Department of Mechanical and Aerospace Engineering

College of Engineering and Applied Science University of Colorado Colorado Springs

Criteria, Standards and Evidence for Reappointment, Promotion and Tenure

April 11, 2023

Standards and processes for reappointment, promotion, and tenure of faculty are governed by Article 5 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 (MAE) at the University of Colorado Colorado Springs (UCCS).

The department is committed to quality teaching, research, and leadership and service to the university, the profession, and the community including diversity, equity, and inclusiveness (DEI). The MAE Department defines research to include fundamental discovery, scholarly work that integrates existing knowledge, and application of knowledge to the solution of a problem of societal interest. The department holds an inclusive view of scholarship in the recognition that knowledge is acquired and advanced through discovery, integration, and application. 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 that 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 college 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 leadership 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 college 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.

The department chair will submit a separate evaluation letter for each of the reviews described below if the chair does not serve on the Primary Unit Evaluation Committee (PUEC) for that review.

The faculty of the MAE Department have elected to forgo a vote of the primary unit faculty regarding RPT decisions made by the PUEC as a step in the reappointment, promotion, and tenure process.

All levels of review and consideration for promotion of both tenure-track faculty and IRC

faculty involve an evaluation of the candidate's teaching, and a portion of that evaluation includes by statute an evaluation of the Faculty Course Questionnaire (FCQ) results. Results of FCQs are one evaluation measure to use but cannot account for over 30% of overall teaching assessment. There is evidence that student evaluations of teaching are subject to bias based on gender, ethnicity, sexual orientation, and age (among other factors). To mitigate this bias, when considering FCQ results for any and all RPT reviews, the following questions may be considered:

- Question 4: The course made it possible for me to increase my knowledge, skills, and understanding of the subject.
- Question 7: The instructor explained course ideas in a clear and understandable manner.
- Question 8: The instructor encouraged interest in this subject.
- Question 9: The instructor demonstrated interest in student learning.
- Question 10: The instructor demonstrated respect for and professional treatment of all students.
- Question 11: The instructor communicated effectively with students about this course.

I. Initial Reappointment Review:

The candidate's total record, including teaching, research, and leadership 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.

<u>Teaching</u>: The candidate's teaching will be evaluated by multiple means that will include Faculty Course Questionnaires (FCQs) and at least two other means of evaluation, which may be taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Results of FCQs cannot account for over 30% of overall teaching assessment. The candidate will show potential for continued development as a teacher. Candidates will 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.

<u>Research</u>: The MAE Department emphasizes fundamental discovery, scholarly work that integrates existing knowledge, and applied research. The candidate will demonstrate a well-designed research plan and the potential for continued development as a researcher and progress toward publication and external funding.

<u>Leadership and Service</u>: The department recognizes the value of leadership and service to the campus, community, and profession. At this stage, the candidate will be involved in departmental meetings and activities.

II. Comprehensive Reappointment Review:

The candidate's record in teaching, research, and leadership and service will be evaluated separately as on track for tenure, not yet on track for tenure but could meet standards for tenure with appropriate corrections, or not on track for tenure. In the case of being on track

for tenure, an additional evaluation may be provided as to whether the candidate is on track to receive a rating of meritorious or excellent in each area. In the case of being not yet on track for tenure, the PUEC may provide additional direction regarding corrective actions. In all cases, the PUEC will issue a separate recommendation regarding whether the candidate should be reappointed. The candidate must demonstrate sufficient progress toward tenure to justify reappointment. This will typically require a rating of, at least, "not yet on track for tenure but could meet standards for tenure with appropriate corrections" in all three areas.

<u>Teaching</u>: The candidate will demonstrate effective teaching evaluated by multiple means that will include Faculty Course Questionnaires (FCQs) and at least two other means of evaluation, which may be taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Results of FCQs cannot account for over 30% of overall teaching assessment. A rating of on track for tenure with a rating of meritorious typically requires evidence of teaching effectiveness within one's immediate instructional setting, as defined in Section III below. A rating of on track for tenure with a rating of excellent typically requires evidence of teaching effectiveness within one's immediate instructional setting as well as evidence of being on track to meet the criteria for a rating of excellent in teaching defined in Section III below. In evaluating teaching, course content, level, presentation mode, and size will be considered in interpreting student evaluations.

