reviews of the significant proposal shall be included in the dossier.

Teaching Metrics: The candidate's teaching shall be evaluated by multiple means, which may include:

- Faculty Course Questionnaires ("FCQ") (required documentation)
- Teaching load (required documentation)
- Letters from Candidate selected students.
- Letters from Committee selected students.
- The candidate's work with students outside of the classroom as a mentor, research advisor, independent study director, intern supervisor and similar activities shall be considered
- Candidate demonstration that their courses are coherently organized and thoughtfully presented
- Candidate demonstration of their commitment to teaching, evidence of which will be good interaction with students, concern with curriculum, and satisfactory development of skills in presenting material
- Improvement and innovations in teaching methods and in curriculum development and contribution to the department will be taken into consideration
- Developing and updating course notes and writing books are important facets of teaching, and
- Developing web support for teaching.
- Curriculum and Scholarship Grants
- Other Regent's/College components of teaching evaluation.

Initial Review:

The candidate's total record, including teaching, research and service, shall be evaluated. No specific rating in each area is required, but the record must show sufficient potential for future success to justify reappointment.

Teaching: In addition to demonstration of quality via the Teaching Metrics defined above, the candidate shall:

1. Teach the requisite number of credit hours for the approved workload.
   a. Note: Thirty accumulated thesis/project credit hours, not used for buying out of a course, count as a three credit hour class when calculating the number of credit hours taught.
2. Achieve a FCQ rating of not more than one standard deviation below the department three-term rolling average on student evaluations in comparable classes.

A positive peer review of teaching can be included in the evaluation and the portfolio may combine it with above standard performance on other items, including but not limited to FCQ, workload, proposal and grant activity and student letters, to argue that despite missing one or more of the items listed above, the candidate overall is meeting or exceeding standards. The committee must approve faculty providing "peer" reviews. The committees' overall evaluation will determine if there is sufficient potential for future success to justify reappointment.

Research and Creative Work: The department recognizes that scholarship can take many forms. Our department emphasizes fundamental discovery, scholarly work which integrates existing knowledge, and applied research. We recognize scholarly study of teaching and learning issues in our field as a form of research. The candidate is expected to demonstrate a well-designed research plan and the potential for continued development as a researcher and progress toward publication. This might include drafts of work in progress, presentations at professional meetings, and/or articles submitted for publication.

Service: The department recognizes service to the campus, community and to our profession. At this stage, the candidate is expected to be involved in departmental meetings and activities.

Comprehensive Review:

The candidate's record in teaching, research, and service will each be evaluated separately as below expectations, meritorious, or excellent. The candidate must demonstrate sufficient progress toward tenure to justify reappointment. This will typically be a rating of at least meritorious in all three areas. The review may also take into account issues of material bearing such as strategic goals of the department, college and campus.

The department will solicit letters from respected scholars in the candidate's field(s) of research per campus policy.

For comprehensive review, proposal and grant activity can include both PI and Co-PI roles as long as the candidate has responsibility for a reasonable part of the effort. REU grants can be counted toward either teaching or research but not both.

Teaching: The teaching reviews based on the teaching metrics given above form the basis of the teaching evaluation at the comprehensive review.

Teaching is meritorious if the candidate meets each of the following criteria:

1. Teaches requisite number of credit hours for the approved workload.
2. Achieves a FCQ rating of not more than 1 standard deviation below the department three-term rolling average on student evaluations in comparable classes.
3. Overall positive evaluation on other teaching metrics

Teaching is excellent if all the criterion of meritorious is met and if the candidate meets at least one of the following criteria:

- Teaches more than requisite number of hours (including the accumulated thesis/project hours) and at least ¼ standard deviation above the department three-term rolling average on student evaluations in comparable classes
    OR
- Achieves FCQ ratings of at least ¾ standard deviation above the department three-term rolling average on student evaluations in comparable classes
    OR
- Wins one external grant for curriculum or student scholarship

A positive peer review of teaching can be included in the evaluation and the portfolio may combine it with above standard performance on other items, including but not limited to FCQ, workload, proposal and grant activity and student letters, to argue that despite missing one or more of the items listed above, the candidate overall is meeting or exceeding standards. The committee must approve faculty providing "peer" reviews. The committees' overall evaluation will determine if there is sufficient potential for future success to justify reappointment.

