# Department of Civil, Environmental and Architectural Engineering Comprehensive Review, Promotion and Tenure Process Guidelines Adopted October 2023

The expectations of the Department of Civil, Environmental and Architectural Engineering (CEAE) for its faculty are that they develop a scholarly and balanced approach towards teaching, research, and service to achieve effectiveness and excellence in their field of endeavor. The nature of scholarly innovation requires both flexibility and freedom; thus, the expectation of developing a universal formula for evaluating performance is unattainable. That is, it is neither desirable nor feasible to specify a rigid set of evaluation guidelines. This document complements the department-adopted College of Engineering & Applied Science Comprehensive Review, Promotion and Tenure Criteria for Tenure Track Faculty and is designed to provide details on the *process* that the department has adopted in such reviews.

## CEAE is organized into six intellectually diverse groups

- 1. Building Systems Engineering
- 2. Construction Engineering and Management
- 3. Environmental Engineering
- 4. Geotechnical Engineering and Geomechanics
- 5. Structural Engineering and Structural Mechanics
- 6. Hydrology, Water Resources, and Environmental Fluid Mechanics

#### and a number of cross-cutting areas:

- Engineering Science
- Civil Systems
- Materials Science and Engineering
- Mortenson Center in Global Engineering and Resilience
- Geoenvironmental Engineering
- Water Engineering & Management

#### **Faculty Tracks and Ranks**

Definition of faculty ranks and tracks can be found at <a href="https://www.colorado.edu/facultyaffairs/faculty-career-milestones/faculty-titles-and-ranks">https://www.colorado.edu/facultyaffairs/faculty-career-milestones/faculty-titles-and-ranks</a>. The Department aligns all faculty ranks and tracks with University rules and guidelines.

#### The Process

#### **Collection of Dossier Materials**

- The candidate will be notified by Department and/or College staff of their upcoming comprehensive review, promotion, or tenure review.
- The candidate will be provided with a checklist of the required dossier materials as well as a timeline with due dates.
- The candidate will work with staff, their PUEC, and the department Chair to compile their dossier within the requested timeline.
  - It is encouraged that the candidate be collecting measures of teaching over the course of their entire appointment, not
    just as they are preparing their dossier. Examples include Teaching Qualify Framework (TQF)-related peer reviews of
    teaching, reports of class interviews, and course materials (syllabi, exams, etc.)

## Selection of the Primary Unit Evaluation Committee (PUEC)

- Two members from the Personnel Committee who have no conflicts of interest are selected to form the PUEC. The members will be selected by the Chair in consultation with the candidate and their mentor(s).
  - Note: University rules prohibit individuals with a conflict of interest from serving on the PUEC. This includes PhD or
    postdoctoral mentoring relationships, close collaborators (typically indicated by status as co- authors or co-investigators on
    multiple peer-reviewed publications or grants in the past three years).
- The PUEC may rely on other faculty from the Personnel Committee and the department who are familiar with the candidate's research to help assemble the case.

## **PUEC Actions**

- The PUEC is responsible for assisting the candidate, staff, and department Chair in assembling the dossier, identifying external reviewers, providing a summary of the candidate's dossier to the voting membership of the primary unit, and making a recommendation to the primary unit. The written recommendation of the PUEC becomes part of the dossier.
- For tenure and promotion cases, the PUEC provides the Chair with a list of 8-10 names of external letter writers, with 3 of those names supplied by the candidate. The Chair will then formally solicit letters from the external reviewers\*.
- Should the candidate choose to use student letters as a measure of teaching, the PUEC will compile a list of at least 10 current and/or former students from which the department will solicit feedback.
- The PUEC writes a recommendation letter describing, evaluating, and summarizing the candidate's accomplishments based upon the relevant data collected. For teaching, the data collected should follow the TQF evaluation summary noted in Appendix C.
- The department Chair will schedule a meeting with the Personnel Committee where the PUEC will present the candidate's case (approximately 15-minutes) and facilitate discussion.
- The PUEC, in consultation with the department Chair, will manage any requests for additional information from the College and other levels of review throughout the review process.

#### **Personnel Committee**

- The Personnel Committee, also referred to as the Promotion Committee, consists of all the Associate and Full Professors within the Department of Civil, Environmental & Architectural Engineering.
- Recommendations for promotion, tenure, and reappointment shall be made by the Personnel Committee and presided over by
  the department Chair, with support from the Associated Chair for Administration. Associate professors will vote on
  recommendations for tenure and reappointment, but not on recommendations for promotion to full professor.

