

Peer Review: A Proposed Process

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Brief Overview:

Wendy and I started reviewing existing peer review procedures in 2016. Using peer reviewed sources and interviews with hort. faculty, we reworked a process, which was then brought to a committee within Hort. Science in fall 2016. The process was refined and presented to Horticulture faculty; then Dr. Wayne Buhler, Interim Dept. Head of Hort.; and Dr. John Dole, the Interim Associate Dean & Director of Academic Programs. Minor adjustments were made based on given feedback. Finally, the process was presented to faculty of the CALS Teaching & Advising Committee. Feedback from that meeting has also been incorporated.

We are now ready to pilot the process. Several reviews will be conducted this spring and maymester in Horticultural Science. Dr. Dole suggested that other departments pilot the process as well this spring, and has some monies as an incentive.

It should be noted that this process is just for FACE to FACE classes for now. This process will have to be adjusted for distance education.

FREQUENCY AND TIMING OF REVIEWS (AS MANDATED BY NCSU POLICY)

- **Assistant Professors:** Minimum of 3 peer reviews before going up for tenure, with one of them occurring before reappointment. Each of the reviews must be conducted in a separate academic year.
- **Associate Professors:** NCSU policy states that reviews should be aligned with post tenure review every five years. A minimum of 2 peer reviews is required for consideration of promotion to full professor. [In Horticultural Science, we do associate professors every 3 years...]
- **Full Professors:** Reviews must be completed every 5 years; aligned with the post tenure review.
- **Non-tenure track teaching faculty with 0.75 FTE or greater:** annual reviews required for first 3 years of employment and once every 3 years afterwards

WHO IS ELIGIBLE TO REVIEW?

NCSU regulations state that peer reviewers may be colleagues of any rank mutually agreed upon by the faculty member and the department head. The peer reviewers may be selected from inside or outside the department. Other institutions, however, recommend that lower ranking faculty should not review higher ranking faculty in case of potential conflicts when it comes to RPT voting. The committee liked the idea of a review coming from faculty of different ranks and different teaching appointments, mainly because of the benefit of the review to all parties involved. Members of the CALS Teaching and Advising Committee suggested (on 2.27.17) that people holding non-teaching appointments also be included for additional perspectives (and helps to spread out review load). Additionally, professionals from industry might also be excellent to act as reviewers.

For ease of getting into a routine schedule, those that were just reviewed, become the next set of reviewers.

Challenges for the Department of Horticultural Science:

With retirements occurring at the end of the spring 2017 semester, the teaching faculty roster will be made up of six (6) full professors; nine (9) associate professors; two (2) assistant professors; and three (3) lecturers. If we only allowed full professors to review each other and all the associate professors, that's a tremendous work load (especially for the one full professor, Fonteno, the only full that does substantial teaching). To offset this, we recommend that full professors who are members of the University's Academy of Outstanding Teachers be enlisted to help. Members of the CALS Teaching & Advising Committee recommended that faculty with non-teaching appointments also be included as reviewers to provide varying perspectives (this also would help spread out the review load).

The committee suggests having one reviewer (of a higher rank) assigned by the Department Head; and the other reviewer suggested by the instructor (ideally, the instructor submits 3 names from which Department Head can select. This reviewer can be of same rank). This should alleviate potential personality conflicts.

Rank	Reviewed By	Can Review
Full professors	One (1) full professor in the Department, or full professor from the University's Academy of Outstanding Teachers; and One (1) other--another full or an associate professor	anyone
Associate professors	One (1) full professor from in the Dept. or from the University's Academy of Outstanding Teachers; and one (1) another full professor or associate professor	anyone
Assistant professors	Two reviewers - Associate or higher	Lecturers (<i>BUT we'd like to see a limit placed on how many so doing peer review does not detract from their program development/progress towards RPT</i>). Could possibly review faculty with higher ranks if all parties agree--excellent teaching tool (so maybe review at least informally)
Lecturer	Assistant professors and higher	Those of same rank or higher, if all parties agree

Estimated Time Commitment to Conduct a Thorough Review: 10-15 hours, not incl. training.

