

ESCI 5480/7480

Philosophy and Leadership in Classroom Practice: Historical, cultural, social, political, and professional influences that impact classroom practice in science

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This syllabus is tentative and will be discussed and confirmed on the first day of class.

Introduction & Course Description

This is an intense and concentrated three-semester-credit hour course designed for undergraduate students and students seeking certification in science education to build upon the learning of their field experiences and to understand the foundation of science education. This course has been developed to serve as a bridge between your student teaching experience and your graduate as a teacher of science. The intent of the course is to provide you with opportunities to explore the historical, cultural, social, political and professional influences that relate to the science classroom practice. Some of the questions you will explore through class activities and assignments include:

How is your teaching going to be influenced by outside entities?

To what should you be paying attention to understand your role as a teacher in the classroom, school, community, and beyond?

How/why are you going to identify our personal role or position in the science education community—for your own growth and the growth of the profession?

What's the difference between "school science" and "real science"?

How do you know if the students are learning?

What is scientific literacy and where do we get it?

Who *are* these students in your classroom?

What are the steps in career development?

What is multicultural education? What does really mean to you? Is it still an issue?

Public Law 94-142— How does it look in the science classroom?

What is your role in the community?

Evolution vs. Creationism - - What are you going to say and do? What about other controversial issues from other scientific disciplines?

A significant amount of this course will be spent in debate and serious reflections. The issues may sometimes be tough. You will be expected to spend time writing and reflecting on the above issues and others as a major portion of your grade. A journaling book is highly recommended.

Attendance Policy

Class participation is a vital component of this course. If you are not in class, you are unable to participate in course activities. It is also important that you arrive on time and are ready to begin. You are expected to be present for every class meeting. I reserve the right to lower a final grade by one or more letter grades if you exceed one unexcused absence or if tardiness becomes problematic. An absence will be considered excused if you provide written documentation for the absence. Absences that may be excused include illness, death or illness in the family, jury duty, or a personal crisis. All work missed during any absence must be made up. A make-up assignment will need to be completed for the missed class. It is the responsibility of the student to contact me with written documentation for any absence. It is also the responsibility of the student to contact me regarding content missed in class. In the event of illness, accident, or other emergency when circumstances permit, you should make direct contact with me, preferably before class takes place. If I cannot be reached in person or by phone, you should

leave a message with the secretary in the Department of Mathematics & Science Education (542-1763). If you miss more than ONE class for any reason (excused or unexcused), you may be dropped from the course.

Cell Phones

Prior to the beginning of each class, please remember to turn off your cell phone, or place it in the “vibrate” or “ringer off” mode.

Assignments and Grading

There is no textbook required for this course.

Rubrics and expectations will be given in class as needed.

1. Attendance/Participation/Discussion (10%). It is important that you are in attendance for class meetings, prepared to participate in classroom activities and actively participate in classroom discussions. Your efforts in these areas will contribute greatly to what you take away from course. Your classmates should also benefit from your contributions, which is an integral component of being a professional.

2. History of Science Presentation (20%). You will produce – from the standpoint of the students you intend to teach- a model, collage, demonstration, etc. that is doable by your students that demonstrates a change in scientific knowledge in human history. Examples could be: Nature Study, 4-H, Sputnik, Civil Rights, BSCS, evolution vs. creation, abolition of Galileo, Frankenstein and cinema science, Flat Earth Society, Human Genome, etc. This project should include a strong element of drama. Be sure to share your idea with me before forging forward. Everyone will have a chance to be on stage!!!!

(Due Tuesday, November 9)

3. Field Trip Project (25%). With a partner, you will explore field trip opportunities within the state and present the materials, possibilities, and justifications to the class. You will be expected to make an appointment and meet with the person in charge of community outreach, interview that contact person, collect the materials available, and “walk through” a dry run of such a class trip, anticipating problems and justifying benefits. You will need to take notes of all the detail, conundrums, difficulties, hidden surprises, etc. This will need to be presented to the class in the format of your choice (e.g., photo, video, PowerPoint) such that it can then help your classmates in a presentation to their employer. In other words, convince us it’s worth the time, trouble and money to take our students there.

(Due Wednesday, December 1)

4. Written Case (20%). You will write a case (open or closed) in which you explore a classroom issue that you encountered during your student teaching. This case will be submitted to an online preservice teacher resource website. **(Due Monday, November 8)**

5. Professional Reflective Portfolio (25%) You will develop portfolio and reflective pieces that show how knowledge of and involvement in professional development, NSTA, GSTA, SACS, GAE, standards, etc. fit into your life profession. Examining how this can impact you as a teacher will be the focus of the reflecting that takes place at our end-of-course field trip. Thus this assignment will be considered your final exam.

(Due Tuesday, December 7)

Academic Honesty

All 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. The policy holds you responsible for maintaining the highest standards of honesty and integrity. Penalties for academic dishonesty are severe and ignorance is not an acceptable defense. Academic dishonesty includes plagiarism, cheating, lying, tampering, stealing, receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge. You should read the policy at:

http://www.uga.edu/ovpi/academic_honesty/culture_honesty.htm

Disability Policy

The University of Georgia is committed to providing equal educational opportunities for qualified students with disabilities in accordance with state and federal laws including the American Disabilities Act.

Help for disabled students is available from the Disability

Services/Learning Disabilities Center. More information is available at

<http://www.uga.edu/stuact/handbook/stuaffairs/disability.html>

Your final grade will be calculated based on the following percentages: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D. **Keep in mind that you choose the quality of the work you submit. A's will be earned by those products that exhibit exemplary quality rather than simply completion of the assignment.**

I will make every attempt to explicate the expectations of each assignment. However, it is your responsibility to ensure that you understand those expectations. Please communicate with me whenever you have questions. Please adhere to the University's academic honesty policy as stated in the student handbook.

I'm looking forward to an exciting few weeks of teaching and learning about you and science!