#### The Vote

- Following the presentation of the candidate's case by the PUEC in a dedicated meeting, the Personnel Committee members vote via paper or electronic secret ballot facilitated by the department Chair or a member of the staff.
- Reappointment and Promotion to Full Professor votes are "For" or "Against" votes. Tenure and promotion votes can only be
  "For" awarding of tenure if all three areas of teaching, research and service are at least "meritorious" and either teaching or
  research is "excellent".
- Abstentions and excused absences are reported separately in the Chair's report.
- The department Chair does not vote.

# Chair's Report of Primary Unit Evaluation & Recommendation

- The department Chair writes a letter reflecting on the evaluation of the PUEC and discussion of the Personnel Committee.
- The Chair's letter will report the vote of the Personnel Committee.
- The Chair's recommendation may deviate from the Personnel Committee's vote.
- The Chair's letter will be shared with the Personnel Committee when finalized.

#### **Notification**

A candidate for reappointment, promotion, and/or tenure is to be informed of the recommendations in writing at each step of the review process. In particular, copies of the Chair's and/or Director's report and the PUEC report are sent to the candidate by the Dean's office after they are received, and copies of the Dean's report and First-Level Review Committee (FLRC) report are sent to the candidate by the Dean's office when they are forwarded to Faculty Affairs.

## **Evaluation Areas of Review**

## Scholarly/Creative Work Evaluation

A combined assessment is made based on the research quality, quantity, and funding. Evaluations include all areas of intellectual inquiry reflecting our research diversity, including pedagogy. The candidate is required to submit a report detailing their scholarly work using the suggested format in the *Guidance to Candidates for Preparation of Materials* (see Appendix B).

- Production of scholarly and creative work
  - Including peer-reviewed papers, books, book chapters, monographs, peer-reviewed conference publications, software, provisional and awarded patents, awards and recognitions, and publicly available technical reports and web content
- Applying for and spending external funding

<sup>\*</sup>Use this template for soliciting external reviewer letters.

- o Including federal agencies, state agencies, private foundations, or industry with the faculty member as principal investigator (PI) or co-PI.
- Engagement with professional communities and society
  - Including conference presentations, invited or keynote talks, documented public impact, press coverage of research contributions, publicly available data sets, self-published software or code implementations, and scientific outreach around faculty scholarship

#### **Teaching Evaluation**

The candidate is required to submit a Teaching Statement detailing their teaching contributions using the suggested format in the *Guidance to Candidates for Preparation of Materials* (see Appendix B). Candidates will be evaluated in the areas of course instruction and mentoring. The Teaching Quality Framework (TQF) Evaluation Summary form should be included in this evaluation by the PUEC. A summary of the teaching evaluation process can be found in Appendix C. Performance in course instruction is assessed in part using the first five dimensions of the TQF, while mentorship is assessed according to the sixth dimension. Candidates, in their Teaching Statement, may also note activities related to the seventh dimension to provide additional evidence of teaching excellence.

Sources of evidence should include:

- Candidate teaching statement, assessing their success in each of the TQF dimensions.
- Faculty Course Questionnaires (FCQs).
- Peer reviews of teaching using the unit's peer observation protocols
- Student reviews of teaching including reports of class or group interviews and/or letters from randomly solicited students\*.
- Student reviews of mentoring including reports of research group interview and/or letters from research advisees\*.
- Other sources of evidence that may be used include the development of new and innovative teaching methods, authorship of textbooks, and other notable teaching accomplishments with broad impact or awards.

These submissions should meet the minimum required by the Multiple Measures of Teaching (MMT) as set by the Office of Faculty Affairs: <a href="https://www.colorado.edu/facultyaffairs/node/504/attachment.">https://www.colorado.edu/facultyaffairs/node/504/attachment.</a>

\*Use this suggested template for soliciting student feedback.

