



COLLEGE OF NATURAL SCIENCE

Guidelines for Implementation of Teaching Evaluation in CNS

Preamble: The CNS Promotion and Tenure Committee drafted guidelines in spring 2009 stipulating that the teaching skills of a candidate under consideration for promotion, tenure, or reappointment are to be evaluated using a set of instruments that include student evaluations, peer evaluations, and the candidate's teaching portfolio. In the fall of 2009, a separate *ad hoc* committee was charged with developing guidelines that describe how these instruments are to be implemented and interpreted, and more broadly, with recommending how the college can develop the teaching skills and instructional effectiveness of all its faculty. This document summarizes the guidelines and recommendations developed by the *ad hoc* committee, as revised by the CNS RPT Committee in spring 2011.

Many faculty members in CNS already provide high quality instruction. The guidelines and recommendations set forth here are not intended as a comprehensive critique of how teaching is currently being done. Rather, their overarching purpose is to identify teachers who are excellent, so that they may be recognized and rewarded, and to provide support and mentoring to faculty in need of improvement. More specifically, the guidelines and recommendations are intended to achieve the following:

- To clarify for faculty how the quality of their teaching will be evaluated by the college and by its departments and programs.
- To identify faculty in need of additional mentoring early in their MSU careers and ensure that departments provide the support those faculty need to become quality teachers.
- To provide incentives that reward faculty whose teaching is consistently excellent, that encourage all faculty to be attentive to teaching quality, and that motivate expert teachers to be mentors to others.
- To recognize and reward departments that foster a culture of teaching excellence.
- To identify especially successful teaching practices so that they may be shared across the college.
- To accomplish all of the above without placing an undue burden on faculty and staff to document teaching accomplishments or to review faculty dossiers.

The responsibility for implementing teaching evaluation that accomplishes these goals rests primarily with the departments of CNS. We recognize that these departments are a heterogeneous group, with teaching loads, course types, and student populations that differ greatly from department to department. We are therefore recommending a broad framework of guidelines that allows departments to tailor the details of implementation to their own needs and constraints.

In general, we expect that departments will provide all newly hired faculty with mentoring in teaching and that they will perform peer reviews sufficient to determine whether their courses are being competently taught. Departments are also expected to provide substantive summaries of teaching accomplishments when their faculty are considered for promotion, tenure, and reappointment. The next section describes the documentation upon which departments should base their assessments of faculty teaching. The section following it describes the format of the summaries to be submitted to the college. The concluding section suggests some support programs and incentives that CNS could provide to promote quality teaching throughout the college.

Documentation of Teaching Accomplishments: Written materials documenting a faculty member's teaching career should provide multidimensional information on teaching analogous to the documentation of research accomplishments. We recommend that the documentation in support of promotion, tenure, and reappointment decisions consist of the following items.

- **Student Evaluations.** SIRS scores, or the equivalent, should be provided for all courses taught at MSU. Student opinion is one among many important instruments for assessing teaching performance, and uniformly low ratings can indicate a real need for improvement. However, the reasons for low scores can vary significantly and should be examined as part of the department's peer evaluation. If student evaluation scores are no longer available for some courses, a list of those courses should be provided so that the record of courses taught is complete.

A departmental evaluation of a candidate's SIRS responses (or equivalent), including an analysis of student comments, and a comparative evaluation to (the same or comparable) courses taught by others, should be included as part of the narrative response in Form D-III A (see below). Departments should also compile a numerical summary of SIRS scores for all courses taught since appointment (or the last RPT action), and summarize them on the CNS RPT Numerical Student Evaluation Summaries worksheet.

- **Peer Evaluations.** The guidelines document drafted by the CNS Promotion and Tenure Committee stipulates that the overall evaluation of a candidate for promotion, tenure, or reappointment will be based in part on peer evaluation of a candidate's teaching performed by the home department. The college expects that peer evaluation will include both classroom visits by faculty members from the department and reviews of syllabi and assessment tools used in courses. Faculty members who perform peer evaluations should be well informed about best practices.*

* For more information about training and best practices in peer evaluation, see URL www.nap.edu/catalog.php?record_id=10024 (especially pp. 93-96 and Appendix C). Examples include <http://www1.umn.edu/ohr/teachlearn/resources/peer/index.html> and <https://tle.wisc.edu/teaching-academy/peer-review-teaching> at peer institutions.