Research and Creative Work: The department recognizes that scholarship can take many forms. Our department emphasizes fundamental discovery, scholarly work which integrates existing knowledge and applied research. Such research is expected to be published in peer-reviewed venues. We recognize scholarly study of teaching and learning issues in our field as a form of research.

A rating of meritorious requires a candidate to show reasonable progress toward tenure as demonstrated by both six external proposals submitted and five refereed papers accepted for publication.

A rating of excellent requires a candidate to show reasonable progress toward tenure as demonstrated by:

1. Either winning a reasonable level of research grant funding or submitting 10 total external proposals, and
2. Submitting seven total refereed publications, including at least one significant paper, and
3. Receiving positive external peer review letters will be considered and can raise the candidate to be excellent.

The above criterion provides sufficient but not necessary conditions for an evaluation of meritorious or excellence in research. The committee can also consider the overall research dossier of the candidate, including the external letters, in making its recommendation, e.g. external recognition of the research impact or exceeding the stated criterion in one category can make up for minor shortfalls in another category.

Service: The department recognizes service to the campus, community and to our profession. A rating of meritorious requires meeting service responsibilities within the department and some service to the college, campus, community or profession. A rating of excellent requires meeting service responsibilities within the department and multiple service contributions to the college, campus, community, or profession. In evaluating service both the quality and quantity of service contributions will be considered.

Promotion to Associate Professor and Awarding of Tenure:

Computer science is a recent field that, because of its very rapid pace and its focus on computer technology, has developed a set of standards for pursuing and disseminating research that are not the same as other fields. While we include all of the standard "components", we also have less traditional items, such as web-only publications and the impact of software that is shared with others. More significantly, as has been well documented, computer science places a much stronger emphasis on *selective* conferences, which are often more selective and have greater impact than journals. This is discussed in The Computer Research Associations Best practice guide to tenure and promotion in computer science, developed by a Blue ribbon committee, http://www.cra.org/reports/tenure_review.html. The department guidelines proposed herein are in keeping with that seminal guide, which we anticipate will be included with each folder for promotion and/or tenure of a CS faculty.

For tenure and promotion review, proposal and grant activity can include both PI and Co-PI roles, with funding levels pro-rated according to grant workload agreement. REU grants can be counted toward either teaching or research but not both. Faculty hired from other institutions may have time and funding levels counted toward tenure, with the details discussed by the primary unit tenure and promotion committee and specified in the hiring offer.

The candidate's record in teaching, research, and service will each be evaluated separately as below expectations, meritorious, or excellent. The candidate must be rated

as, at least, meritorious in all three areas and must receive a rating of excellent in either teaching or research.

The department will solicit letters from respected scholars in the candidate's field(s) of research per campus policy.

<u>Teaching</u>**:** The department defined teaching metrics above and recognizes the importance of the many different criteria mentioned in the Regent's criteria, but calls out a subset which we consider most important, which are:
- Letters from Candidate selected students.
- Letters from Committee selected students.
- Teaching FCQs (see teaching expectations above)
- Teaching Load (see teaching expectations above)
- Student Mentoring (including independent student research projects)
- Curriculum Development (including text books).
- Curriculum and Scholarship Grants
- Other Regent's/College components of teaching evaluation.

Teaching is meritorious if the candidate meets each of the following criteria:

1. Teaches requisite number of credit hours for the approved workload.
2. Achieves FCQ ratings of not more than one standard deviation below the department three-term rolling average on student evaluations in comparable classes.
3. Overall positive evaluation on other teaching metrics

Teaching is excellent if all the criterion of meritorious is met and if the candidate meets at least one of the following criteria:

- Teaches more than requisite number of hours (including the accumulated thesis/project hours) and at least ¼ standard deviation above the department three-term rolling average on student evaluations in comparable classes
    OR
- Achieves FCQ ratings of at least ¾ standard deviation above the department three-term rolling average on student evaluations in comparable classes
    OR
- Wins one significant external grant for curriculum or student scholarship

A positive peer review of teaching can be included in the evaluation and the portfolio may combine it with above standard performance on other items, including but not limited to FCQ, workload, proposal and grant activity and student letters, to argue that despite missing one or more of the items listed above, the candidate overall is meeting or exceeding standards. The committee must approve faculty providing "peer" reviews. The overall evaluation will determine if there is sufficient record to justify meritorious or excellence in teaching.

