

Department of Electrical and Computer Engineering
College of Engineering and Applied Science

May 31, 2009

Introduction:

Standards and processes for reappointment, promotion and tenure of faculty are governed by Article V and Attachment A of the Laws of the Regents. These are further delineated in a series of CU Administrative Policy Statements. Campus guidance is supplied in UCCS Policy # 200-001. These documents require the establishment of departmental criteria which are to be used throughout the review process.

These criteria are to be considered guidelines for the general review of candidates toward reappointment, promotion and tenure in the Department of Electrical and Computer Engineering at the University of Colorado at 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.

These criteria can be amended by majority vote of the department subject to approved by the Dean of the college of Engineering and Applied Science and the Vice Chancellor for Academic affairs.

I. 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 of future success to justify reappointment.

Teaching: The candidate's teaching shall be evaluated by multiple means which will include, at a minimum, Faculty Course Questionnaires and two other means of evaluation. Examples of other means of evaluation are provided in the attachment to this document. In addition to classroom teaching, 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 here. The candidate is expected to show potential for continued development as a teacher. Candidates should demonstrate that their courses are coherently organized and thoughtfully presented. Furthermore, candidates will be expected to demonstrate a 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.

Research: 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 with progress toward publication and external funding. This might include drafts of work in progress, presentations at professional meetings, research proposals submitted 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.

II. 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 also solicits letters from respected scholars in the candidate's field of research as per campus policy.

Teaching: The candidate will be expected to demonstrate effective teaching evaluated by multiple means which will include, at a minimum, Faculty Course Questionnaires and two other means of evaluation. Examples of other means of evaluation are provided in the attachment to this document. This evaluation includes contributions to the breadth, depth, and needs of the department and up-dating curriculum and course materials. In addition to classroom teaching, 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 here. A rating of meritorious will require student evaluations which are typically at or above the departmental average and evidence of effective teaching. A rating of excellent will require student evaluations which are typically above the departmental average, evidence of effective teaching, and dedication to student learning. In evaluating teaching, course content, level and size will be considered in interpreting student evaluations.

Research: 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. A rating of meritorious requires reasonable progress toward tenure as demonstrated by submission of research proposals with quality and originality, professional presentations, at least one peer-reviewed publication, and by letters of evaluation of their work. A rating of excellent requires at least three publications which may include refereed journal articles, referred research monographs and refereed book chapters having research focus. Receipt of peer-reviewed grants, contracts may be substituted for publications. Exceptional

quality of scholarly work may be considered to raise an evaluation in cases where the quantity specified has not been met.

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.

III. Promotion to Associate Professor and Awarding of Tenure:

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 also solicit letters from respected scholars in the candidate's field of research as per campus policy.

Teaching: The candidate will be expected to demonstrate effective teaching evaluated by multiple means which will include, at a minimum, Faculty Course Questionnaires and two other means of evaluation. Examples of other means of evaluation are provided in the attachment to this document. This evaluation includes contributions to the breadth, depth, and needs of the department and up-dating curriculum and course materials. In addition to classroom teaching, 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 here. A rating of meritorious will require student evaluations which are typically at or above the departmental average and evidence of effective teaching. A rating of excellent will require student evaluations which are typically above the departmental average, evidence of effective teaching, and dedication to student learning. In evaluating teaching, course content, level and size will be considered in interpreting student evaluations.

Research: 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. A rating of meritorious requires at least three peer-reviewed publications which make an original scholarly contribution published or accepted in final form. These may include refereed journal articles, refereed book chapter in research monographs or refereed book chapters with research focus. Receipt of peer-reviewed grants or contracts may be substituted for publications. A rating of excellent requires at least five peer-reviewed publications which make an original scholarly contribution published or accepted in final form. These may include refereed journal articles, refereed book chapters in research monographs or refereed book chapters with research focus. Exceptional quality of scholarly work may be considered to raise an evaluation in cases where the quantity specified has not been met. Presentations at professional meetings and non-refereed publications may be considered as secondary evidence of ongoing research activity.

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.

IV. Promotion to Full Professor:

The candidate's record in teaching, research, and service will be evaluated as a whole as below expectations, meritorious, or excellent. Promotion requires "a record that, taken as a whole, is judged to be excellent; a record of significant contribution to both graduate and undergraduate education, unless individual or departmental circumstances require a stronger emphasis or singular focus on one or the other; and a record, since receiving tenure and promotion to associate professor, that indicates substantial, significant, and continued growth, development, and accomplishment in teaching and working with students, research, scholarship or creative work, and service." The department will also solicit letters from respected scholars in the candidates field of research as per campus policy.

Teaching: The candidate will be expected to demonstrate effective teaching evaluated by multiple means which will include, at a minimum, Faculty Course Questionnaires and two other means of evaluation. Examples of other means of evaluation are provided in the attachment to this document. This evaluation includes contributions to the breadth, depth, and needs of the department and up-dating curriculum and course materials. In addition to classroom teaching, 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 here. In evaluating teaching, course content, level and size will be considered in interpreting student evaluations. Substantial, significant and continued growth, development, and accomplishment as a teacher since tenure must be demonstrated through development of new and revised curriculum, new pedagogical techniques, participation in professional development, work with students outside the classroom and other areas of teaching such as those in the attachment.

Research: The department recognizes that scholarship can take many forms. Our department emphasizes fundamental discovery, scholarly work which integrates existing knowledge and applied research. Substantial, significant and continued growth, development, and accomplishment as a researcher since tenure must be demonstrated through refereed publications, peer-reviewed external grants and other areas of research such as those in the attachment. Exceptional quality of scholarly work may be considered to raise an evaluation in cases where the quantity is less. Presentations at professional meetings and non-refereed publications may be considered as secondary evidence of ongoing research activity.