#### **Service Evaluation**

Candidates will be required to report on their level of service amongst the following areas using the suggested format in the *Guidance to Candidates for Preparation of Materials* (see Appendix B):

- Department service
  - Committees
  - o Additional roles (i.e., Faculty Director or Associate Chair)
  - Advising student groups
- College and campus service
  - Committees
  - Additional roles (i.e., Assistant or Associate Dean)
- National/International/Professional
  - Journal and grant proposal reviews
  - Organizing conference sessions and conferences
  - Serving on the editorial board of journals
  - Professional society leadership positions and committees

#### **Timeline**

<u>Comprehensive Review (Reappointment):</u> The process for comprehensive review takes place after three years of service, during the fourth year. Dossiers are typically due to the College early in the fall semester. Candidates will be notified of their upcoming Comprehensive Review in the previous spring semester with materials due at the start of the fall semester.

<u>Tenure Review:</u> The process for tenure review and promotion to associate professor takes place after six years of service, during the seventh year. Tenure and promotion packages are typically due to the College in the middle of the fall semester. Candidates will be notified of their upcoming tenure and promotion in the previous spring semester with materials due early in the fall semester.

<u>Post-Tenure Review</u>: CU's tenured faculty undergo post-tenure review (PTR) every five years. The post-tenure review timeline begins with the award of tenure, and the first PTR occurs five years after the faculty member is continuously tenured; it continues to occur at five-year intervals unless a promotion review takes place. A promotion will re-start the PTR clock. Candidates will be notified of their upcoming post-tenure review in the fall semester of their 5<sup>th</sup> year with materials due in the mid-spring semester. Post-tenure review follows the guidelines developed by CEAS, <u>linked here</u>.

<u>Promotion to Full Professor</u>: This process occurs post-tenure, when the candidate has "1. a record that, taken as a whole, may be judged to be excellent; 2. a record of significant contribution to graduate and undergraduate education, unless individual or departmental circumstances can be shown to require a stronger emphasis, or singular focus, on one or the other; and 3. a record since receiving tenure or promotion to Associate Professor that indicates substantial, significant, and continued growth, development, and accomplishment in teaching (or librarianship), scholarly/creative work, and leadership and service." The process for promotion to full professor is not mandatory. Cases for promotion to full professor are typically due to the College at the end of the fall semester so it is recommended that candidates initiate this process no later than the start of the fall semester.

Request for Early Review: Faculty are eligible to be reviewed for tenure following their comprehensive review. (University policy requires that faculty undergo comprehensive review; Boulder campus policy sets that review in the fourth year. That year is adjusted when time towards tenure is granted upon hiring.) Review for tenure is mandatory in the seventh year if it has not occurred earlier. A request for a review prior to the seventh year may come from the individual faculty member or from their unit(s), but faculty members coming up for tenure prior to the seventh year should seek advice from their unit chair and other mentors and would be advised not to proceed if they do not believe they have the backing of their unit. All levels of review will use the same standards and criteria in reviewing such a faculty member as they would in the seventh year; there is no higher standard or different set of criteria for early tenure. Requests for early review should be made in the spring semester before the academic year the candidate wishes to be reviewed.

<u>First-Level Review Committee (FLRC) (CEAS)</u>: Following the presentation of the case to the Personnel Committee and Committee vote, the case will move to the First-Level Review Committee (FLRC) at the College. The Dean will appoint a FLRC of faculty to provide a report on the merits of the cases considered in any given academic year. The members should be tenured, full professors. The FLRC is to serve as a college committee, not representing any individual department. In general, the FLRC will consist of 12 voting members. Members shall serve for three-year terms, staggered across departments. The Dean will broadly outline the charge to the FLRC in a meeting with the Committee at the beginning of each academic year.

<u>Dean's Recommendation (CEAS)</u>: Following a case review and report by the FLRC, the Dean writes a report with their evaluation of the case and recommendation. If the recommendation of the Dean differs from the majority of those who voted in the primary unit, the head of the primary unit, and /or the majority of those who voted in the First-Level Review Committee, the Dean shall outline the areas of disagreement and the reasons for their recommendation in that context. The recommendation of the Dean, the results of the votes of the primary unit and the college review committee, and the candidate's dossier shall be forwarded together to the chief academic officer.

<u>Vice Chancellor's Advisory Committee (VCAC)</u>: Following the FLRC evaluation and the Dean's recommendation, the case moves to the VCAC, which meets weekly during the spring term. The VCAC is a key body for peer review and faculty governance. More specifically: The role of the VCAC includes reviewing hire with tenure, comprehensive review, tenure, and promotion cases forwarded to it by the deans of the multiple colleges and schools. Its deliberations result in a vote, which is reported in the form of a recommendation to the provost.

