

Engineering Professional Development 690

Diversity in the College Classroom
Spring 2008
Part II

Course Information Packet



**Engineering Professional Development 690
Diversity in the College Classroom (Spring 2008)**

General Course Information

1 credit

March 24 to May 5, 2008, University of Wisconsin-Madison

Course meets: Mondays, 9:00-11:00 am, Science House, 1645 Linden Drive

Course instructors:

Chris Carlson-Dakes

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Science House (1645 Linden Dr.)

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Course website:

<http://my.wisc.edu> under the “Academic” tab OR <https://uwmad.courses.wisc.edu>;
login with your UW ID and password.

Course email:

epd690-12-s08-agg@lists.wisc.edu

Contact information for supporting programs:

The Delta Program in Research, Teaching, and Learning

<http://www.delta.wisc.edu>

info@delta.wisc.edu

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Course overview:

This course is a continuation from EPD 690, Part 1. In this course, students will develop projects in a rigorous, peer-reviewed context. These projects will be based on the proposals developed in the “Action Plan” section of the previous course, and may consist of instructional materials, course proposals or syllabi, grant proposals, instructional videos, websites, the diversity focus of a Delta internship proposal, or other projects focused around diversity in STEM/SBE teaching.

Course objectives:

During this course, you will:

- conceive of, develop and present a project on the topic of diversity in STEM/SBE
- learn how to receive, benefit from, and give constructive peer-review criticism regarding issues of diversity
- understand, and learn to apply concepts of “Teaching-as-Research,” “Scientific Teaching”, “Learning Community” and “Learning-through-Diversity” to your teaching.

Other course objectives will be co-constructed by the instructors and course participants during the first course meeting on March 24. These will be written up by the instructors and circulated by the second class meeting (on March 31) for your records.

Accessibility:

If you are a person with special circumstances that you believe will affect your class performance (for example, visual, hearing, or learning disabilities, or language differences), please let us know how we can make appropriate accommodations.

Student Assessment:

This course, as a graduate-level and optional course, will be graded based on a contract. In registering for this course, you are entering a simple contract with us the instructors: if you attend all the classes, participate in class discussions, and submit a good faith effort on the assignments that we describe below, you will receive an A for your course grade. Each uncompensated absence (see below) or missed assignment will result in lowering one grade level (i.e., A to AB, AB to B, etc.).

We understand that you may have responsibilities outside of class (professional meetings, sick children or partners, time-inflexible employers, etc.) that may cause you occasionally to miss class. We ask that you email us as soon as you know that you will miss class, and when you return to class, propose make-up work to compensate for your absence from class. As we will all miss the benefit of your insights when you are not there, we request that your make-up work be something that contributes to learning of the class. Please discuss your ideas with us.

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Course assignments

Project development

The main purpose of this course is to provide you with the structure and support to develop, and perhaps implement, a project of your choosing regarding the topic of diversity in STEM/SBE education. All classroom activities and most assignments will be organized around this project development.

Your project may be based on the action plan you developed from the previous course, or a different idea you have.

Consider the following possibilities:

- write the diversity focus of a Delta internship proposal or a proposal to integrate diversity into an existing internship offering (see page 9 for more details)
- design and develop instructional materials (i.e. labs, case studies, problem-based learning activities, etc.) that can be used to educate faculty or students about diversity or enhance diversity in the classroom. Instructional material could be developed to teach:
 - undergraduate students about the value and impact of diversity on their college experience;
 - faculty how to be sensitive to diversity issues in their classroom;
 - a seminar on the value of diversity for colleagues or administrators.

Ideas might include:

- a video about group dynamics and diversity in the classroom for undergraduates; an accessible database of literature on diversity
- a collection of examples of diverse scientists or of your discipline taught in a social context.
- write a broader impact proposal for a grant you are planning to submit that incorporates some of what you have learned in this course into reaching broader audiences
- write a paper (and submit it for publication!) regarding how the topic of diversity is treated in your discipline
- develop a website highlighting the roles of women, ethnic minorities, people with disabilities, or other populations on the development of your discipline
- develop a course module that integrates diversity into an existing disciplinary course that you may need to teach some day
- research the history of your discipline, and the contributions (or reasons for the lack thereof) of women and minorities to your field. Develop an informal educational product (website, poster, leaflet, museum exhibit) to share this history with others.
- other projects focused around diversity in science and engineering teaching.