Peer evaluations of teaching should be annual during at least the first two years of a faculty member's service as an MSU instructor, and they should continue to be annual as long as the department has concerns about the instructor's teaching. A peer evaluation should also be performed in the year before the instructor applies for promotion. Peer evaluations of all senior faculty should be performed periodically, in order to recognize excellence and to ensure that departments remain broadly aware of their own teaching practices. The time period between peer evaluations will depend on departmental resources but we recommend that the period should not exceed five years.

The purpose of these peer evaluations is fourfold: (1) to place student evaluations in perspective, either corroborating them or providing an alternative viewpoint on the quality of teaching in the course, (2) to verify that the course goals outlined in the syllabus are clearly stated and appropriate and that the assessment tools are well aligned with those goals, (3) to review course content and exams to determine if these materials are appropriate for the course, and (4) to encourage an exchange of ideas among colleagues that enhances the quality of teaching throughout the department. Departments should develop their own processes for peer evaluations, taking advantage of best practices outlined by the National Academies (see footnote on the previous page) and remaining careful to avoid the pitfalls described therein. These processes should be well documented and well known by the faculty and the college. Departments should resist the temptation to demand that faculty adhere to a particular style of teaching and be attentive to keeping the peer evaluation process from becoming politicized.

CNS has created peer classroom observation and teaching portfolio evaluation tools that, at the discretion of the Department, can be used to facilitate this process. These tools are attached at the end of this document.

- **Teaching Portfolio.** All faculty members in CNS will be expected to maintain a teaching portfolio consisting of three sets of materials provided by the faculty members themselves. The following list summarizes the elements of the teaching portfolio.
 - I. **Syllabi & Representative Assessments.** This set of materials is provided to help peer evaluators determine whether course objectives are clearly stated in the syllabus, appropriate for the course, and adequately assessed by examinations or some other tool. A syllabus and a single representative assessment tool, such as a quiz, exam, or homework assignment, should be provided for up to three distinct, recently taught courses. Faculty members who have not yet taught three distinct courses should provide a syllabus and an assessment tool for each course taught. In most cases, the syllabus and final exam for a given course will be all that is necessary. If a final exam was not given or would not be representative, a more representative assessment tool may be provided. This element of the teaching portfolio should take very little time to prepare, as it consists entirely of course materials already developed.
 - II. **Examples of Excellence.** When faculty members are considered for promotion, tenure, or reappointment, they provide a research dossier consisting of materials selected to highlight their most impressive research accomplishments. The types of materials provided can differ greatly, depending on the faculty member's research field and particular interests. However, they are generally selected to demonstrate what the faculty member him- or herself believes to be excellence in research. This set of materials in the teaching portfolio is analogous. Faculty

members have many different points of view on what constitutes teaching excellence, and they should be encouraged to submit materials that exemplify what they believe to be their finest teaching accomplishments. *Any specific examples of successful teaching are welcome. We are simply asking faculty to summarize the high points of their teaching career.*

The following list is intended to clarify the kinds of items that faculty might file in this category of the portfolio:

- A statement of teaching philosophy describing the preferred style of teaching and substantiated with evidence* showing that it is effective.
- Examples of innovative teaching approaches or of teaching methods that effectively promote student engagement.
- Descriptions of new courses developed or of substantial modifications to existing courses.
- Examples of course materials or texts developed by the faculty member.
- Demonstrations of student learning (some examples include summaries of performance on pretest and posttest questions, descriptions of class projects submitted by students, or summaries of successful student research).

The list is not meant to be complete, nor should faculty be judged on the variety of items they submit—it is not a checklist. What matters most is the quality of teaching exemplified in the submitted material.

Up to three representative examples of quality teaching may be submitted in this portion of the portfolio, but fewer should be expected of faculty still new to teaching. Each example should be described in a single-page summary.

If a particularly noteworthy accomplishment cannot be adequately described in a single-page summary, supporting documentation may be provided. We recommend that these optional supporting materials be provided as an online or electronic appendix to minimize the paperwork burden. However, departments should consider implementing additional guidelines and/or page limits, in order to manage the burden on reviewers. For example, faculty members in some departments are asked to provide a sampling of their best peer-reviewed research papers when they are being considered for promotion, tenure, or reappointment. These are generally considered optional reading for evaluators seeking a deeper understanding of that research. An appendix submitted in support of teaching excellence should be viewed similarly.