<u>Recommendation of the Provost</u>: The provost considers the contents of the dossier and the recommendation of the VCAC and makes an affirmative or negative recommendation to the Chancellor. This recommendation will occur during the spring semester.

Recommendation of the Chancellor: The Chancellor is responsible for making the final decision on reappointment and promotion cases. In questions of tenure, the Chancellor makes a recommendation to the President of the University of Colorado system. Affirmative recommendations by the Chancellor usually result in positive recommendations by the president to the Regents, who have final authority in cases of tenure. The President and Regents usually take no action on negative recommendations for promotion to full professor from associate professor, unless a formal appeal is made by the faculty member. This recommendation will occur during the spring semester.

<u>Regents of the University of Colorado</u>: All positive recommendations for tenure shall be forwarded to the President for review prior to submission to the Board of Regents. The role of the President's Office in faculty personnel decisions is to ensure that appropriate

and established procedures are followed, and that university standards for tenure and promotion are upheld at each campus. The primary responsibility for making personnel recommendations rests with the chancellors. The Board of Regents makes the final decision on the award of tenure. Only the board has the authority to award tenure. This recommendation will occur during the spring semester.

<u>Process for appeal</u>: Faculty who are not recommended for reappointment, tenure, or promotion by the Chancellor have the right to appeal the decision to the University President. The University President is charged with responsibility for ensuring that appropriate and established procedures are followed on each campus. The President may elect to undertake a review when he or she finds that: "...substantive issues of sufficient magnitude to affect the outcome exist, procedural issues of sufficient magnitude to affect the outcome exist, or when prima facie evidence of discrimination exists." Hence, faculty who wish to appeal the decision of the Chancellor should be advised to address one or more of these criteria in their letter to the President. The appeal process used is described in Subsection 5.C, Laws of the Regents, Faculty Dismissal for Cause and Grievances.

Once a faculty member receives written notification from the Chancellor of his or her decision not to make a positive recommendation, the affected faculty member has ten days in which to make written appeal to the President.

## **Appendix**

#### A: Resources

Advice on Reappointment, Promotion, & Tenure for faculty in the CU Boulder College of Engineering and Applied Science: <a href="https://www.colorado.edu/engineering-facultystaff/advice-reappointment-promotion-tenure-faculty-cu-boulder-college-engineering-and-applied-science">https://www.colorado.edu/engineering-facultystaff/advice-reappointment-promotion-tenure-faculty-cu-boulder-college-engineering-and-applied-science</a>

APS 1022: Standards, Processes and Procedures for Reappointment, Tenure, Promotion, and Post-Tenure Review: https://www.cu.edu/ope/aps/1022

Career Milestones: Tenure Track Faculty Comprehensive Review, Tenure, & Promotion:

https://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/reappointment-tenure-and-promotion

CEAS Policies, Procedures, and Criteria for Reappointment, Promotion, and Tenure (Tenure-Track Faculty):

https://www.colorado.edu/engineering-facultystaff/faculty/regular-faculty-tenuredtenure-track/policies-procedures-and-criteria-reappointment-promotion

CEAS Post-Tenure Review: https://www.colorado.edu/facultyaffairs/career-milestones/post-tenure-review

Early Promotion & Tenure Policy: <a href="https://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures/early">https://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures/early</a>

Information Packet: Comprehensive Review, Promotion, & Tenure Review:

https://www.colorado.edu/facultyaffairs/node/615/attachment

 $\textbf{Multiple Measures of Teaching:} \underline{\textbf{https://www.colorado.edu/facultyaffairs/multiple-measures-teaching}}$ 

Office of Faculty Affairs (OFA) A-Z Information Guide: https://www.colorado.edu/facultyaffairs/a-z

Optional Tenure Clock Stoppage: <a href="https://www.colorado.edu/facultyaffairs/content/optional-pandemic-tenure-clock-stoppage-request-form">https://www.colorado.edu/facultyaffairs/content/optional-pandemic-tenure-clock-stoppage-request-form</a>

Post-Tenure Review (Boulder Campus): https://www.colorado.edu/facultyaffairs/post-tenure-review

Reappointment, Tenure, Promotion: https://www.colorado.edu/facultyaffairs/reappointment-promotion-and-tenure

Regent Article 5: Faculty: <a href="https://www.cu.edu/regents/law/5">https://www.cu.edu/regents/law/5</a>

