Department of Mechanical and Aerospace Engineering College of Engineering and Applied Science

May 31, 2009

Mechanical and Aerospace Engineering Department University of Colorado at Colorado Springs Guidelines for Reappointment, Promotion, and Tenure Revised May 2009

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 criteria are guidelines for the review of candidates for reappointment, promotion and tenure in the Department of Mechanical and Aerospace Engineering at the University of Colorado at Colorado Springs.

The department is committed to quality teaching, research, and service to the university, the profession, and the community. Each candidate's case will be reviewed and judged on its individual merits and circumstances in the context of these guidelines. The evaluation process assumes: possession of an appropriate terminal degree; competent education and training in the discipline; 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.

While a faculty member's career record will be considered in personnel actions described here, some emphasis for evaluation purposes may be on work performed at UCCS and, in particular, progress since the last review.

These criteria can be amended by a majority of the voting faculty of the MAE department subject to approval by the dean of the College of Engineering and Applied Science and the Provost.

It is expected that the department chair and the dean will provide explicit written feedback on an untenured faculty member's progress toward tenure at least annually as part of the annual review and evaluation. This feedback shall address the candidate's status and progress in research, teaching, and service. If such feedback is lacking and it is desired by the candidate, it is incumbent upon the candidate to submit a written request for feedback to which both the department chair and the dean shall respond in writing in no more than 30 calendar days from the request. The candidate may request such feedback after no less than six months since the previous request.

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 taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. 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.

Research: The MAE department emphasizes fundamental discovery, scholarly work which integrates existing knowledge, and applied 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 and external funding.

Service: The department recognizes the value of service to the campus, community and 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 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 department review committee will solicit letters from respected scholars in the candidate's field of research according to 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 taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. 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 near 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: A rating of meritorious requires reasonable progress toward tenure as demonstrated by evaluation of the items in the <u>Research</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. A rating of meritorious requires peer-reviewed publication(s). A rating of excellent requires significant peer-reviewed publications (typically, an average of two or more publications

per year in archival journals, or an average of one or more publications per year in archival journals generally considered to be among the top few journals in mechanical or aerospace engineering). Receipt of peer-reviewed grants or contracts may be substituted for some publications. Exceptional quality of scholarly work may be considered to raise an evaluation in cases of lower quantity.

Service: The department recognizes the value of service to the campus, community and profession. A rating of meritorious requires meeting service responsibilities within the department and some service to the college, campus, community or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. A rating of excellent requires meeting service responsibilities within the department and multiple service contributions to the college, campus, community, or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation & Arating of excellent requires meeting service responsibilities within the department and multiple service contributions to the college, campus, community, or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. 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 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 review committee will solicit letters from respected scholars in the candidate's field of research according to 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 taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. 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 near 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 candidate will be expected to have a strong research program as demonstrated by evaluation of the items in the <u>Research</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. A rating of meritorious requires multiple peer-reviewed publications (typically, an average of one or more publications per year in archival journals). A rating of excellent requires significant peer-reviewed publications (typically, an average of one or more publications (typically, an average of two or more publications per year in archival journals, or an average of one or more publications per year in archival journals generally considered to be among the top few journals in mechanical or aerospace

engineering). Receipt of peer-reviewed grants or contracts may be substituted for some publications. Exceptional quality of scholarly work may be considered to raise an evaluation in cases of lower quantity.

Service: The department recognizes the value of service to the campus, community and profession. A rating of meritorious requires meeting service responsibilities within the department and some service to the college, campus, community or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. A rating of excellent requires meeting service responsibilities within the department and multiple service contributions to the college, campus, community, or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation & Arating of excellent requires meeting service responsibilities within the department and multiple service contributions to the college, campus, community, or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. 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."

Overall excellence may be demonstrated either by nationally and internationally distinguished efforts in one area accompanied by progress in the other areas, by strength in two areas accompanied by progress in the remaining area, or by substantial progress in all three areas. The department review committee will solicit letters from respected scholars in the candidate's field of research according to 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 taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. 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. Substantial, significant and continued growth, development, and accomplishment as a teacher since tenure must be demonstrated through the means of evaluation taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A.