Research and Creative Work:

Within Research, the expectations are as follows:

- Refereed Publications:
  - Meritorious requires 10 refereed publications, of which at least two are significant. Each significant publication beyond two counts as two refereed publications.
  - Excellent requires 15 refereed publications, of which at least three are significant publications. At least five of the refereed publications for excellent must have a first author of the candidate or the candidate's UCCS student. Each significant publication beyond three counts as two refereed publications towards research excellence.
- External Competitive Funding:
  - Meritorious requires the candidate being responsible for at least $150K in funding or winning one significant grant.
  - Excellent requires the candidate being responsible for at least $300K in funding including winning one significant grant.
  - Seminal papers in the candidate's field of research that are transformational in character can be used in lieu of external funding. The case of transformational will requiring the candidate to provide quantitative justification, e.g. using h-index and citation levels, within their field and multiple external letters validating the transformational nature.

The above criterion for provide sufficient but not necessary conditions for an evaluation of meritorious or excellence in research. The committee can also consider the overall research dossier of the candidate, including the external letters, in making its recommendation, e.g. external recognition of the research impact or exceeding the stated criterion in one category can make up for minor short falls in another category.

Service: The department recognizes service to the campus, community and to our profession. A rating of meritorious requires meeting service responsibilities within the department and service to the college, campus, community or profession. A rating of excellent requires meeting service responsibilities within the department and multiple service contributions to the college, campus, community, or profession. In evaluating service both the quality and quantity of service contributions will be considered.

Promotion to Full Professor:

Promotion to Full professor requires a national reputation with significant citations to published work. It is expected that the candidate has brought positive visibility to our department and college through their work.

Overall excellence may be demonstrated either by distinguished accomplishment in teaching or research accompanied by progress in the other areas, or by manifest strength in two areas accompanied by progress in the remaining area. Although there is no time

limit associated with the promotion to Full Professor, in the research area it is expected that the candidate will have an established and on-going and successful program involving external funding since the granting of tenure and promotion to Associate Professor. As with tenure, seminal papers that are transformational in nature can be used in lieu of external funding.

The department will solicit letters from respected scholars in the candidate's field(s) of research per campus policy.

Post-tenure Review:

Recognizing the many different ways in which post-tenure faculty contribute to the University, we define "meeting expectations" for purposes of post-tenure review as consisting of three elements, each of which must be met:

1. having achieved a rating of "meeting expectations" or higher on each of the annual merit reviews included in the time period under review,
2. documented progress toward the faculty member's current professional plan, and
3. having submitted an acceptable professional plan for the next 5 years, which indicates an ability to achieve "meeting expectations" or higher ratings in the future.

If a faculty member is deficient in meeting these standards, the committee shall consider the total record of the faculty member during the review period to determine whether strengths in some time periods or some activities compensate for the deficiency such that a rating of "meeting expectations" is still appropriate. Ratings of "exceeding expectations," "outstanding" or "excellent" will be awarded for exceeding these standards.

Promotion from Instructor to Senior Instructor:

The schedule for promotion to Senior Instructor will follow the applicable campus and college policies.

Teaching:

1. Demonstrated effectiveness as a classroom teacher.
2. Keeping courses up-to-date by incorporating new materials or by introducing new methods/approaches/technologies.
3. Being accessible to students and helping students outside of class.
4. Publications related to teaching including textbooks, new teaching methods and aids.
5. Active interest and support of student activities through student clubs and organizations

Service:

1. Active participation in curriculum development, including assessment. This can include being an active and contributing member of the undergraduate curriculum committee.
2. Participation in professional training and career development both inside and outside of the university.

It is not expected that a candidate must rate highly on every point in the above items. However, high-quality work in many of these is essential.