Regent Policy 5.D: Reappointment (to a tenure-track position), Tenure, & Promotion: <a href="https://www.cu.edu/regents/policy/5">https://www.cu.edu/regents/policy/5</a>

Tenure Clock: https://www.colorado.edu/facultyaffairs/tenure-clock

Tenure Clock Adjustments: https://www.colorado.edu/facultyaffairs/adjustments-tenure-clock

Tenure Clock Waiver of First Semester of Service: <a href="https://www.colorado.edu/facultyaffairs/content/tenure-clock-waiver-first-semester-service">https://www.colorado.edu/facultyaffairs/content/tenure-clock-waiver-first-semester-service</a>

Tenure & Promotion Appeals: <a href="https://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures/tenure">https://www.colorado.edu/facultyaffairs/career-milestones/reappointment-promotion-and-tenure/relevant-policies-and-procedures/tenure</a>

VCAC Dossier Checklist for Comprehensive Review, Tenure & Promotion:

https://www.colorado.edu/facultyaffairs/node/504/attachment

VCAC Dossier Checklist for Hires with Tenure: https://www.colorado.edu/facultyaffairs/node/588/attachment

# **B:** Guidance to Candidates for Preparation of Materials

Candidates for promotion and tenure, as well as for promotion to Full Professor, are required to provide each of the following materials. Candidates for reappointment are only required to provide the first six items (i.e., all but the list of external reviewers, who are not contacted during the comprehensive review process per College policy). Candidates should prepare the required materials prior to the beginning of the fall semester in which the case will be considered. For cases requiring external letters, the list of recommended external reviewers should be provided by the candidate at the end of the preceding spring semester.

## 1. Curriculum Vitae (CV)

This document represents a cumulative record of the candidate's creative/scholarly work, teaching, and leadership and service achievements. The following is a suggested format for how a CV may be presented for ease of review during the personnel action being undertaken, and additional sections may be warranted. This format may include the following sections:

- a. <u>Educational background:</u> Include all universities attended and degrees, as well as years of attendance. Include names and institutions for dissertation advisors.
- b. Employment history: For postdoctoral positions, include names and institutions of postdoctoral advisors.
- c. Honors and awards: Indicate the granting institution, year, department, and/or organization.
- d. Scholarly/creative work:
  - List scholarly/creative work appearing in: (i) peer-reviewed journal publications, (ii) non-peer-reviewed journal publications, (iii) peer-reviewed conference proceedings. (iv) non-peer-reviewed conference proceedings. Include authors, year, title, journal/proceedings name, volume, and/or page numbers. The impact of journals should be indicated using an impact factor, ranking of the journal within the field (obtained, e.g., from <a href="https://jcr.clarivate.com/jcr/browse-journals">https://jcr.clarivate.com/jcr/browse-journals</a>), or other relevant metric.
  - Written work in press or submitted but not yet accepted for publication should be clearly identified as such.
  - List conference presentations and seminars/lectures, indicating the conference, year, and whether the presentation was contributed or invited. Poster presentations should be listed in a separate section.
  - Additional sections should be added for book chapters, books at academic presses, books at non-academic presses, patents, online video series, websites, blogs, etc. For patents, indicate whether the patent is provisional or awarded.
  - List research funding received and pending proposals. Include agency, title, amount received, beginning and end dates, names of all co-investigators, candidate's role (Principal Investigator or Co-Principal Investigator), and candidate's portion of the funding. During reappointment review, also include the list of proposals submitted and declined.
  - Publications since starting at CU should be indicated (i.e., publications starting with when the candidate is listed with their CU affiliation).
  - The candidate's name should be highlighted in bold everywhere it appears in author lists for all scholarly/creative work. Student researchers from the candidate's group should be indicated by an asterisk (\*) and postdoctoral researchers should be indicated by a caret (^) in author lists. The thesis and postdoctoral supervisors of the candidate should be indicated by a superscript chevron (< or >). Candidates should include a legend for the notation used in their CV.
  - The Department considers publications that have been accepted for publication and campus policy allows the candidate to add materials at any point during review.

#### e. Teaching accomplishments:

- List classes taught at CU and elsewhere (if applicable), including the name of the class, course number, number of students enrolled, semester, and year.
- List any textbooks, study guides, manuals, workbooks, or electronic media produced for student or class use.
- List individual undergraduate and graduate students mentored. Include names, period mentored, and completion dates (with degrees or honors) of the students for whom the candidate served as either the primary mentor or the co-advisor. For co-advisor arrangements, the name(s) of the co-advisors should be included, along with an explanation of the co-advising contribution.
- List exam (e.g., comprehensive and preliminary) and thesis committees on which the candidate has served, including student name, department, and advisor.