Service: The department recognizes service to the campus, community and to our profession. In evaluating service both the quality and quantity of service contributions will be considered. Substantial, significant and continued growth, development, and accomplishment in service since tenure must be demonstrated through measurable service progress in the department, college, campus, university, community and in our profession. We recognize that different faculty at this

level will fulfill this requirement very differently. The attachment lists some issues that may be considered.

Overall excellence may be demonstrated either by truly distinguished efforts in one accompanied by progress in the other areas, by manifest strength in two areas accompanied by progress in the remaining area, or by truly substantial progress in all three.

IV. 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) having met the goals of the faculty member’s current professional plan, and 3) having submitted an acceptable professional plan which indicates an ability to achieve “meeting expectations” or higher ratings in the future. If a faculty member is deficient in meeting this standard, 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” or “outstanding” will be awarded for exceeding these standards.

Appendix: Factors to be considered for Tenure and Promotion:

The following lists itemize example means to evaluate a candidate's teaching, research, and service.

Example means for evaluating of a candidate's contributions to teaching:

- Quality of classroom teaching, as evidenced by student evaluations, peer evaluations, and/or instructor course evaluations
- Use of innovative teaching techniques and/or technology to improve learning, (e.g., active learning, tailoring activities to student learning styles, incorporating elements to facilitate distance learning)
- Teaching "service" classes in addition to a standard teaching load, such as freshman seminar, special topics, or courses for industry
- Supervise undergraduate research assistants, independent study students, senior design students, masters theses and/or doctoral dissertations
- Mentor students, including course and/or career advising
- Create new and relevant courses, programs, and/or instructional laboratories
- Write course or laboratory readers, educational books, and/or educational software
- Contribute to course and/or program assessment
- Contribute to the ongoing process of evaluating and updating instructional materials and/or curriculum for courses, laboratories, and programs
- Present peer-reviewed papers at education conferences
- Displays flexibility and cooperation required to carry a full share of his or her department's teaching responsibilities over the long term

Example means for evaluating a candidate's contribution to research:

- Quality peer-reviewed publications documenting advances in scholarship of discovery (basic research), scholarship of integration (research bringing together knowledge from separate fields or sub-fields), scholarship of application (research applying knowledge to real-world problems), and/or scholarship of teaching and learning in Electrical and Computer Engineering (pedagogical research). Example peer-reviewed outlets include: peer-reviewed conferences, journals and research monographs, and book chapters with research focus.
- Develop high-quality technical reports relating to the scholarship of discovery, integration, application, and/or teaching and learning
- Producing quality research products, such as materials, devices, systems, and software that benefit the research community
- Research has been directed to problems that are recognized as significant by experts in the field and are consistent with the objectives of the department
- Seek and/or obtain external funding through research proposals for single and/or multidisciplinary work in the scholarship of discovery, integration, application and/or teaching and learning
- Seek and/or obtain funding and research opportunities for students
- Strong record in attracting graduate students and directing their research
- Has developed or acquired laboratory facilities to support research, such as seeking and/or obtaining equipment grants

- Patent disclosures submitted/awarded.

Example means for evaluating a candidate's contribution to service:

- Serve as an active member of departmental, college, campus, and/or system committees
- Participates in activities intended to improve the quality of the university's program
- Serve as chair of departmental, college and campus, and/or system committees
- Serve as chair of department or associate dean
- Serve as teaching mentor to junior faculty, honoraria, and/or teaching assistants
- Serve as research mentor to junior faculty, including helping with proposal writing to enhance their success in obtaining research funding
- Participate in activities that contribute to recruiting and retention, at the department, college and/or campus levels (e.g., high-school visits, engineering challenge, freshman welcome, EAS ambassador, etc)
- Contribute to efforts that establish strategic partnerships with industry and the military
- Set up multi-institution higher education or technical collaboration
- Service for technical journals (e.g., editor and/or reviewer)
- Service for technical and/or education conferences (e.g., workshop organizer or presenter, session chair, session organizer, reviewer)
- Service to profession and discipline at the state, national and/or international levels, such as within a professional organizations (e.g., on a technical program committee)
- Serve on proposal review panels
- Seek and/or obtain funding for student scholarships
- Serve as student club advisor
- Participate in technical or higher education oriented service in the community, such as mentoring high-school students on projects

SPECIFIC CRITERIA FOR PROMOTION FROM INSTRUCTOR TO SENIOR INSTRUCTOR

A. General Principles

For promotion to Senior Instructor, a candidate must have the master's degree or its equivalent and should have considerable experience teaching at the undergraduate (primarily lower division) level. Additionally, the candidate must have demonstrated special abilities in teaching, such as consistently above-average student evaluations, significant contributions to development of new courses and laboratories, and course materials.

B. Specific Criteria

- a. Does the candidate have a thorough knowledge of the subject matter of the courses/laboratories he or she has taught?
- b. Does the candidate keep courses/laboratories up-to-date by incorporating new material or by using new methods/approaches/technology?
- c. Has the candidate demonstrated an ability to collaborate with faculty in developing new courses/laboratories, or in making substantial revisions in old ones, at the undergraduate level?
- d. Is the candidate an enthusiastic teacher?
- e. Do the students and/or peers consider the candidate an effective teacher?
- f. Is the candidate accessible and willing to spend adequate time with students outside the classroom?
- g. How well are the candidate's students prepared for succeeding in courses/laboratories?
- h. Does the candidate contribute to the department's service activities?

EXAMPLES OF APPROPRIATE CRITERIA FOR FACULTY EVALUATION

The criteria used for yearly faculty evaluation is the same as the criteria used for Promotion and Tenure.