* This request for evidence should not be interpreted as a mandate for faculty to perform research into learning outcomes in their own classes. Evidence that a particular approach to teaching is effective can come from many different sources, including personal experiences, the experiences of colleagues, and the literature on teaching effectiveness. We are simply asking faculty who provide statements of teaching philosophy to explain *why* they believe that their preferred style of teaching is effective.

- III. **Contributions to the Teaching Culture.** Many faculty members contribute in various ways to create a positive teaching culture in their department, college, university, and discipline. Faculty should provide a list of the activities they have engaged in here. *We are simply asking faculty to briefly summarize the ways in which they have worked with other teachers to improve the quality of teaching at MSU, either by providing or receiving guidance or mentoring.*

Examples of items that could appear in such a list are: efforts to develop graduate student teaching, mentoring a younger faculty member in teaching, working with a mentor to improve one's own teaching, collaborative teaching efforts, and participation in or direction of workshops to improve teaching skills. Reviewers should recognize that many of the items in this area apply more to senior faculty than to junior faculty, who may not yet have had opportunities to act as mentors and trainers of others.

The preparation of teaching portfolios is not intended to be burdensome and is most effectively managed by updating the portfolio each semester. Portfolios of junior faculty will naturally grow as their teaching experience accumulates. Furthermore, during the next few years, reviewers should recognize that faculty coming up for promotion, tenure, and reappointment did not have these guidelines to follow until recently and should make allowances for that fact while evaluating their teaching portfolios.

Senior faculty should not be expected to produce complete teaching portfolios within an unrealistically short time period after these guidelines are implemented. The time frame over which senior faculty should develop teaching portfolios will depend on how a department chooses to do its peer evaluations of teaching. However, the teaching portfolio should be complete before the faculty member comes up for peer evaluation.

Summarizing Teaching Accomplishments: The guidelines for promotion, tenure, and reappointment in CNS specify that departments provide a written summary of the teaching evaluations of that faculty member (see Form D-III A, "Evaluation of Instruction"). That summary should devote at least one paragraph to each of the following aspects of teaching quality, based on the department's review of student evaluations, peer evaluations, and the teaching portfolio.

- **Clear and Appropriate Objectives.** This part of the summary is based on peer evaluation of the syllabi and sample assessments provided in the teaching portfolio. Evaluators should address whether the course objectives and requirements are clearly stated in the syllabi and whether the objectives for each course are appropriate. It is also desirable for evaluators to address whether the assessments are aligned with the stated course objectives and adequately measure student learning, but this type of evaluation may be more difficult for upper division courses with specialized content.
- **Competence in the Classroom.** This section summarizes the student evaluations and the classroom observations of the peer evaluators, who should seek to understand the reasons for either unusually high or unusually low student evaluations. Samples of written student comments can be particularly helpful in illuminating the reasons for the numerical scores. Positive student evaluations are desirable but should not weigh so heavily that fear of lower scores discourages faculty members from making changes that could improve their teaching effectiveness. If a candidate's student evaluation scores are persistently low, this part of the summary should explain the reasons for the low scores, as determined by the peer evaluators, and the steps the department and candidate have taken to improve

those scores. *As departments bear a significant mentoring responsibility, this portion of a candidate's summary will be one of the means used to assess a department's commitment to quality teaching.*

- **Evidence of Excellence.** This section summarizes the elements of the teaching portfolio that the candidate has provided as evidence of teaching excellence. The documentation the candidate has provided should be available to the CNS Promotion and Tenure committee upon request. Evaluators should recognize that evidence of excellence can come in many different forms, which may include:
 - Evidence showing that students have made learning gains in the candidate's courses or have been effectively prepared for more advanced academic work.
 - Documentation of exceptional commitment to student learning.
 - Descriptions of innovative teaching by the candidate, which may consist of pioneering teaching methods, applications of new teaching technologies, development of new courses, or substantive revisions to existing courses.
 - Examples of pedagogical materials developed by the candidate, such as textbooks, web sites, or lecture notes, that have been adopted in other professors' courses.
 - Teaching awards, as long as they come with a statement of the reason for the award.
 - Successful mentoring of research students.
- **Contributions to Teaching Culture.** The last part of the summary describes how a faculty member has contributed to the broader culture of teaching, drawing on material provided in the teaching portfolio. As mentioned earlier in this document, in the section on teaching portfolios, examples of contributions may include such things as: efforts to develop graduate student teaching, mentoring a younger faculty member in teaching, working with a mentor to improve one's own teaching, collaborative teaching efforts, and participation in or direction of workshops to improve teaching skills. Evaluators are welcome to comment on how the candidate's contributions have improved the quality of teaching in their department.