## f. Service and leadership activities:

- List internal service and leadership activities to the Department, College, and Campus.
- List external service and leadership activities to professional organizations and government agencies. Include conference/workshop/session organizing, journal and grant/proposal reviews, and other activities. Outreach activities to the community on behalf of CU may also be included.
- g. Media recognition: List articles/stories in which the candidate has appeared, including links if available.

## 2. Teaching statement

The evaluation of teaching is focused on two areas: (i) course instruction and (ii) mentoring. These two areas are evaluated using the teaching quality framework (TQF) and this statement is an opportunity for the candidate to reflect on their contributions and activities in both course instruction and mentoring. The evaluation process for course instruction and mentoring is provided in Appendix C. The statement should provide context and self-reflection on the development of their teaching approach, philosophy, and accomplishments, rather than repeating information already available in the CV. The recommended length of this statement is no greater than approximately 1,500 words.

With respect to course instruction, the candidate should specifically comment on the first five dimensions of the TQF, using evidence and examples from their own course instruction. These dimensions include (a) goals, content, and alignment, (b) preparation for teaching, (c) methods and teaching practices, (d) presentation and student interaction, and (e) student outcomes. If applicable, the candidate should also highlight significant contributions to curriculum and course development, development of textbooks or other teaching materials used elsewhere, educational grants, teaching publications and presentations, and/or significant participation in activities of the American Society for Engineering Education (ASEE) or in the educational functions of the professional societies of which the candidate is a member.

With respect to mentoring, candidates should discuss their mentoring of undergraduate, MS, and PhD students enrolled at CU and elsewhere (with clear indication of the student's home institution). The candidate should also describe their mentorship of post-doctoral researchers, if applicable. Focus should be placed on the involvement of student and post-doctoral researchers in the candidate's research program and the candidate should specifically address their progress, with evidence and examples, related to the sixth dimension of the TQF focused on mentorship and advising.

Throughout the statement, the candidate should reflect on the development and impact of their teaching and advising, which addresses the seventh and final dimension of the TQF. The candidate should describe their contribution to local or external teaching communities, comment on how their teaching has changed over time, including how the candidate's professional development activities have informed their teaching practices and philosophy, and describe to what extent they have reflected on and improved their teaching and contributed to the broader teaching community, both on and off campus.

Candidates should include a section titled "Broader Impacts" in the teaching statement that outlines how they have considered and addressed the larger societal connections of their teaching and mentoring activities. For example, the candidate could describe how they have promoted diversity, equity, and inclusion through their classroom instruction and mentoring. The candidate could discuss how they have worked to make their classroom teaching more inclusive through curriculum development, pedagogical choices, adoption of different evaluation methods, or how they have worked to mentor traditionally under-represented students in research. Outreach activities and community engagement related to teaching and mentoring could also be described.

#### 3. Scholarly/creative work statement

The evaluation of scholarly and creative work is focused on three areas: (i) production of scholarly and creative work, (ii) applying for and receiving funding sufficient to support an active research program, and (iii) engagement with professional communities and society. Candidates should specifically address contributions and activities in each of these three areas, with separate sections in the statement focused on each area. The recommended length of this statement is no greater than approximately 1,500 words, not including figures (not required) and references. The statement should be appropriate for an educated public, as most reviewers at the second and third levels will not be engineers. Again, this is the candidate's opportunity to provide context and demonstrate growth, as opposed to primarily repeating data from the CV.

A primary focus of the statement should be to show innovation and impact through scholarly and creative work; candidates should explicitly discuss the intellectual significance, impact, and depth of their research contributions. The Department values high-impact products over simply a large quantity of products. The candidate should comment on the quality and field-specific standing of journals in which they have published; this information should contextualize the journal impact factors and rankings included in the CV. The candidate should describe the significance of the example scholarly/creative works included in their materials and highlight the impact of any other particularly notable scholarly/creative works listed in their CV, without repeating information already available in the CV. An outlook for future research directions the candidate plans to pursue may also be identified.

