

ESCI 5470/7470
Reflection on Science Teaching
Fall 2006

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Purpose

Reflection helps beginning teachers untangle the web of deeply entrenched personal theories about teaching and learning. In this course, you will be challenged to purposefully and critically examine your beliefs and knowledge about teaching science. The notion of reflection involves thinking and acting on those aspects of teaching that frustrate, confuse, and perplex. As a reflective teacher, you will:

- recall and describe specific experiences in your teaching, while identifying and framing issues of classroom practice.
- respond to issues by recognizing both the similarities to other situations and the uniqueness of your particular situation. This awareness will hopefully lead you, the beginning teacher, to realize the broader principles and theories that inform your teaching.
- experiment with solutions to problems of practice and examine the consequences and implications of various solutions.

The overall goal of this course is to use your classroom experiences and the experiences of others to critically and thoughtfully reflect about your growth as a science teacher.

Class Meeting Dates and Times

During Student Teaching

Wednesday evenings (5-8 PM), August 16- November 1

Post-Student Teaching Seminar:

Days/Times will be distributed early in the semester.

Attendance and Participation

- Class participation is a vital component of this course. It is also important that you arrive on time and are ready to begin. You are expected to be present for every class meeting.

- If you miss a class meeting for any reason, you will be required to complete a make-up assignment for that class meeting. It is your responsibility to contact me about the make-up assignment.
- I reserve the right to lower a final grade by one or more letter grades if absenteeism or tardiness becomes problematic.
- If you miss 3 or more class meetings during the entire semester, you will be dropped from the course.
- In the event of illness, accident, or other emergency when circumstances permit, please make direct contact with me. If I cannot be reached in person or by phone, please leave a message with a secretary in the Department of Mathematics & Science Education.

Assignments and Grading

(Note: There are no textbooks required for the course.)

1. *Discussion/Participation (20%)*: There are many ways in which you will be expected to participate in our class, including discussions, presentations, small group work, large group activities, etc. Your participation should:

- demonstrate an ability to actively contribute to group and class discussions;
- reflect active engagement in small group and whole group learning exercises;
- consist of thoughtful dialogue;
- show respectful communication with others;
- demonstrate professionalism and a learner mentality.

2. *Video Tape Written Reflection (20%)*: During your student teaching, you will videotape an episode of your teaching. (Note: The videotapes are not used for university research purposes, and are intended for your learning. However, in rare instances, a school may strictly forbid videotaping for any reason. Should this be your case, we will work together to construct a viable alternative.) After the taping, you will be asked to review yourself teaching science and answer questions that are aimed at helping you critically and reflectively examine your teaching.

Due on or before Wednesday, October 18.

3. *Video Presentation (15%)*: You will make a short presentation during our weekly seminars using your videotaped teaching episodes. ***Due on or before Wednesday, November 1.***

4. Journal Article Critique (10%) In this project, you will read & review an academic journal article about science education. You will share the main ideas of this article and facilitate a discussion with the class. ***Due on or before Wednesday, October 18.***

5. Professional Reflective Portfolio (30%): To facilitate your reflection on the entire student teaching experience (and incidentally begin preparing you for your job search, your M.Ed., and/or National Board Certification), you will construct a professional reflective portfolio during the post-student teaching component of this course. This will largely be composed of the reflective writing pieces that you enter into LiveText ***Due on or before Tuesday, December 1.***

Videotape presentations will be assessed by you, your peers, and Dr. Spellman. A sample evaluation form will be distributed prior to the first presentations. Detailed project descriptions and grading rubrics will be distributed later in the semester for the teacher inquiry project and professional portfolio. In a general sense, the following criteria will be considered when evaluating your class work and assignments:

- demonstrates original thinking and ideas go beyond what is described in class or in readings?
- indicates basic ideas of assignment have been extended, i.e., attempts to go further than just “getting by”?
- shows evidence of ability to synthesize information from a variety of sources?

As stated by UGA policy, the course syllabus is a **general plan** for the course; deviations announced to the class by the instructor may be necessary.

In accordance with the **University Honor Code and Academic Honesty Policy**, academic work must meet the standards contained in *A Culture of Honesty*. Each student is responsible to inform themselves about those standards before performing any academic work. Details are available at <http://www.uga.edu/ovpi/honesty/acadhon.htm>