**Merit Evaluation Process and Criteria: Calendar Year 2024**

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**1. Purpose**

This document outlines the annual merit evaluation process and criteria for tenured, tenure-track, and teaching faculty in the Paul M. Rady Department of Mechanical Engineering (ME) at the University of Colorado, Boulder (CU). Annual merit evaluations are used to provide feedback on the alignment of faculty activities with department priorities and on progress towards professional milestones, including promotion and tenure (as applicable). These evaluations are also used to determine merit raises.

**2. Merit Evaluation Overview**

The merit evaluation process provides an assessment of faculty in three areas: research, teaching, and service. Ratings are given on a campus-mandated five-point scale, consisting of “Fails to Meet Expectations” (FM; 1), “Below Expectations” (BE; 2), “Meeting Expectations” (M; 3), “Exceeding Expectations” (E; 4), and “Outstanding” (O; 5).

During merit review, “Expectations” are defined according to the position and rank of each faculty member. That is, different expectations hold for tenured, tenure-track, and teaching faculty, as well as for the different ranks within each track (i.e., assistant, associate, and full), consistent with the different job codes and titles for each position. Varying publishing and funding norms in different areas of research are also considered.

Overall ratings are determined based on a weighted sum of research, teaching, and service ratings, where the weightings are determined by the appointment percentages of an individual faculty member. Contributions to DEI will be considered for each area based on information provided in the summary in Section 210, as well as individual descriptions for relevant entries using the drop-down menu. Non-integer scores are common in each rating category and are used to determine overall ratings. In some cases, faculty may have a 0% appointment in one or more rating categories; these faculty are not rated in these categories.

For faculty on sabbatical for part or all the academic year, appointment percentages are adjusted to account for reduced teaching and service loads (typically, 60% research, 25% teaching, and 15% service for one-semester sabbaticals and 80% research, 10% teaching, and 10% service for two-semester sabbaticals). As such, faculty on sabbatical will receive an overall rating that largely reflects their research rating. Faculty on family or medical leave for one semester or more in a review cycle do not typically have appointment percentages adjusted; these faculty will be reviewed based on performance during non-leave periods only, with a proportional adjustment in expectations (e.g., a faculty member with one semester of leave will be expected produce less scholarly and creative work in a review cycle as compared to a faculty member who did not take leave, yet both may receive research ratings of “Exceeding Expectations” or “Outstanding”).

At the end of the merit evaluation process, faculty receive a form outlining their category and overall ratings, along with a brief written justification for the rating. Faculty will be informed of the distribution of scores in each category in addition to the distribution of overall ratings. In their forms, faculty will also receive their ratings in each evaluation dimension. Additional explanation and justification are provided in required in-person follow-up meetings for all faculty at the assistant level (including tenure-track and teaching faculty); these meetings are optional and provided on an as-needed basis for more senior faculty.

The merit evaluation process provides an opportunity to discuss progress towards professional milestones, including promotion and tenure, but is distinct from the process used for comprehensive review, promotion, and tenure (CRPT). Merit evaluation ratings do not guarantee or inform CRPT outcomes (either positively or negatively). The CRPT process includes additional sources of information – including external evaluation letters, student evaluation letters, and a department vote – that are not included in the merit evaluation process.

**3. Merit Evaluation Process**

**3.1 Personnel**

Beginning in February, members of the personnel committee begin reviewing the Faculty Report of Professional Activities (FRPA) and other sources of evaluation information for each faculty member in the department. There are seven members of the personnel committee: five tenured faculty members, one teaching professor (associate or full), and one research professor (associate or full). The chair(s) of the primary unit evaluation committee (PUEC) and merit evaluation process will be a tenured faculty member. The department chair also participates in personnel committee activities, as necessary. The department personnel manager provides staff support for the personnel committee, and an administrative assistant may also be present at personnel committee meetings for note taking and administrative purposes. All members of the personnel committee, the department chair, the personnel and operations manager, and the administrative assistant will complete implicit bias training on an annual basis. Personnel committee members with personal conflicts of interest (e.g., immediate family members) are excluded from the evaluation and discussion of ratings for those with whom they are conflicted.

