

# Mechanical Engineering Peer Teaching Evaluation Guidelines<sup>1</sup> and Peer Observation Protocol (for RPT and Merit)

2024

## Observation Guidelines

The goals of the peer teaching evaluation process are to have peer observation feedback available to faculty for tenure and promotion cases, provide a formative process for continuous improvement of teaching, and create a culture of community around teaching with monetary support for observers for time and effort spent. Per expectations from the Dean's office, departments should employ multiple measures for evaluation of teaching with scholarly tools, and this is one of the primary ones used in our department. Peer observations are thus intended to promote improvement as well as to evaluate. Please write up the peer observation protocol form responses in the spirit of being formative (i.e., provide constructive criticism, areas for improvement, areas of excellence, etc.), with the opportunity to use engagement in the observation practice for summative evaluation purposes.

## Frequency of Observation

1. All faculty (pre-tenure, associate, full, instructors, postdocs, and lecturers) with teaching responsibilities should be observed at least once every academic year.
2. Observations are most useful when done in the first 1/2 of the semester.
3. The frequency of observation listed here should be understood as the minimum requirement. Additional observations can be requested by the faculty member or the Department Chair.
4. Completion of an observation will be given credit for annual merit purposes.

## Program Management

Faculty who serve as observers will receive \$300 for each completed observation survey. Administrative support will assist with initiation of peer observations, requesting allocation of funds to observers' accounts, tracking who has completed observations, and submission of data to personnel files. The Personnel Committee is charged with receiving information from administrative support regarding who has participated in a peer observation and survey data in the case of RPT. The faculty member observer and observee will coordinate schedules for observation.

## Selection of Observers

Selection of observers will be initiated by a survey going to all faculty at the beginning of semester that asks:

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<sup>1</sup> Developed by the University of Colorado Boulder Dept. Of Mechanical Engineering Teaching Quality Framework Departmental Action Team (Jean Hertzberg, Jana Milford, Todd Murray and Daniel Knight) working in partnership with the CU Boulder Teaching Quality Framework Initiative (<https://www.colorado.edu/teaching-quality-framework/>) with sponsorship by the National Science Foundation (DUE-1725959) - any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the NSF.

- Which class, which semester do you want to be observed?
- Whose teaching do you admire? Please suggest 3 possible observers.
- How many observations are you willing to do for others?

Within the first few weeks of the semester, the survey results will be analyzed by an administrator to pair observers with observation requests. Within the first month of the semester, pairings will be sent out to the observer and faculty to be observed.

### **Procedure for Classroom Observations**

#### **Before your observation:**

1. The observer should talk to the faculty member in advance of the observation in order to understand the objectives for that class and how it fits with the overall course and to provide an overview of the observation to be conducted. Conversations to consider can include: What is the best/most important/most fun aspect of the course? What issues are you facing this semester?
2. Faculty members are required to provide their observer with the course syllabus, and may provide other materials they deem relevant, including access to the learning management system, lesson plans, assessment materials, or outlines explaining the pedagogical goals of classroom activities.

#### **During your observation:**

3. The observer should fill out the online the [Peer Observation Protocol Form](#). A copy can be found at the end of this document. The protocol is a guide; **not every box must be checked**. After submission, the observer will receive a copy of the submission.

#### **After your observation:**

4. The observer should meet with the observed faculty member after the classroom observation to share the survey form and provide formative and constructive feedback to the faculty member. Ask first if suggestions are welcomed. Start with strengths and frame criticisms as questions of “why do that”. Conversations to consider can include: What might you want to do/change?
5. The survey data will automatically go to the administrator, who will initiate the observer’s payment. A copy of the completed form may be retained by both the observer and observed.

### **Guidance for Evaluators of Letters**

The protocol form submitted by the observer can be used as a multiple measure of teaching evidence for several dimensions of teaching, including but not limited to: goals, content, and alignment of a course; preparation for teaching; methods and teaching practices; presentation and student interaction; student (and other) outcomes; mentorship and advising; and reflection, development, and teaching service/scholarship.

**Merit-Specific Considerations**

For merit purposes, faculty who request and have an observation completed will receive credit for having an observation done.

**RTP-Specific Considerations**

Evaluations from the past three years of observations can be used for comprehensive reappointment, promotion, and tenure uses.