Although peer review is extremely valuable to the instructor, the reviewers and the Department, the committee understands it is still an enormous time commitment. It is our recommendation that a supplement be offered to those involved in reviewing. Additionally, faculty should receive appropriate credit in their FAR for participating fully in peer review process.

TO BE COMPLETED BY ALL FACULTY PRIOR TO BEING REVIEWED:

- a. Attend "Creating a Teaching Portfolio" workshop (no later than semester prior to being reviewed). Hopefully we can find someone to do this from the Office of Faculty Development
- b. Attend "Hallmarks of Effective Teaching" seminar (given by Anne Spafford and Wendy Warner, 1.23.17; and repeated in future semesters)

TO BE COMPLETED BY ALL FACULTY CONDUCTING PEER REVIEWS:

- c. Participate in the "How to Conduct an Effective Peer Review" workshop (developed and presented in-house, to be offered at the beginning of each semester or each academic year)
(so faculty conducting reviews are confident in their skills to conduct a constructive review)

Commitment for Instructor:

Task	Estimated Time	When
Developing Teaching Portfolio (optional, but highly recommended—can be used for awards submissions down the line—not wasted time!)	5-10 hours ¹	Semester prior to peer review
Pre-observation Meeting with reviewers	1-2 hours	Beginning of the semester review is to occur , coordinate dates for observations and get them in everyone's calendar
Post-observation Meeting with reviewers	1-2 hours	Post observation, preferably within a week after final observation by reviewers
Response/Reflection of Peer Review	1 hour	After completion of review process (written piece, added to teaching portfolio)

Commitment for Reviewers:

Task	Estimated Time	When
Review Instructor's Teaching Portfolio (optional, but recommended)	2-3 hours	Beginning of the semester review is to occur, and PRIOR to pre-observation meeting
Pre-observation Meeting with Instructor (mandatory for both reviewers)	1-2 hours	Beginning of the semester review is to occur
Observation (3 lectures if lecture only class; 2 lectures and 1 lab if lab-based class) mandatory	3-5 hours	Class sessions as decided upon by instructor and reviewers; does not have to be sequential, but can be
Post-observation Meeting with Instructor (mandatory for both reviewers; VERY helpful to have a draft of report to discuss for this meeting)	1-2 hours	Post observation, preferably within a week after final observation
Written Report (mandatory, using template provided)	2-3 hours	After Post-observation meeting, due to Dept. Head using template, no later than 2 weeks after observations.

¹ Note that the first time an instructor develops a teaching portfolio, it will be very time consuming; but will be much easier in subsequent reviews

The Procedure in a Nutshell:

1. Two reviewers (one assigned; one chosen by subject from list of approved faculty; faculty outside of department is OK)
2. Subject provides reviewers a copy of their teaching portfolio; reviewers take time to go through it
3. Reviewers meet with instructor for a pre-observation interview, schedule time for observations
4. Together reviewers observe a given class on 2-3 class periods (2-3 lectures if lecture-only class or 2 lectures and 1 lab if lecture/lab course). Classes do not have to be sequential, but it might be helpful to see how classes link together; or how lecture and a lab relate.
5. Reviewers meet after observations to discuss notes. It should be noted that the assessment tool is just used to document observed hallmarks of effective teaching and for discussion with instructor and **not** included in the final report.
6. Reviewers meet with instructor for post-observation interview and to discuss observation findings; obtain any necessary clarifications, etc.
7. Reviewers work together on written report using template provided; then submit it to Dept. Head within 2 weeks of final observation.

Peer Review --The Component Parts in More Detail

Instructor Prepares Teaching Portfolio

A teaching portfolio packages together:

- Statement of teaching philosophy/pedagogy and how his/her course fits in to/relates to overall curriculum
- Course syllabi
- Project statements/assignments
- Grading Rubrics
- Sample quizzes and exams
- Summary of student evaluations from previous years, if applicable
- Response to previous peer reviews, if applicable
- Self-evaluation of teaching (no more than 1 page statement)
Added after the review: reflection on peer review impact

Teaching portfolio should be shared with reviewers long before pre-observation interview. Reviewers should take ample time in reviewing portfolio prior to meeting for initial interview.