**3.2. Sources of Information**

The primary source of information for the merit evaluation process is the FRPA, which is due by February 1 each year. Failure to submit the FRPA on time may result in the faculty member becoming ineligible for a merit increase to their salary. All tenured, tenure-track, and instructional faculty are required to complete and submit their FRPA by the due date. Both qualitative (e.g., narrative summary of activities) and quantitative (e.g., number of publications) information from the FRPA is considered. The narrative summary of activities should also be used to highlight or convey information that would not show up elsewhere in the FRPA (e.g., difficult personal circumstances).

In addition to the FRPA, teaching performance is assessed using qualitative and quantitative feedback from Faculty Course Questionnaires (FCQs and any available information from classroom peer observations and classroom student interviews (both of which may be considered during, but are not required for, merit evaluations). Information from FCQs will be critically evaluated by the personnel committee in the context of general trends for similar courses (e.g., FCQ scores are generally higher in smaller graduate courses than in large required undergraduate core courses). The personnel committee will also take into consideration that FCQs are an often-biased source of information about a course and instructor, primarily measuring student satisfaction rather than student success or outcomes. As such, information from FCQs will be used carefully during the merit evaluation process as part of a holistic assessment of classroom instruction.

The service evaluation also includes a statement from department committee leads (e.g., the undergraduate and graduate committee chairs) regarding each faculty member’s level of engagement. Input on annual evaluations for faculty in the partner programs at Colorado Mesa University (CMU) and Western Colorado University (WCU) is solicited from the directors of each of these programs.

**3.3. Merit Evaluation Procedure**

Merit evaluation ratings are determined based on the criteria described in Section 4. The procedure leading to these ratings is the following:

1. Initial ratings are given by the personnel committee and the department chair based on the review of information in Section 3.2. Faculty on the personnel committee determining these ratings are as follows:
	1. Two tenured professors and the research professor each provide initial research ratings for all faculty.
	2. Two tenured professors and the teaching professor each provide initial teaching ratings for all faculty.
	3. One tenured professor and the department chair each provide initial service ratings for all faculty.

Ratings in each category are determined according to the criteria outlined in Section 4.

1. All initial ratings are compiled in one spreadsheet by the personnel and operations manager, or by the administrative assistant.
2. The entire personnel committee and department chair discuss each faculty rating as a full group. These discussions are organized by rating category, rank, and position such that, for example, all research ratings for full professors are discussed together, followed by research ratings for associate professors, and so on.
	1. During these discussions, notes are taken by the personnel and operations manager or the administrative assistant. These notes are the basis for written feedback on final ratings forms.
	2. These discussions result in final ratings calculated according to the criteria in Section 4.
	3. Final ratings are reviewed by the personnel committee to check for bias or problematic patterns.
	4. Final ratings for partner program faculty at CMU and WCU are reviewed by the program directors.
3. Ratings forms are prepared by the merit evaluation chair, the department chair, and the personnel and operations manager. These forms include brief written feedback based on the committee discussions, including the ratings in each evaluation dimension (discussed in Section 4.1); this feedback is reviewed and edited by the chair for clarity.
4. All faculty at the assistant level are required to meet with the department chair and at least one member of the personnel committee to discuss their ratings. Other faculty may request a follow-up meeting if desired.

**4. Ratings Criteria**

**4.1. Dimensions**

Merit ratings are determined across seven dimensions: two dimensions in teaching (*T1*, *T2*), three in research (*R1*–*R3*), and two in service (*S1*, *S2*). The specific dimensions are the following:

1. Course instruction at the undergraduate and graduate levels (*T1*)
2. Mentoring and advising of undergraduate and graduate students (*T2*)
3. Production of scholarly and creative work (*R1*)
4. Applying for, winning, and/or spending funding (*R2*)
5. Engagement with professional communities and society (*R3*)
6. Internal service to the department, college, or university (*S1*)
7. External service to professional communities and society (*S2*)

Based on qualitative and quantitative evidence taken from the FRPA and other sources (details are provided in the next section), a rating of 1-5 is given in each dimension, corresponding to FM, BE, M, FE, and O ratings. These ratings are made relative to position- and rank-specific expectations, as described in the next section. Performance within each merit evaluation category (i.e., research, teaching, and service) is then determined as a weighted sum of the ratings in each dimension, as outlined in Section 4.3. Notably, not all dimensions are weighted equally (e.g., production of scholarly and creative work is the greatest contributor to the research rating).