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Project initial description:

To make the best use of the 7 weeks we have together, we ask that you bring a 1-2 page write-up about the project you would like to pursue during this course. This may be based on the final assignment for Part I of the course.

Include consideration of:

- the goals of your project (and why these goals are important to you and your students)
- the audience for your project (and why you chose this audience)
- a short literature review/other background to support your idea
- what evidence you might need to prove the worth or success of your project

Peer review activity:

In university contexts, we often engage in activities which are determined academically acceptable if a selection of our peers have agreed that they are. We have designed peer review into the structure of this course to give you some experience in reviewing others' academic work, and to receive feedback on your own project from others engaged in similar pursuits.

You will be asked to:

- informally present your work to your peer participants
- provide specific, thoughtful feedback to two of your peer participants orally and by completion of a peer-review rubric that we will provide.

Project write-up and submission:

In addition to developing whatever project you like, we request that you write a short (5-10 page) paper describing the project. This paper should include the following:

- a description of the diversity-related issue/challenge you are addressing
- a rationale, supported with literature or a needs-assessment, for doing this project
- a description of your audience
- a description of your approach, supported by any relevant literature
- a plan for how you have/will assess or evaluate the success of your project
- a reflection on the development process (and, if relevant, the implementation) of your project.

In addition to this, we would like some kind of representation of your project to be submitted. For example, if your project is

- to create a video to be shown to faculty, then include the script
- to write a paper for publication, then include a draft
- to build a website to educate kids about your discipline, then include a mock-up or set of storyboards;
- to develop a module on the historical context of your discipline to be included in an intro geology class, then include class plans, handouts, a syllabus, or whatever else may be relevant.

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- to redesign a lab you teach to be accessible to people with visual impairments, then include a video of how a real person with this disability tried out your modifications.

Please talk to us if you are unsure of how to “submit” your project.

Course evaluation:

This course is experimental in that it is part of a larger research project for Delta. Because we hope to revise and improve the course for future offerings, you will be required to complete a course assessment at the end of the course. The evaluations will be conducted electronically and anonymously, but the person conducting the evaluation (not the instructors) will keep track of who has submitted an evaluation, so that the completion of the evaluation can be part of your grade.

Texts:

There are only a few required readings for this course. These will be posted on the course website. Other reading articles or chapters that may be circulated during the course will develop over time depending on the interests and needs of the class.

The required readings are:

Delta Pillars’ “one-pagers”: Teaching-as-Research, Learning Community, and Learning-through-Diversity. (Available at http://www.cirtl.net/ourwork_coreideas.html)

Handelsman, J., Miller, S., & Pfund, C. 2007. *Scientific teaching*. New York: Freeman. Pp.47-64.

Brower, A., Carlson-Dakes, C., Shu Barger, S. (submitted for publication). *A learning community model of graduate student professional development for teaching excellence in higher education*.

Course website:

We will be using a My UW Desire2Learn website that should be accessible through your My UW portal (<http://my.wisc.edu>). We will continue to use the same site as for Part I of the course so that you have access to all the literature posted there. In addition, we will post the few required readings, as well as many supplementary readings as we can, links to useful websites, upcoming campus events that may be of interest, and the syllabus. We also have created a discussion forum -- if you have comments you would like to share between course meetings, feel free to post them here.