Candidates should include a section titled "Broader Impacts" in the scholarly and creative work statement that specifically addresses the societal, community, and/or diversity, equity, and inclusion impacts of their work. For example, the candidate could describe how they have worked to make their lab inclusive and equitable, how their work directly affects under-served communities, or how their research benefits human health and safety.

#### 4. Leadership and service statement

This statement should describe the candidate's leadership and service in two areas: (i) internal (Department, College, and Campus) and (ii) external (to the profession and the public). Candidates should include leadership and service dates and level of effort required when relevant (for example, if the candidate was a journal editor/co-editor, they should describe the extent of their activities, involvement, and/or number of papers handled). Candidates should avoid repeating information already available in their CVs and should instead focus in this statement on describing the quality and impact of their leadership and service activities. Candidates should particularly highlight any leadership positions or roles, with a description of activities performed and outcomes. The recommended length of this statement is no greater than approximately 1,500 words.

Candidates should include a section titled "Broader Impacts" in the leadership and service statement that describes their professional impacts on society through their service activities at a level appropriate for their rank. For example, this could include leadership and service activities focused on fostering a more diverse, equitable, and inclusive environment at CU, both inside and outside the Department. The candidate could describe service to the community and society that intersects with their work at CU. Candidates could discuss how any of their leadership and service activities have been focused on making their profession, professional societies, or meetings more inclusive and equitable.

## 5. Three representative examples of scholarly work

Candidates should include three peer-reviewed publications that demonstrate their accomplishments in scholarly and creative work. Candidates should include publications reflecting work completed after joining CU and that are notable for their innovation and impact. Candidates should explain in their scholarly and creative work statement why these publications are particularly noteworthy. Publications including PhD student authors are preferred.

#### 6. Research funding history

This must be included in the dossier, either as part of the candidate's CV or as a separate list or table. The Department finance team will provide a list of expenditures for candidates, and candidates should indicate whether they are the Principal Investigator (PI), Co-PI, Senior Personnel, or Subcontractor, as well as the total award amount and their portion of the funding in the case of multiple investigators. Dates, project titles, and funding agencies should be provided with all expenditures. Candidates should list pending proposals and may elect to include declined proposals.

#### 7. List of recommended external reviewers (not required for Comprehensive Review/Reappointment)

The candidate may provide a short list (up to three names) of whom can be *included* or *excluded* as potential reviewers on cases for promotion to Associate Professor and tenure, and for promotion to Full Professor. This list should include professional scholars who can write authoritatively about the candidate's scholarly and professional service record, chosen to avoid any known or apparent biases, either positive or negative. The list should not include anyone with a conflict of interest in the case which, as defined by the College and University, includes PhD or postdoctoral mentoring relationships and close collaborators (typically indicated by status as co-authors or co-investigators on multiple peer-reviewed publications or grants in the past three years).

## C: Teaching Quality Framework (TQF) Evaluation

The sources of evidence used by the PUEC in completing the TQF evaluation summary include the following at a minimum, each of which is required:

- a. <u>Candidate teaching statement:</u> The candidate's assessment of their success in each of the TQF dimensions should be outlined in their teaching statement, providing the "self-voice" required for a holistic TQF evaluation.
- b. <u>Faculty course questionnaires:</u> Submit the complete record of faculty course questionnaire (FCQ) summaries of each course taught and the instructor summary compiled by the Office of Budget, Planning, and Assessment, for the period of review. For promotion to the rank of Professor, include only the FCQs since promotion and tenure. Fall FCQs should be added when they become available.
- c. <u>Peer reviews of teaching:</u> These reviews, especially for junior faculty, should not be just one or two classroom visits in the semester of the review submission. They should instead represent a series of visits over the period of review or beyond, providing opportunities for feedback, improvement, and assessment.
- d. <u>Student reviews of teaching:</u> To assess the quality of classroom instruction, feedback from students should be included in the TQF assessment and should come from at least one of the following sources:
  - Report of class or group interviews: Interviews of a class or group of students should be performed without the candidate present, and the students should be asked to describe both the positive aspects of the course and instructor and areas for improvement. Feedback should be provided to the candidate. Feedback from class or group interviews should be prepared in the TQF format.
  - Letters from randomly solicited students: Letters may be requested from students who have taken courses from the faculty member being evaluated, both at the undergraduate and graduate levels, including current students and alums. Letters

should preferably be requested for several different classes and semesters to gauge development over time. At least four letters are required if this form of evidence is used in the TQF assessment. Letters should be requested using this format.