Faculty near the beginning of their appointments at CU may also not have had sufficient opportunity to demonstrate their performance in each rating dimension. In such instances, faculty will not be penalized and the short duration of their time in the department will be taken into consideration by the personnel committee when determining merit ratings.

**4.2 Evidence and Expectations**

Sources of evidence and position- and rank-specific expectations for each of the evaluation dimensions are outlined in the following sections.

***4.2.1. Course instruction (T1)***

Contributions are comprised primarily of instruction in undergraduate and graduate courses related to the core teaching mission of the department. Courses taught outside the department should also be noted and will, in most cases (e.g., with prior approval from the department chair), be treated as equivalent to those taught in the department.

* 1. Relevant FRPA categories: 307, 308, 310, 319, 320.
	2. Quantitative and qualitative data from FCQs, classroom peer observations, and classroom student interviews may all be used to evaluate the course instruction dimension.
	3. The [teaching quality framework (TQF)](https://docs.google.com/document/d/1AIN4GVje007IzCfd_auLpG4IGdqNRnctGpSs-dI5wOE/edit) may be used to structure narrative feedback (self-voice) on the FRPA, classroom observation reports (peer-voice), and classroom interview reports (student-voice).
	4. Additional credit will be given for the development or revision of courses, teaching a course for the first time, and teaching (typically larger) undergraduate required core courses.
	5. Faculty should note, and will receive additional credit for, activities to improve teaching, such as attending an ASEE meeting, participating in the department peer observation process, or taking an online pedagogy class.
	6. Additional credit will be given for formal pedagogical activities related to diversity, equity, and inclusion (DEI) and faculty employing inclusive teaching practices. These activities should be identified using the DEI Activity Summary (code 210; example statements can be found [here](https://www.colorado.edu/bfa/sites/default/files/attached-files/bfa-r-1-02.28.22_recommended_guidelines_dei_faculty_merit_evaluations.rev090722.pdf)).
	7. Expectations:
	8. Tenure-track faculty at the assistant level are expected to show evidence of a commitment to improving instructional expertise, with some involvement in both undergraduate and graduate education (in many cases, these faculty initially teach primarily at the graduate level). Tenure-track faculty at the assistant level with a two-course teaching load will be evaluated relative to this expected load (i.e., these faculty will not be penalized for their lighter teaching loads).
	9. Tenured faculty at associate and full levels are expected to show evidence of high-quality education at both the undergraduate and graduate levels, including ongoing growth and innovation as an instructor.
	10. Teaching faculty at the assistant level are expected to show evidence of high-quality education primarily in larger undergraduate core courses. Credit is also given for graduate-level teaching, but this is not required.
	11. Teaching faculty at associate and full levels are expected to show evidence of sustained high-quality undergraduate and graduate education, including course development or revision and other pedagogical activities.

***4.2.2. Mentoring and student advising (T2)***

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 undergraduate research (e.g., via the UROP or DLA programs), supervising students engaged in internships for credit, and supervising postdoctoral researchers.

* 1. Relevant FRPA categories, 301 – 306, 311 – 313, 317.
	2. For each PhD student, make a single entry and list the level of candidacy of the student.
	3. Co-advising arrangements should be clearly labeled and described in the FRPA.
	4. Formal advising of undergraduate or MS students cannot substitute for advising PhD students at the tenured or tenure-track level.
	5. Supervision of postdoctoral researchers cannot substitute for advising PhD students at the tenured or tenure-track level.
	6. Additional credit will be given for the number of PhD and MS thesis students defending each year.
	7. Faculty are encouraged to share details about non-research related mentoring, which could include advising independent studies, working with student organizations, and other significant efforts to create strong student/faculty relationships within the community.
	8. Additional credit will be given for mentoring or recruiting advisees who are members of marginalized or underrepresented populations (including female/non-binary persons). These activities should be identified using the DEI Activity Summary (code 210).
	9. Expectations:
	10. Tenure-track faculty at the assistant level are expected to show evidence of growing student mentorship across all levels, with a mix of PhD, MS, and undergraduate student supervision. Growth in this context is indicated by the number of new students advised each year. These faculty are expected to participate in thesis and dissertation committees, including oral and research preliminary exams for PhD students. Students, particularly at the PhD level, should be involved in the production of scholarly and creative work.
	11. Tenured faculty at associate and full levels are expected to show evidence of substantial student mentorship, primarily at the PhD level. Supervision of postdoctoral researchers, MS, and undergraduate students is also encouraged but should not take the place of PhD supervision. These faculty are expected to participate in and lead thesis and dissertation committees, including oral and research preliminary exams for PhD students. Students at the PhD level should be involved in the production of scholarly and creative work.
	12. Teaching faculty at the assistant level are not expected to supervise or advise students in a formal capacity but are encouraged to participate in thesis and dissertation committees, including oral and research preliminary exams for PhD students.
	13. Teaching faculty at associate and full levels are encouraged (but not required) to supervise independent study students and are also encouraged to participate in thesis and dissertation committees, including oral and research preliminary exams for PhD students.

***4.2.3. Production of scholarly and creative work (R1)***

Contributions include peer-reviewed journal papers, books, book chapters, monographs, peer-reviewed conference publications, software contributions, provisional and awarded patents, publicly available technical reports, and data sets.

1. Relevant FRPA categories: 401 – 407, 410 – 412, 418.
2. The impact of journals should be indicated using an impact factor, ranking of the journal within the field (obtained, e.g., from <https://jcr.clarivate.com/jcr/browse-journals>), or another relevant metric. Faculty are also encouraged to provide an impact statement if a publication appears in a lower tier journal that was selected because the paper would have a greater impact there.
3. By default, a faculty name appearing at the end of an author list will be taken as indication that the faculty member is the senior and/or corresponding author. The senior author is defined as the guiding force behind a scholarly and creative work and is often the advisor of the first author (who may be a student or postdoctoral researcher). For journals and fields that follow different norms (e.g., fields where it is customary to list the senior author second), a note of explanation should be provided.
4. Greater credit is given for scholarly and creative work in which a faculty member is either the first, senior, or corresponding author.
5. Review papers should include a description of whether the review was invited or contributed, as well as the prestige of the review and journal within the field (as measured, e.g., by impact factor or other metric).
6. Commentaries, book reviews, and other non-original scholarly and creative works should be noted as such, with a corresponding description of impact and prestige within the field.
7. Peer-reviewed conference papers should only be listed if they undergo full peer review (e.g., review and revision). The approximate acceptance rate of peer-reviewed conference papers should be noted, if available. This information is intended to provide context; there is no strict cutoff at which a conference paper will be considered “peer-reviewed”. If information on acceptance rates is not available, other information on the prestige or reputation of the conference in the field should be provided for context. Conference abstracts that are reviewed a single time as a process for acceptance should be listed in the 413 or 415 categories in *R3*.
8. Scholarly and creative work contributing to DEI should be identified using the DEI Activity Summary (code 210).
9. Additional consideration will be given to research honors and awards, including conference-level paper awards and society-level awards (relevant FRPA categories: 701-705, 780, 790, 799).
10. Faculty are encouraged, but not required, to include work in progress on their FRPA (e.g., publicly available preprints and submitted patents); this information is not considered during the annual evaluation but may be useful for FRPA preparation in subsequent years.
11. Expectations:
	* 1. Tenure-track faculty at the assistant level are expected to show evidence of progress towards the production of high quality scholarly and creative work (e.g., preparing and submitting manuscripts, or building experiments and writing computational codes). Typically, these faculty will demonstrate (and should remark upon) the increasing output and impact of the scholarly and creative work they produce each year.
		2. Tenured faculty at associate and full levels are expected to show evidence of high impact scholarly and creative work.
		3. Teaching faculty with a partial research appointment are expected to show evidence of high impact scholarly and creative work in proportion to the size of their appointment.

***4.2.4. Applying for, winning, and/or spending funding (R2)***

This funding can come from federal agencies, private foundations, or industry with the faculty member as principal investigator (PI), co-PI, or co-I. Internal funding (e.g., the CU Innovative Seed Grant) should also be noted. Yearly acquisition of new grants is not required and the total amount of research expenditures each year is not included in the merit evaluation process.

* 1. Relevant FRPA categories: 421 – 424, 429 – 430.
	2. Proposals pending and not awarded should also be noted.
	3. All funding should be labeled as NEW or CONTINUING, and the role on the project (e.g., PI, co-PI, or co-I) should be clearly indicated.
	4. All funding should clearly indicate the project name, funding agency, dates, total amount, amount awarded to the faculty, and co-investigators.
	5. Preference is given to external funding sources, as opposed to funding from competitions internal to the department, college, campus, or system.
	6. Proposals and funding that directly contribute to DEI should be identified using the DEI Activity Summary (code 210).
	7. For fields of research with different funding norms, faculty should note this information in their narrative summary statement (e.g., computational research often requires less funding than experimental research).
	8. Expectations:
1. Tenure-track faculty at the assistant level are expected to show evidence of proposal submissions with the potential to increase funding levels and support PhD students.
2. Tenured faculty at associate and full levels are expected to show evidence of new and continuing external funding sufficient to support 3-5 PhD students for the duration of their degrees.
3. Teaching faculty with a partial research appointment are not expected to secure external funding, but credit is given if such funding has been pursued or secured.

***4.2.5. Engagement with professional communities and society (R3)***

Contributions can take the form of 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. This dimension is distinct from external service (i.e., *S2*) in that engagement with professional communities and society is directly connected to, and occurs via, scholarly and creative work produced by the faculty member.

* 1. Relevant FRPA categories: 413 – 416, 419, 440, 444, 450, 460.
	2. Invited talks should be clearly labeled by prefacing entry with INVITED. Contributed presentations should be clearly labeled with PODIUM or POSTER.
	3. All presentations on which faculty are an author or co-author should be included, with the presenting author clearly indicated (e.g., preface with an asterisk).
	4. Engagement activities that directly contribute to DEI should be identified using the DEI Activity Summary (code 210).
	5. Expectations:
	6. Tenure-track faculty at the assistant level are expected to show evidence of substantial dissemination of scholarly and creative work, particularly via participation in professional conferences.
	7. Tenured faculty at associate and full levels are expected to show evidence of substantial dissemination of scholarly and creative work, with an emphasis on documented public and societal impact.
	8. Teaching faculty with a partial research appointment are expected to show evidence that their scholarly and creative work is being disseminated, particularly via participation in professional conferences.

***4.2.6. Internal service (S1)***

Contributions can take the form of service to the department, an institute, the college, or campus, in the form of semester or year-long formal and informal activities that directly support our collective teaching and research missions. Standard forms of internal service are typically committee work, faculty mentoring, and significant administrative roles, including serving as Chair, Associate Chair, Institute Director, Institute Associate Director, or Associate Dean. Internal service also includes serving as a member of or chairing an ad hoc committee (with permission from the Chair, or Institute Director as applicable), including faculty search committees.

* 1. Relevant FRPA categories: 605 – 609
	2. To gauge time commitment on ad hoc committees, hours per week spent on each committee should be noted.
	3. Feedback from department committee chairs will be solicited to determine faculty engagement and responsibility.
	4. Efforts that directly support broadening participation in science and engineering, or that impact DEI should be noted using the DEI Activity Summary (code 210).
	5. For faculty mentoring activities, the names of mentees should be provided, as well as the number of hours per week/month spent mentoring and the activities performed.
	6. Expectations:
1. Tenure-track and teaching faculty at the assistant level are expected to serve on at least one departmental committee.
2. Tenured and teaching faculty at the associate or full levels are expected to serve on at least one departmental committee and to become involved in department or college-level committees, either as participants or in leadership roles. These faculty may also be selected to mentor junior faculty.