Pre-Observation Interview

The two reviewers sit down with the instructor prior to any class observation to discuss course parameters (required class vs. elective; introductory course with no pre-requisites vs. advanced and part of a sequence, how teaching changes between AGI, 4-year, and graduate courses a faculty member teaches); overall teaching pedagogy, course set up, etc. This is also an opportunity for the instructor to ask for help in certain areas, if needed. Dates for class observations should also be scheduled at this meeting so they are on everyone's calendars. Would also be good to discuss a 2-3 year review plan (maybe Dept. Head can dictate?)---Does it make a difference that different courses are reviewed at different periods, or should the same one be reviewed each time?

Observation: Lectures and Labs

Reviewers schedule multiple class sessions to visit and observe. If the class is all lecture format, three lectures should be observed by both reviewers. If the class has a lab, then 2 lectures and a lab should be observed by both reviewers. The form in Appendix A is to be used to track what hallmarks are being used in an easy to record format during observation. Note that the form is just for ease of documentation. It can be used in the post-observation interview, but it does NOT get submitted with the final written report.

Post-Observation Interview

(Combining review of course materials and observation findings)

Reviewers meet with instructor after class observations. Observed hallmarks and areas for improvement should be discussed. Additional discussion points based on review of course materials and class observations/non-observable professional aspects of teaching could/should include:

- How evident is it that material being taught is current and latest information in field?
- How does faculty member demonstrate that he/she knows how students learn?
- How does faculty member recognize what prior information (including misconceptions) students bring to class?
- What evidence points to effectiveness of teaching strategies?
- How well does faculty member provide appropriate and timely feedback for students?
- Are students provided regular updates regarding progress?
- Does faculty member respond appropriately and timely to student requests outside of class?
- How available is faculty member available to students outside of class?
- How does instructor inspire students? What evidence exists that shows students are inspired?
- How does instructor instill professional development skills?
- What evidence points to that the instructor is teaching to the appropriate level of rigor?
- How well do learning outcomes match up with professional skill sets? (compare learning outcomes on syllabus to dept. learning outcomes)

Written Report

Reviewers write report together using template provided (in Appendix B). All headings must be included and followed so reports across faculty are consistent; and an individual's evaluation is consistent over time. Note that in addition to the peer evaluation, one section of the report is a reflection on what the reviewers learned about teaching and how participating in this review process improved their own teaching.

Appendix A: Observation Form

For Reviewers' Use ONLY and not included in final report.

This is a helpful tool to know what to look for and to easily record what you're observing. Each reviewer does his/her own. Once completed, it can be reviewed with the instructor at the post- observation meeting. Salient points can be pulled from this form to use in the final report. **Note: an instructor does not need to demonstrate ALL of these hallmarks! This is also a useful tool for reviewers to reflect on the hallmarks they do/could use in their own courses.**

Hallmarks of Exceptional Teaching	Comments for Strengths and Weaknesses
Pre-Class Activities/Environ.	
Chats with students prior to start of class	
Materials/technology prepared	
Image/quote/object/question visible to prep incoming students to the session's course content	
Class Start (first 5-10 min.)	
Review of previous instruction, connection to current learning	
Welcomes student questions about any prior content/assignments/etc.	
Provides specific objectives for the class period	
Knowledgeable about subject matter	
Enthusiasm for teaching and subject matter	

Hallmarks of Exceptional Teaching	Comments for Strengths and Weaknesses
Teaches at an appropriate level of rigor	
Offers various points of view	
Knows and uses correct student names	
Cares for and respects students	
Encourages students to ask questions and/or contribute to discussion	
Allows time for questions and discussion	
Encourages and facilitates respectful class dialog	
Acknowledges students' contribution to the class	
Clarity in explaining concepts and principles	
Appropriate inclusion of supplemental teaching tools- PowerPoint, Doc cam, videos, etc.	
Use of relevant illustrations and examples	
Visuals are balanced mix of text and illustrations	
Slides are used as teaching aid; not sole source	

Slides are free of misspellings and content cited if not original	
Logical and appropriately paced progression of content	
Use of clear transitions between content	
Inclusion of challenging and appropriate questions	
Variability of instructional strategies	
Closure of Class	
Review of key points from day's material	