# Peer Observation Protocol Form

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## Start of Block: Description

Description You have been asked to complete a peer observation for an ME faculty member for inclusion in their reappointment, comprehensive review, promotion, or tenure case. **Please note that not all boxes need to be filled**, instead consider which are most appropriate for what was observed. Please complete the following steps for your peer observation:

- Request and review the syllabus and other materials for the course prior to your classroom observation.
- In advance, please talk to the faculty member of the class period you will be observing to understand the objectives for that class and how it fits with the overall course.
- After submission, you will receive a copy of this form to share with the faculty member as you discuss your observations and suggestions. Include some suggestions for improvement - it is not expected that any class would ever be perfect!
- **No additional summary letter is required.**
- **This form can also be filled out online [with this survey](#)**

## End of Block: Description

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## Start of Block: Course Information

Q1 Observer's Name

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Q2 Instructor's Name

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Q3 Course Name / Course Number / Course Section

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Q4 Date/Time

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Q5 Approximate number of students present

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Q6 General description of course - hybrid/remote, physical environment, lecture/lab?

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End of Block: Course Information

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Start of Block: Syllabus Information

Q7 What goals for the observation were discussed with the instructor in advance of the peer observation?

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Q9 Did the syllabus clearly describe expectations and requirements for the course, including departmentally prescribed learning objectives, if applicable?

☐ Yes (1)

☐ No (2)

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Q10 If the syllabus did not include expectations for the course, what was missing/unclear?

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End of Block: Syllabus Information

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Start of Block: Section A: Environment, Structure, and Implementation

Q11 **A1) Organized.** Please comment on the organization, structure, and use of time in the class.

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**Q12 A2) Engagement.** Please comment on students being on task and engaged in learning (e.g., interested in the lesson, active student involvement, etc.).

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**Q13 A3) Resources.** Please comment on the resources selected for the class (board work, PowerPoints, etc.); were the resources educationally appropriate and appeared valuable (e.g., used various materials to foster student understanding, such as drawings, graphs, physical materials, videos, etc.)?

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**Q14 A4) Inclusive Environment.** Please comment on the classroom environment; did the instructor establish a classroom environment that gave all students the opportunity to participate fully (e.g., creates a positive climate that evokes interest and questions from diverse students)?

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**Q15 A5) Formative Assessment.** Please comment on the opportunities the instructor enacted to gauge student understanding as the lesson proceeded (e.g., opportunities to ask and answer questions, identify anything unclear, use of clickers, etc.).

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**Q16 A6) Active Learning.** Please comment on the active learning strategies that were employed (as appropriate for the size and structure of the class - see examples below).

*Examples of active learning include, but are not limited to:*

- Clicker concept questions; hands-on demonstrations; games; making time for students to discuss concepts with peers; active writing (e.g., minute papers) or speaking (e.g., in-class presentations); working through problems individually or with groups; routinely asking for and welcoming student input and questions; fielding questions in a way that encouraged further discussion; and demonstrating active listening.

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**End of Block: Section A: Environment, Structure, and Implementation**

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**Start of Block: Section B: Content**



**Q17 B1) Content.** Please comment on the examples and details the instructor chose that were appropriate and worthwhile for helping students learn the content in this course.

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**Q18 B2) Accuracy.** Please comment on the accuracy of the instructor's written and spoken content (information written on board, in hand-outs, and on tests and quizzes).

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**Q19 B3) Depth.** Please comment on the instructor's delivery of content and answering of questions in a way that was consistent with a depth of knowledge of the subject appropriate for the students.

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**Q20 B4) Significance.** Please comment on instances during the class that it was made explicit to the students why the material is important to learn, e.g. there are connections to other areas of the discipline, or to real-world applications of the topic.

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End of Block: Section B: Content

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Start of Block: Section C: Open-ended responses

**Q22 C1)** Please comment on strengths and positive aspects of the course and/or the instructor's teaching.

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**Q23 C2)** Please comment on suggestions for the instructor to improve their teaching.

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End of Block: Section C: Open-ended responses

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Start of Block: You

Q25 Your comments/suggestions on the peer observation process are welcome. Please provide your input here:

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End of Block: You

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