Support and Incentives for Teaching Excellence: In order for these guidelines to be successful, the college must be willing to provide support to faculty members wishing to improve the quality of teaching in CNS and incentives sufficient to motivate our busy faculty to devote some time and attention to quality teaching.

- **Support Programs for Faculty.** Workshops on teaching and learning are offered by MSU's Office of Faculty and Organizational Development, the CNS Dean's Office, and many professional societies (e.g. American Geophysical Union, American Chemical Society, Ecological Society of America). Among the programs important to implementation of these guidelines are the following:
 - Training in writing an effective syllabus.

- Development of a CNS clearinghouse for sharing and disseminating successful teaching methods.
 - Training in evaluating student learning gains.
 - Training programs in peer evaluation practices.
 - Funding for attending teaching workshops outside of MSU
- **Incentives for Faculty.** Evaluation of a faculty member's teaching for raises, promotion, tenure, and reappointment should be weighed by chairs and committees in direct proportion to the faculty member's assigned duties. Among the actions that the college and its departments and programs can take to motivate professors and demonstrate the college's commitment to teaching quality are the following:
 - Efforts to explicitly acknowledge when excellence in teaching is a factor in raising a professor's salary.
 - College-sponsored teaching awards for both junior and senior faculty that provide a recurring salary increase.
 - Rewards to departments whose summaries of teaching accomplishments demonstrate that they foster a culture of quality teaching.

CNS Peer Classroom Observation Tool

Faculty Observed _____ Rank _____
 Date of Observation _____ Course Observed _____

Content/Organization: *Accuracy, depth, relevance, and currency of subject matter; amount/level and selection/development of topics covered; clarifying examples used; alignment of topics with course/curricular goals.*

<input type="checkbox"/> Unsatisfactory Inappropriate, out of date, misleading, or factually incorrect information presented, or selection, level, or amount of content inappropriate for course.	<input type="checkbox"/> Needs Improvement Some weakness in selection, level, or amount of material, topics unconnected, poorly developed, or unrelated to course objectives.	<input type="checkbox"/> Good Subject matter and content level of high quality, presented from a variety of approaches to maximize student learning, and all topics clearly introduced, developed, and explicitly linked to course objectives	<input type="checkbox"/> Excellent Exemplary or creative selection, motivation, and development of topics discussed, and course objectives or expectations clearly embedded in class design.
Comments:			<input type="checkbox"/> Not Observed

Instructional Delivery: *Verbal, visual, and logical clarity of classroom presentation; communication techniques or media used; instructional strategies employed.*

<input type="checkbox"/> Unsatisfactory Unintelligible or imprecise speech, unreadable visual material, unclear explanation of content, inappropriate instructional strategy, presentation too fast or slow, or instructor unprepared.	<input type="checkbox"/> Needs Improvement Some unmodulated or imprecise speech, visual aids absent or difficult to read, unclear content explanation, inadvisable instructional strategy, or presentation occasionally too fast or slow, or ineffective at holding audience attention.	<input type="checkbox"/> Good Presentation enthusiastic, verbally and visually clear and precise, effective explanation of content, held audience attention, appropriately paced, and use of effective and well-suited communication and instructional strategies or visual aids.	<input type="checkbox"/> Excellent Dynamic verbal and visual presentation, superlative explanation of content, variable and responsive pace, and use of innovative communication or instructional techniques requiring active or high-level student thinking.
Comments:			<input type="checkbox"/> Not Observed

Classroom Environment/Interaction: *Effectiveness of classroom as a learning environment; quality of faculty/student and student/student interactions; encouragement of student feedback; time management.*