Observation: Labs

Hallmarks of Excellent Teaching	Comments for Strengths and Weaknesses
Well organized	
Explicit connection between course content and lab experiment/activity	
Clarity of demonstration, highlights steps and key points	
Provides adequate opportunity for student practice	
Guides/facilitates student critical thinking during lab	
Encourages students to reflect on the experience/thought process at the conclusion of lab	

Overall Learning Environment

Hallmarks of Excellent Teaching	Comments for Strengths and Weaknesses
Cares for and respects students	
Knows and uses correct student names	
Suitable use made of class time	
Provides safe environment	
Uses humor appropriately	

Appendix B: Written Report Template

Finalized written report **must** follow this format, with these headings, and be submitted to Department Head within **two** weeks

1. CLASS DESCRIPTION

Title, type of course (lecture, lecture/lab, etc.), academic level, required/elective, number of students, when offered, GEP, time, dates of meetings and observations.

2. TEACHING METHODS

Describe teaching methods and comment on their appropriateness to achieve class learning outcomes/goals. Describe any innovative techniques, materials, or assignments that could benefit other faculty.

Describe teaching technologies used by instructor and students as well as comment on the appropriateness and effectiveness of the technology (e.g. class management systems, social media platforms; software; blogs, clickers, student computing; etc.)

3. OVERALL TEACHING EFFECTIVENESS

Comment on instructor's knowledge of subject matter (e.g. currency and depth of knowledge) as well as ability to explain things well and respond to questions at an appropriate level.

Comment on instructor's oral and written delivery and presentation effectiveness.

As brought up in the recent external review, how do we assess appropriate RIGOR of course? Maybe just in discussion between reviewers and instructor...

4. STUDENT-TEACHER INTERACTION

Describe instructor's interaction with class, including rapport with all students, instructor's ability to promote creative and critical thinking, opportunities for student engagement, and opportunities for students to demonstrate achievement of learning objectives.

5. TEACHING MATERIALS

Comment on overall course design (e.g. syllabus (very important—Anne has a good guide for this), handouts, class notes, course-packs, and other teaching materials). Describe types of assessments (e.g. class activities, homework, exams, papers, videos, presentations, projects, portfolios, etc.) addressing their rigor and appropriateness.

6. AREAS OF STRENGTH

Describe areas of strength instructor demonstrated

7. OPPORTUNITIES FOR IMPROVEMENT

Describe at least 1-3 aspects for improving student learning or the instructor's teaching effectiveness. Set measurable/obtainable short-term and long-term goals for improvements and methods of following up on improvements.

8. REVIEWER'S REFLECTION

A reviewer's reflection of how participation in this process impacted their own teaching. This is the final section and important because every person involved in a peer review has the opportunity to reflect upon his/her own teaching and engage in stimulating dialog about teaching with peers.

Sources

Brent, Rebecca and Felder, Richard (2004) "A Protocol for Peer Review of Teaching, Proceedings of the American Society for Engineering Education Annual Conference & Exposition.

Chism, Nancy. Peer Review of Teaching: A Sourcebook. 2nd ed. Bolton, MA: Anker, 2007

Horticultural Science Faculty Survey and Interviews (small, informal) May 2016

Interviews with Interim Dept. Head, Horticultural Science, NC State University; and Interim Dean of Academics College of Ag. & Life Sciences, NC State University May 2016

Iowa State University, Center for Excellence in Learning and Teaching
Peer Evaluation of Teaching: Literature Review and Best Practices
<http://www.celt.iastate.edu/faculty/document-your-teaching/peer-observation-of-teaching-best-practices>

NCSU REG 05.20.10 Evaluation of Teaching
Section 4.2-4.2.3: Peer Evaluation Instrument
Section 6: Procedures for Peer Evaluation

University of Dayton Ryan C. Harris Learning Teaching Center. Evaluation of Faculty Teaching: Methods of Evaluation
Peer Review of Classroom Instruction
Peer Review of Course Material
Self-Evaluation
https://udayton.edu/lc/development/teaching_evaluation.php