<u>Research</u>: A rating of on track for tenure with 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 on track for tenure with a rating of meritorious typically requires peer-reviewed publication(s). A rating of on track for tenure with a rating of excellent typically requires peer-reviewed publications that demonstrate the potential for significant impact. Exceptional quality of scholarly work may be considered to raise an evaluation. Items in the <u>Research</u> portion of Areas of Evaluation in Appendix A will be considered in addition to publications.

<u>Leadership and Service</u>: The department recognizes the value of leadership and service to the campus, community, and profession. A rating of on track for tenure with 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>Leadership and Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. A rating of on track for tenure with 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>Leadership and Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. In evaluating leadership and service, both the quality and quantity of service contributions will be considered.

III. Promotion to Associate Professor and/or Awarding of Tenure Review:

The candidate's record in teaching, research, and leadership and service will be evaluated separately as not meritorious, 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 PUEC will solicit letters from respected scholars in the candidate's field of research according to campus policy.

Teaching: The candidate will demonstrate effective teaching evaluated by multiple means that will include Faculty Course Questionnaires (FCQs) and at least two other means of evaluation, which may be taken from the Teaching portion of Areas of Evaluation in Appendix A. Results of FCQs cannot account for over 30% of overall teaching assessment. Per Article 5, a rating of excellent in teaching "shall include multiple measures of teaching evaluation and demonstrated achievement at the campus, local, national, and/or international level that furthers the practice and/or scholarship of teaching and learning beyond one's immediate instructional setting." The immediate instructional setting is defined as that related to one's contractual teaching load and the teaching of courses on overload for which compensation is received. The Teaching portion of Areas of Evaluation in Appendix A provides examples of items that may apply beyond one's immediate instructional setting. In evaluating teaching, course content, level, presentation mode, and size will be considered in interpreting student evaluations.

<u>Research</u>: The candidate will demonstrate effectiveness in research as evaluated by 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 typically requires multiple peer-reviewed publications. A rating of excellent typically requires peer- reviewed publications that demonstrate significant impact. Exceptional quality of scholarly work may be considered to raise an evaluation. Items in the <u>Research</u> portion of Areas of Evaluation in Appendix A will be considered in addition to publications.

Leadership and Service: The department recognizes the value of leadership and 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 Leadership and Service 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 Leadership and Service portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. In evaluating leadership and service, both the quality and quantity of service contributions will be considered.

IV. Promotion to Full Professor Review:

Per Article 5, recommendations for promotion to Full Professor will be based on "a record that, taken as a whole, may be judged to be excellent," including post-tenure evidence.

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 PUEC will solicit letters from respected scholars in the candidate's field of research according to campus policy.

<u>Teaching</u>: The candidate will demonstrate effective teaching evaluated by multiple means that will include Faculty Course Questionnaires (FCQs) and at least two other means of evaluation, which may be taken from the <u>Teaching</u> portion of Areas of Evaluation in Appendix A. Results of FCQs cannot account for over 30% of overall teaching assessment. Progress in teaching since tenure may be demonstrated through the 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 evaluating teaching, course content, level, presentation mode, and size will be considered in interpreting student evaluations. Distinguished efforts in the area of teaching can be exemplified by significant contributions to curriculum and course development, course and program assessment, and/or peer-reviewed educational literature.

<u>Research</u>: The candidate may demonstrate progress in research since tenure through the means of evaluation taken from the <u>Research</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. Exceptional quality of scholarly work may be considered to raise an evaluation. Distinguished efforts in the area of research must include demonstration through refereed publications and peer-reviewed grants, unless extraordinary circumstances warrant an emphasis on one or the other.

<u>Leadership and Service</u>: The department recognizes the value of leadership and service to the campus, community, and profession. Progress in leadership and service since tenure may be demonstrated through the means of evaluation taken from the <u>Leadership and Service</u> portion of Areas of Evaluation in Appendix A. Additional means of evaluation may be presented, if desired. In evaluating leadership and service, both the quality and quantity of service contributions will be considered. Distinguished efforts in the area of leadership and service can be exemplified by significant contributions to university leadership, institution-building, and/or the profession.

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 that 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 Senior Instructor and from Senior Instructor to Principal Instructor

The process for promotion of IRC faculty is addressed in the EAS College Policy addressing the same. IRC faculty are evaluated based on their teaching and leadership and service activities. Specific criteria for both promotion steps are delineated in Appendix B.

Appendix A. Areas of Evaluation for Tenure-Track and Tenured Faculty

The items listed below are intended as examples of areas to be used in evaluating teaching, research, and leadership and service for tenure-track and tenured faculty. Items preceded by an asterisk (*) under Teaching are examples of areas that may apply beyond the immediate instructional setting. The items below are not intended to be an exhaustive list.

Teaching:

- Provision of high-quality classroom teaching, as evidenced by student evaluations, mid-course evaluations, peer evaluations, or instructor course evaluations.
- Contributions to on-going evaluation and maintenance of the curriculum.
- Development and maintenance of course materials.
- Supervision of student research.
- Contributions to course and program assessment.
- Curriculum development efforts.
- Course improvement efforts.
- Professional development and innovations related to teaching.
- * Creation of new courses.
- * Authorship of technical textbooks.
- * Scholarly research and presentation or publication on teaching and learning.
- * Recognition of teaching strength through college, campus, or system teaching awards.
- * Receipt of professional awards related to the education process.
- * Receipt of grants for teaching and education improvements.
- * Mentoring or teaching students beyond the immediate instructional setting, e.g., serving as an independent study director or intern supervisor, or presenting teaching or instructional seminars to undergraduate or graduate students.

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 and/or government.
- Monographs and/or books on advanced topics within the discipline.
- Invited or volunteered presentations of research.
- Patent disclosures submitted.
- External research proposals submitted.

Leadership and 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.
- Service as a reviewer for technical journals and technical conferences.
- Participation in professional technical organizations, such as ASME, AIAA, AIChE, ASHRAE, including in a leadership capacity and in the receipt of awards and/or election to Fellow or Associate Fellow.
- Participation in technical or higher education-oriented service in the community, such as meaningful involvement with industry partners, commissions, boards, or public service organizations.
- Involvement in technical conference organization (e.g., session chair/organizer).
- Service on review panels for funding agencies (e.g., NSF, NIH, etc.).
- Service as an editor of technical journals.
- Service as a faculty mentor.
- Education outreach to students from K-12 schools, colleges, and universities, e.g., in areas related to science, technology, engineering, and mathematics (STEM).
- Improvement of the programmatic quality, reputation, and/or operational efficiency of the department and/or college.
- Mentoring other faculty.
- Assisting or addressing the needs of marginalized or minoritized students and/or faculty.
- Linking the professional skills of members of the faculty and students to the world beyond the campus.

Appendix B. Specific Criteria for Promotion of IRC Faculty

For promotion from Instructor to Senior Instructor

It is not expected that an individual would rate highly on every point in each of these categories, given the spectrum of differences in 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 they proved successful should make for reasonable uniformity of judgment in considering promotion.

Teaching:

- Effectiveness as a teacher in the classroom. This includes adopting efficient teaching styles appropriate to each classroom environment, motivating the students, and reacting with sensitivity to the students' responses.
- Incorporation of new materials, methods, approaches, or technology in order to keep courses current.
- Demonstrated ability to develop new courses and revise existing courses.
- Considered an enthusiastic teacher who is accessible to students and willing to spend adequate time to help students outside the classroom.
- Considered an effective teacher by students and/or peers.
- Publications related to teaching, including textbooks, new teaching methods, and aids.

Leadership and Service:

- Active participation with their colleagues in curricular development and other pedagogical activities.
- Development of facilities within the department, college, or university that contribute to teaching activities.
- Participation in professional training and career development activities both inside and outside of the university.
- Participation in outside (e.g., K-12) activities to the extent that it contributes to the candidate's effectiveness as a faculty member.
- Active interest in student affairs and welfare, and effectiveness as a student advisor.

For promotion from Senior Instructor to Principal Instructor

It is not expected that an individual would rate highly on every point in each of these categories, given the spectrum of differences in 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 they proved successful should make for reasonable uniformity of judgement in considering promotion.

Teaching:

Demonstrated excellence as an educator in a wide variety of classes and class levels.

- Participation in training at the university or greater level to enhance teaching, with proven application benefits to methods, approaches and/or technology in the classroom.
- Publications and/or presentations contributing to enhancement of department, college, or university teaching practices.
- Development of new courses and/or program-wide enhancements.
- Considered an effective and enthusiastic teacher by students and/or peers.

Leadership and Service:

- Participation with proven contributions in activities at the university or higher level.
- Participation in outside activities at the regional, state or national level to the extent it contributes to the department, college, or university goals.
- Demonstrated commitment to cross-disciplinary activities and committees.
- Leader in development of programs or facilities that enhance academic capabilities and teaching excellence.
- Contributions in student affairs and welfare, such as first-year experience, advising, etc.

College of Engineering and Applied Science Department of Mechanical and Aerospace Engineering RPT Criteria Version History

Version 2: Initial Version

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