<input type="checkbox"/> Unsatisfactory Disrespectful instructor behavior, hostility to feedback, absence of focus on subject matter, bad time management, uncontrolled distracting student behaviors, or uncivil learning environment.	<input type="checkbox"/> Needs Improvement Unresponsive to student feedback, occasional distracting digressions, some misunderstanding of or inadequate response to questions, or poor classroom management or time usage.	<input type="checkbox"/> Good Student feedback invited, and enthusiastic and appropriate responses given to questions. Focused classroom environment conducive to learning. Good time management. Peer, team, or active learning, if used, done appropriately.	<input type="checkbox"/> Excellent Exceptional environment in which students freely participate in constructive dialog with instructor and, if appropriate, with other students.
Comments:			<input type="checkbox"/> Not Observed

Examples of Teaching Excellence (if appropriate):

Summary and Recommendations:

Date Form Returned to Department and Observed Faculty _____

Observer Signature _____

Observed Faculty Signature _____

Department Chair Signature _____

CNS RPT Teaching Portfolio Assessment Tool

Faculty _____ Rank _____
Date _____ Assessment Performed by _____

CNS RPT Teaching Portfolio Content*: A *syllabus* and a *representative assessment tool* (e.g. quiz or homework assignments) from *three separate courses* (fewer, if less than three courses have been taught); up to *three one-page summaries of examples of teaching excellence*; a *summary list of contributions to the teaching culture*.

Required Syllabus Elements†: (check if present in all syllabi)

- | | |
|--|--|
| <input type="checkbox"/> Statement of Course Goals/Objectives | <input type="checkbox"/> Activity/Assignment/Exam Calendar |
| <input type="checkbox"/> Instructor Contact Information/Office Hours | <input type="checkbox"/> Statement of Attendance Policy |
| <input type="checkbox"/> Grading Criteria | <input type="checkbox"/> Required/Recommended Course Materials |

Instructional Design: *Alignment with course goals/objectives, progression of topics, content, pacing, frequency of feedback, and use of multiple modes of instruction to accommodate students with a diversity of strengths.*

<input type="checkbox"/> Unsatisfactory Course design inconsistent with learning objectives, little student feedback, or content, pacing, or instructional strategies inappropriate.	<input type="checkbox"/> Needs Improvement Course design poorly aligned with learning objectives, infrequent student feedback, or content, pacing, or instructional strategies inadequate.	<input type="checkbox"/> Good Course design well aligned with learning objectives, frequent student feedback, content and pacing appropriate, and a variety of effective instructional strategies employed.	<input type="checkbox"/> Excellent All “Good” criteria, plus innovative course content or design promoting a high level of student performance, which fosters student learning, and enables student intellectual or skill development.
Comments:			

Examples of Teaching Excellence: Assess instructional effectiveness of examples, e.g. ability to encourage creativity, higher-order thinking, or collaborative learning, and to require application of learning and skills in relevant or realistic ways, or use of methods informed by instructional scholarship.

* A detailed description of the CNS RPT Teaching Portfolio may be found in the [“Guidelines for Implementation of Teaching Evaluation in CNS”](#).

† See the [MSU Code of Teaching Responsibility](#).

Assessments: *Alignment with course goals/objectives, clarity of expectations and presentation, appropriateness of length and difficulty, opportunity for students to apply skills acquired in relevant ways, and encouragement of higher-order thinking.*

<input type="checkbox"/> Unsatisfactory Unaligned with learning objectives or curricular goals, does not demonstrate proficiency in skills taught, expectations or presentation unclear, inappropriate in length or difficulty, or requires no higher-order thinking.	<input type="checkbox"/> Needs Improvement Poorly aligned with learning objectives or curricular goals, inadequate examination of skills taught, expectations or presentation insufficiently clear, of questionable length or difficulty, or requires little higher-order thinking.	<input type="checkbox"/> Good Well aligned with learning objectives and curricular goals, thorough examination of skills taught, expectations and presentation clear, of appropriate length and difficulty, and requires higher-order thinking.	<input type="checkbox"/> Excellent All "Good" criteria, plus innovative or particularly effective design or execution, assigned tasks support and require creative or synthetic work and foster student intellectual development.
<p>Comments:</p>			

Contributions to the Teaching Culture: Assess contributions to teaching culture, e.g. participation, and effectiveness in improving the quality of teaching at MSU, including providing or receiving mentoring, curricular or instructional leadership, or contributions to the scholarship of teaching and learning.

Summary and Recommendations: