

Evaluation of Program in Secondary Science Summer 2010 Course Syllabus and Timeline



AUBURN UNIVERSITY SYLLABUS

1. **Course Number:** CTSE 7540 **Course Title:** Evaluation of Program in Secondary Science
Credit Hours: 3
Prerequisites: none
Corequisites: none
 Class meets: Tuesdays 6-9:50pm
 Summer Session (full)
 Instructor: Russell
2. **Date Syllabus Prepared:** January 2006; revised May 2008; May 2009; May 2010
 - Distributed May 2010
3. **Textbook or Major resources:** Popham, W. J. (2001). The truth about testing: An educator's call to action. Association for Supervision and Curriculum Development, Alexandria, VA.
 Doran, R., Chan, F., Pinchas, T. (1998). Science Educator's Guide to Assessment. NSTA Press, Arlington, VA.

Various articles and readings will be disseminated and are considered required reading to prepare you for the material that will be covered in class. Any assigned readings will be disseminated at least one week prior to the assigned due date for discussion.

4. Course Description: Theoretical perspectives of evaluation and methods of evaluating learners, teachers, and curricula.

*Please Note: This document is subject to minor amendments and we might need to adjust the schedule as we move through the summer semester, adjusting the pace for the readings and inserting into the agenda additional resources that may become appropriate. Pay close attention to assignment dates.

5. Course Objectives:

This course examines theoretical perspectives of evaluation and methods of evaluating learners, teachers, and curricula. This course is a practical introduction to student assessment and evaluation. We will define the basic terminology of assessment and evaluation for our understanding. We will study the importance of science education assessments and their meanings on the international, national, state, and district level. We will also learn how to critically examine standardized testing. For our everyday teaching, we will learn how to write better traditional tests for our students and address the diversity of learning styles in our test development.

This course will also investigate science teaching effectiveness, with attention to the instruments and models of assessment currently in use for diagnosis and research in science education. We will discuss evaluation of cognition, attitudes, and skills for science students. We will constantly ask, “What do [your] students know?” “How can you help them demonstrate it?” “How confident can you be of the results of evaluation?” “What does a grade in your class mean?”

We will need to continually revise the schedule as we move through the summer semester, adjusting the pace for the readings and insert into the agenda additional materials that may become appropriate. Pay close attention to tests and assignment dates. **All assignments are to be typed, double-spaced, and in APA style (6th ed.).**

To provide opportunities so that students will:

- A. Knowledge of the purposes, strengths, and limitations of formative and summative assessment and of formal and informal assessment strategies. 290-3-3-.04(2)(c)5.(i)
- B. Knowledge of measurement-related issues such as validity, reliability, norms, bias, scoring concerns, and ethical uses of tests and test results. 290-3-3-.04(2)(c)5.(iii)
- C. Knowledge of assessment tools to monitor the acquisition of reading strategies, to improve reading instruction, and to identify students who require additional instruction. 290-3-3-.04(3)(c)2(ii)
- D. Knowledge of the role that mathematics plays in everyday life. 290-3-3-.04(3)(c)3.(i)
- E. Knowledge of the concepts and relationships in number systems 290-3-3-.04(3)(c)3.(ii)
- F. Knowledge of the appropriate use of various types of reasoning, including inductive, deductive, spatial and proportional, and understanding of valid and invalid forms of reasoning. 290-3-3-.04(3)(c)3.(iii)
- G. Knowledge of both metric and customary measurement and fundamental geometric concepts, including shapes and their properties and relationships. 290-3-3-.04(3)(c)3.(iv)
- H. Ability to solve problems using different strategies, to verify and interpret results, and to draw conclusions. 290-3-3-.04(3)(c)3.(v)
- I. Ability to communicate with other about mathematical concepts, processes, and symbols. 290-3-3-.04(3)(c)3.(vi)
- J. Knowledge of Alabama’s state assessment requirements and processes. 290-3-3-.04(5)(c)(ii)
- K. Knowledge of research relating collective responsibility for student learning to increased achievement for all students. 290-3-3-.04((5)(c)4(i)

6. Course Content and schedule:

Please note that this class meets every Tuesday from 6:00-9:50pm. All class meeting dates are considered mandatory. All absences must be in accordance to the Tiger Cub policy for excused absences and all absences excused or unexcused are still at the discretion of the professor of the course.

***Please note that additional readings and material will be disseminated and covered on the dates listed below even though they may not be included under the weekly agenda. Articles will be passed out no less than one week prior to the week that they will be discussed.**

Tentative schedule: Please keep in mind that we may have to adjust the pace of the course periodically.