- e. <u>Student reviews of mentoring:</u> To assess the quality of mentorship and advising, feedback from students should be included in the TQF and should come from at least one of the following sources:
  - Report of research group interview: An interview of students in the candidate's research group should be performed without the candidate present, and the students should be asked to describe both the positive aspects of the candidate's mentoring and areas for improvement. Feedback should be provided to the candidate.
  - Letters from research advisees: Letters may be requested from current or former students who have been research advisees of the candidate. At least three such letters are required if this form of evidence is used in the TQF assessment. Letters should be requested using this format.
- f. Other: Additional sources of evidence that may be used in the TQF assessment include the development of new and innovative teaching methods, authorship of textbooks, course material provided publicly in websites and video series, and other notable teaching accomplishments with broad impact.

#### **Evaluation of Teaching Process**

The evaluation of teaching is focused on two primary areas: (i) course instruction and (ii) mentoring. These two areas are equally important for all tenure-track faculty and are given equal weighting in determining an overall teaching rating. Performance in course instruction is assessed, in part, using the first five dimensions of the TQF, while mentorship is assessed, in part, according to the sixth dimension. Candidates should also note any activities related to the seventh dimension of the TQF to provide additional evidence of excellence in teaching.

#### Course instruction

Contributions are comprised primarily of instruction in undergraduate and graduate courses related to the core teaching mission of the Department.

- a. Meritorious: Candidates show evidence of sustained high-quality education at both the undergraduate and graduate levels. In the context of the TQF dimensions, a rating of "meritorious" could be indicated by all five dimensions related to course instruction being rated with proficiency levels of 1 or 2, with occasional 3s or 4s. The candidate should have a thorough knowledge of the subject matter of the courses they have taught and should keep their courses up to date by incorporating new material. The candidate should have a working knowledge of the science of teaching and learning as applied to their content area. The candidate should have demonstrated an ability to develop new courses or to make substantial revisions to old ones. The students consider the candidate to be an effective teacher and the candidate is willing to spend adequate time with students outside the classroom. The candidate has made effective use of peer evaluation and programs or training to improve teaching. The candidate has worked to make their classroom teaching more inclusive, for example through curriculum development or the adoption of different evaluation methods.
- b. Excellent: In course instruction, excellence may be demonstrated through publications and presentations related to teaching, including textbooks, new teaching methods and aids, and the introduction of new laboratory experiments. In the context of the TQF, a rating of "excellent" may be indicated by proficiency level ratings of mostly 4 in the first five dimensions. Most notably, these dimensions should include evidence of achievements beyond standard classroom practice, for example through one or more of the following: (i) sustained recognition of accomplishment through multiple high-level campus, CU System, and national awards in education; (ii) production of multiple peer-reviewed works on teaching and scholarship of teaching and learning; (iii) curriculum design and innovation, including textbooks or the equivalent resources impacting CU, national and international audience; (iv) sustained grants or funding in support of developing, enacting, and sustaining effective educational programs; (v) programmatic development, such as the creation of a new pathway or program in the field that positively impacts those at University of Colorado and serves (and is taken up) as a national model. Excellence may also be demonstrated through substantial outreach activities and community engagement related to teaching.

## Mentorship and student advising

Contributions can take the form of advising students in either educational or research settings, independent of department, including serving as the formal advisor or co-advisor of MS or PhD students, supervising independent study students, serving on dissertation and thesis committees, advising of undergraduate research (e.g., via the DLA or SPUR program), and supervision of postdoctoral researchers.

a. <u>Meritorious</u>: The candidate is a conscientious and effective mentor of students in research at both the graduate and undergraduate levels. The candidate shows evidence of growing student mentorship across all levels, with a mix of PhD, MS, and undergraduate student supervision. Candidates are expected to participate in and lead thesis and dissertation committees, including PhD preliminary exams. Students, particularly at the PhD level, should be involved in the production of scholarly and creative work. Candidates for promotion and tenure should have already graduated, or nearly graduated, at least one PhD student as primary advisor. The candidate shows evidence of creating an inclusive group environment.

b.	<u>Excellent:</u> The candidate has demonstrated substantial and sustained excellence in student mentorship. The candidate should have graduated multiple PhD students and should have a robust and diverse research group. The candidate has demonstrated success and substantial engagement in mentoring under-represented and/or non-traditional students, including leadership and participation in both internal and external mentoring programs.
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