***4.2.7. External service (S2)***

Contributions take the form of service to scholarly communities, in the form of formal and informal activities that directly support that community’s scholarly activities. Common forms of external service focus on reviewing papers and proposals, either as an ad hoc reviewer or a member of a program committee or other formal panel, managing peer review as a journal editor or senior member/chair of a conference program committee or other formal panel, organizing a professional meeting (working group, workshop, symposium, conference), service to a professional society (via formal committees, or in an elected or appointed position), significant outreach to the public (local, state, or national), or serving as a program officer at a grant-making institution (public or private). This dimension is distinct from engagement with professional communities and society (i.e., *R3*) in that external service is not directly connected to scholarly and creative work produced by the faculty member. In many cases, this dimension is most closely connected to the promotion and dissemination of the scholarly and creative work of others.

* 1. Relevant FRPA categories: 601 – 604, 620, 625, 630, 631, 695 – 698.
	2. To gauge time commitment for faculty in organizing professional meetings, the size of the meeting, workshop, symposium, etc. and the specific organizing role performed should be noted.
	3. Work on editorial boards should indicate the number of papers handled in the prior year.
	4. The total number of publications reviewed in the prior year is sufficient for assessing peer-review activities.
	5. Efforts that support broader participation in science and engineering, or that impact DEI, should be noted.
	6. Expectations:
1. Tenure-track faculty at the assistant level are expected to perform reviews of papers and proposals, as well as become involved in organizing some aspects of professional meetings, such as workshops and mini-symposia.
2. Tenured faculty at the associate or full levels are expected to perform reviews of papers and proposals as well as hold leadership positions in their professional communities (e.g., serving on executive and editorial boards and organizing conferences).
3. Teaching faculty are not expected to perform external service, although credit will be given for any external service activities performed.

**4.3. Ratings Calculations**

The ratings in each dimension (i.e., research, teaching, and service), as well as overall ratings, are based on department priorities and are calculated using the formulas described in the following.

1. Teaching (*T*): All faculty are expected to prioritize classroom instruction, but some faculty (e.g., tenure-track and tenured faculty) will also engage in substantial mentoring activities by advising students in research. Other faculty (e.g., teaching faculty) may engage in considerable classroom instruction with less mentoring. As such, the formula used to determine the teaching rating prioritizes classroom instruction while still giving credit to those faculty with substantial mentoring contributions:

*T =* max[*0.8 T1 + 0.2 T2 , 0.6 T1 + 0.4 T2*]

1. Research (*R*): All faculty with a research appointment are expected to put most of their focus on the production of scholarly and creative work, with lesser but still important focus on securing external funding and engaging their professional community. As such, the formula used to determine the research rating is:

 *R = 0.6 R1 + 0.3 R2 + 0.1 R3*

1. Service (*S*): To enable self-governance, all faculty are expected to prioritize internal service. However, external service increases the reputation and visibility of the department. As such, the formula used to determine the service rating prioritizes internal service while still giving credit to those faculty with substantial external service contributions:

 *S =* max[*0.8 S1 + 0.2 S2 , 0.6 S1 + 0.4 S2*]

1. Overall (*F*): The final, or overall, rating for each faculty is determined according to their respective appointment percentages: *r* % research, *t* % teaching, and *s* % service. The resulting overall rating is then:

 *F = (r/100) R + (t/100) T + (s/100) S*

Based on the numerical scores in each category and in the overall calculation, both category and overall qualitative merit evaluations are assigned according to the following criteria (where *X* is either *R* for research, *T* for teaching, *S* for service, or *F* for overall):

**Rating (*X* )Evaluation**

$1\leq X<2$ Far Below Expectations (FB)

$2\leq X<3$ Below Expectations (BE)

$3\leq X<3.5$ Meets Expectations (M)

$3.5\leq X<4.5$ Exceeds Expectations (E)

$4.5\leq X\leq 5$ Outstanding (O)