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Course Schedule

Week	Date	Class plan	Assignment due today
1	Mar 24	Introduction Course goals construction Delta Internship opportunities Applying for Human Subjects Approval	Bring your action plan from Part I of the course.
2	Mar 31	Aaron Brower, Associate Vice Chancellor for Teaching and Learning on “The Wisconsin Experience” and Learning Communities Focus on learning community and Learning-through-Diversity	Read: <ul style="list-style-type: none"> • Delta Pillar one-pagers • Carlson-Dakes et al, in preparation Initial project description due
3	April 7	Doing rigorous teaching research: <ul style="list-style-type: none"> • Teaching-as-Research • WPST’s scientific teaching, assessment 	Read: <ul style="list-style-type: none"> • Handelsman et al, 2006; Chpt 3
4	April 14	Working time and project advising with consultants. Guests: TBA Mid-course correction	Bring whatever materials, text, drawings, files, ideas you have created to share with peer-reviewers
5	April 21	Revisiting Teaching-as-Research, including development of evaluation plans for each project Apply pillar rubric	Bring whatever materials, text, drawings, files, ideas you have created to share with consultants. peer-reviewers
6	April 28	Peer review session: guidelines and practice Project presentation	
7	May 5	Peer review session: guidelines and practice Project presentation	Full project write-up due
Post course		Course evaluation	Complete online course evaluation

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Giving and receiving feedback

You can best benefit from your teaching practice if you receive clear feedback. This requires an open and caring atmosphere in which your fellow participants feel comfortable enough to offer honest feedback, motivated by your willingness to receive it. Feedback provides you with information about how you affect others and how well your behavior and activities match your intentions; it helps you identify your strengths and areas for improvement.

Giving constructive feedback

Constructive feedback is descriptive rather than evaluative. By describing one's own reaction and avoiding evaluative language, the individual receiving feedback is less likely to react defensively. Constructive feedback has the following characteristics:

1. It is specific rather than general.
2. It considers the needs of the receiver and giver.
3. It is directed toward behavior that the receiver can change. Frustration is generated when a person is reminded of a shortcoming s/he cannot control.
4. It is solicited rather than imposed. Feedback is most useful when the receiver has a question the observers can answer.
5. It is given immediately after the event.
6. It is checked to ensure clear communication. Have the receiver rephrase the feedback.

Both giver and receiver can check with others on the accuracy of the feedback; is this one person's impression or a shared impression?

Feedback Basics

Recommended <i>(focus on the giver's perception, specific)</i>	Not Recommended <i>(judgmental, general)</i>
I was confused when you explained...	Your explanation was confusing.
It would help me understand better if you could pause longer between introducing major concepts.	Your lecture went too fast.
It would help if you didn't stand behind the high podium.	You are too short to be seen.
It would help if you make more eye contact during the class and ...	It felt unfriendly and cold when you taught.

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Turning your Diversity project write-up into a Delta Internship proposal

Your project write-up can, with very little modification, become the foundation of your proposal for a Delta Internship. The internship in turn will allow you to carry out your action plan. Your proposal should be no more than 5 single-spaced pages in length (12 pt font) and like your project-write-up, should include the items listed below.

Note: The ideas in Section I of the proposal are traditionally developed by both the intern and their faculty or instructional staff partner. If you decide to pursue an internship you will either need to identify a partner, or contact the program for help finding a partner. For further information on the Delta Internship Program or to find an internship partner, contact Don Gillian-Daniel at dldaniel@wisc.edu.

SECTION I: PROJECT DESIGN (modifications to the project write-up)

- A description of the diversity-related issue/challenge you are addressing, or question you are interested in answering.
 - Be sure that the project is feasible in terms of your time, effort and available resources
- Relevant literature
 - What is known about the issue/question/problem?
 - How have others addressed it?
- Teaching-as-research strategy – a description of your approach
 - Provide a rationale for doing this project
 - Provide examples of at least two specific teaching and learning approaches and activities that you plan to use to be an effective teacher for students with different backgrounds than your own.
 - How will you develop and use learning communities to promote learning in your project?
- What assessment techniques will you use?
 - Provide a plan for how you will assess or evaluate the success of your project

SECTION I: PROJECT DESIGN should also include:

What roles and responsibilities will both you and your partner have in the project?

Proposed timeline for activities

Literature cited

SECTION II - PERSONAL

What are your previous teaching experiences?

What are your current career aspirations?

What do you hope to gain from the internship experience that will advance you toward your career goal(s)?

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SECTION III – CONCEPTUAL UNDERSTANDING

What is your understanding of each of the three terms below AND how would you use each concept to improve learning?

- Teaching-as-research
- Learning-through-Diversity
- Learning communities

How have you developed your understanding of diversity? Please provide an example.