EDCI 676: Reflection and Practice in Secondary School Science Teaching

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Time and date TBA

Learning Outcomes for EDCI 676:
This course is designed as the third in a sequence for prospective secondary science educators in the MCERT program. It comes in the spring semester of the yearlong student-teaching placement. It is assumed that at this point in your student teaching, you are getting regular opportunities to teach. By the end of this course, you will demonstrate:

- Abilities to plan instruction, based on the materials, curriculum, and students in the classes you are teaching;
- Abilities to purposefully elicit student ideas and reasoning about science in the context of your teaching;
- Abilities to identify and interpret student ideas; and reflect on possible appropriate responses to student thinking as evident in your lessons.
- Capacities to constructively reflect on your own teaching, as well as provide feedback for others, with specific regard to the student ideas evident in the data (student work, videotapes).

General Description of the Course:
We’re going to spend the semester reading, watching, and talking about everyone’s teaching experiences, with a particular focus on the substance of students’ scientific thinking: What is there to see and hear in their understanding and reasoning, and what are possibilities for how to respond?

The main assignments will be to

- **Write three case studies** of learning and teaching from your classes, about five pages each, and post them to the Discussion Board on ELMS, the university’s electronic blackboard.
- **Read and discuss the case studies written by others**, using the Discussions Board. Each student must respond to at least two case studies per round (see schedule below).
• **Present two of your case studies**, one with videotape/transcript evidence and the other with student work evidence. Videotape several of your class sessions, and pick snippets to present in seminar, connected to a written case study.

• **Watch and talk about each others’ videos/student work cases in seminar.** We will construct a schedule to determine who will present when.

• **Facilitate a discussion of a science topic** of your choice with a partner.

From time to time along the way, we’ll take a break to think about some questions in science ourselves, maybe as they come up from case studies. We’ll also spend some time talking about basic professional responsibilities and about connecting science education to issues of relevance to society and to the local community. And at the end of the semester, I’m going to ask each of you to meet with me individually for an “exit interview,” to talk about your experiences in the program.

**Grades and Attendance**

Grades are determined based on the three written case studies, written responses to others’ case studies, presentations, and participation in seminar. *In particular, you will be assessed on your ability to attend to and discuss the substance of students’ thinking.*

You will be asked to rewrite an assignment I believe it to be unsatisfactory (below what we would give a B).

You may miss **no more than** two seminar sessions. If unexpected circumstances cause you to miss more, please see me. There will be no class on March 1 or March 15.

**Relevant student policies**

Religious Observance: The University System of Maryland policy "Assignments and Attendance on Dates of Religious Observance" provides that students should not be penalized because of observances of their religious beliefs; students shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances.

We are a diverse community and enroll students of many religions; pursuant to policy, we will do what we can when there are students’ requests for excused absences and make-up test requests due to reasons of religious observances. *It is the student’s responsibility to inform* the instructor of any intended absences for religious observances in advance. Notice should be provided as soon as possible but no later than the end of the schedule adjustment period.
Honor Code: The University is one of a small number of universities with a student-administered Code of Academic Integrity and an Honor Pledge. The Code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. Students should write the following signed statement on the top of each examination or assignment: *I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment).* Compliance with the code is administered by the Student Honor Council, which strives to promote a “community of trust” on the College Park campus.

Individual Needs Accommodation: The University is legally obligated to provide appropriate accommodations for students with documented disabilities. In order to ascertain what accommodations may need to be provided, students with disabilities should inform the instructors of their needs at the beginning of the semester. The instructor will then consult with Disability Support Services (314-7682). DSS will make arrangements with the student to determine and implement appropriate academic accommodations.