Research: The candidate will be expected to have a strong research program as demonstrated by evaluation of the items in the <u>Research</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. Substantial, significant and continued growth, development, and accomplishment as a researcher

since tenure must be demonstrated through refereed publications, (excellence would typically be demonstrated by an average of two or more publications per year in archival journals, or an average of one or more publications per year in archival journals generally considered to be among the top few journals in mechanical or aerospace engineering), peer-reviewed grants and other areas of research such as those in the <u>Research</u> portion of Areas of Evaluation in Appendix A. Exceptional quality of scholarly work may be considered to raise an evaluation.

Service: The department recognizes the value of service to the campus, community and profession. The candidate will be expected to meet service responsibilities within the department, college, campus, community or profession as demonstrated by evaluation of the items in the <u>Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. In evaluating service both the quality and quantity of service contributions will be considered.

V. Post-tenure Review:

Recognizing the many different ways in which post-tenure faculty contribute to the University, "meeting expectations" for purposes of post-tenure review will consist 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.

VI. Process for promotion from Instructor to Sr. Instructor

- The candidate will initiate the promotion process by submitting to the department chair by February 1 a document addressing the specific criteria for promotion. (Appendix B)
- 2. The chair will write a recommendation for or against promotion and will forward that recommendation along with the candidate's document to the office of the Dean of Engineering and Applied Science. A copy of the chair's recommendation will also be given to the candidate at the time it is forwarded to the dean's office.

Appendix A. Areas of Evaluation

Teaching:

* Provision of high quality of classroom teaching, as evidenced by student evaluations, peer evaluations, or instructor course evaluations.

- * Creation of new courses.
- * Contributions to on-going evaluation and maintenance of the curriculum.
- * Development and maintenance of course materials.
- * Authorship of technical textbooks.
- * Supervision of student research.
- * Contributions to course and program assessment.

* Presentation of peer-reviewed papers at education conferences and publication of papers in education journals.

* Recognition of teaching strength through college, campus, or system teaching awards.

Research:

- * Record of external funding through research proposals.
- * Peer-reviewed publications at conferences and in archival journals.
- * Record of funding and research opportunities for students.
- * Equipment grants for research.
- * Technical reports submitted to an external body.
- * Contributions to efforts that establish strategic research partnerships with industry/government.
- * Monographs and/or books on advanced topics within the discipline.
- * Invited or volunteered presentations of research.
- * Patent disclosures submitted.
- * External research proposals submitted.

Service:

* Service on departmental, college, campus, or system committees and special assignments.

- * Service as a student club or extracurricular activity advisor.
- * Service in departmental, college, campus, or system administrative positions.
- * Attendance and contribution to department and college faculty meetings.
- * Engagement in recruiting, retention, or student scholarship activities.
- * Reviewer for technical journals and technical conferences.

* Participation in professional technical organizations such as ASME, AIAA, AIChE,

ASHRAE, including awards and election to Fellow.

* Participation in technical or higher education oriented service in the community.

* Involvement in technical conference organization (session chair/organizer ...), serving on review panels (NSF etc.).

- * Service as an editor of technical journals.
- * Service as a faculty mentor.

Appendix B. Specific Criteria for Promotion from Instructor to Senior Instructor

A. Teaching

i. Effectiveness as a teacher in the classroom, at the undergraduate level. This includes adopting efficient reaching styles appropriate to each classroom environment, motivating the students, and reacting with sensitivity to the students' responses.

ii. Keeping his/her courses up-to-date by incorporating new materials or by introducing new methods/approaches/technology.

iii. Demonstrated ability to develop new undergraduate courses and revision of existing courses.

iv. Enthusiastic teacher, accessible to students, willing to spend adequate time to help students outside the classroom.

v. Considered an effective teacher by students and/or peers.

vi. Publications related to teaching, including textbooks, new teaching methods and aids.

vii. Active interest in student affairs and welfare and effectiveness as a student advisor at the undergraduate level.

B. Service

i. Active participation with his or her colleagues in curricular development and other pedagogical activities.

ii. Development of facilities within the department or college that contribute to teaching activities.

iii. Participation in professional training and career development activities both inside and outside of the university.

iv. Outside (e.g. K-12) activities to the extent that it contributes to the candidate's effectiveness as a faculty member.

It is not expected that an individual would rate highly on every point in each of these categories, given the spectrum of differences individual abilities, attitudes and preferences. However, the quality of the candidate's performance in regard to the listed items and the number of those in which he or she has proved successful should make for reasonable uniformity of judgment in considering promotion.