Week 1	May 25	Introduction to course/review of syllabus
Week 2	June 1	Discuss page 1-11 and Chapter 1 Popham; Chapter 1 NSTA
Week 3	June 8	Discuss Chapter 2, Popham; Chapter 2 NSTA. Additional assigned article reading (to be disseminated); Library Resource Center (LRC) article critique research
Week 4	June 15	Discuss Chapter 3-4 Popham; Chapter 3 NSTA; Article Critique #1 due
Week 5	June 22	Midterm Exam
Week 6	June 29	Discuss Chapter 5 & 6 Popham
Week 7	July 6	Discuss Chapter 7&8 Popham Library Resource Center (article critique research)
Week 8	July 13	Discuss Chapter 4 NSTA; Research exam development; Article Critique #2 due.
Week 9	July 20	Discuss NSTA (Chapters TBA); Research exam development
Week 10	July 27	Last day of class Discuss Chapters 5-8-Discussion on exam development
Classes End August 2		
Week 11	Final Exam Period August 3-5	

7. Course Requirements/Evaluation:

- A. Attend and participate in all class sessions
- B. Complete mid-term and final exams
- C. Complete additional reading and writing assignments

Cultural Diversity

“I don’t care that you know. I want to know that you care”

Author Unknown

This course reflects the College of Education’s commitment to cultural diversity. The goal of the professional education program at Auburn University is to prepare outstanding educators who are competent, capable, and caring in complex, diverse educational arenas. Such individuals are

- Effective in their roles as culturally responsive teachers, designing and implementing sound meaningful and balanced instruction with the full range of learners.
- Effective as they assist learners in their comprehension of issues surrounding diversity; and
- Effective in their contributions of thoughtful and informed discourse to their own educational communities as they work to build equitable and supportive environments learners.

Expectations

In this course I expect you to:

- Reflect critically on all experiences and readings.
- Be prompt and in attendance at all course sessions.
- Demonstrate critical reflection through discussion, writing and course assignments.
- Complete assignments to the best of your ability.
- Communicate expectations and ideas.
- Recognize and validate the values of other class members.

This class is intended to be both interactive and collaborative. You are expected to come to class prepared to discuss assignments. We may also designate small groups during the initial class session, and you will spend some time doing group work. Learning is most effective when we fully participate in the process of constructing knowledge. In this course it is my expectation that everyone actively participate. Participation

starts with preparation. It is my expectation that each class participant will be fully prepared for each day by having read the assigned materials and completed other work requested and required. In the event that you are not prepared to discuss the assigned readings and facilitate group activities the professor reserves the right to deduct 5 points from your final grade for each class meeting that you are not prepared.

General grading rubric for assignments

100%: beyond the call of duty; strikingly impressive; excellent in every way
90%: both complete and showing evidence of original, active, critical thought
80%: all specified aspects of assignments minimally completed
<80% one or more aspects of assignments missing or unacceptable

Grading Scale:

A 92%-100%
B 80%-91%
C 70%-79%
D 60%-69%
F <60%

Course Evaluation

Your final course grade will be based on the following:

<u>Assignments</u>	<u>Points</u>
1. Assignment #1 Article Critique	15
2. Assignment #2 Article Critique	15
3. Unannounced pop quizzes (2 at 5 points each)	10
4. Midterm Exam	30
5. Final exam	30

** Please note any incomplete assignments or assignments not typed up in the proper format will not be accepted. All papers must be in 12 font, Times New Roman, and double-spaced.

All submitted work should be typed and neatly arranged. NO creative margins. Please start all assignments at the very top of the first page and put your name, assignment, and date on the very last page.

Assignments

1. Article Critique #1
2. Article Critique #2
3. Unannounced quizzes: there will be at a maximum of 2 unannounced quizzes based on the assigned readings and material discussed in previous or current classes.
4. Midterm Exam
5. Final Exam for the course will be scheduled for finals week.
6. Students will also participate in summer tutoring for the graduation exams at Auburn High School (AHS). More information will be disseminated on tutoring dates and times. Students will also have to prepare lesson plans for tutoring. Students are required to provide documentation of their tutoring dates and times signed by the supervisor for summer tutoring.

8. Class Policy Statements:

Participation: Students are expected to participate in all class discussions and participate in all exercises.

It is the student's responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work.

Attendance

Attendance/Absences: Attendance is required at each class meeting. If an exam is missed, a make-up exam will be given only for University-approved excuses as outlined in the Tiger Cub. Arrangement to take the make-up exam must be made in advance. Students who miss an exam because of illness need a doctor's statement for verification of sickness and should clear the absence with the instructor

the day they return to class. Other unavoidable absences from campus must be documented and cleared with the instructor in advance.

*Attendance is mandatory and participation is paramount for success in this class. You are responsible for attending all class sessions.

*Students are allotted one excused or unexcused absence. All other absences are unexcused unless they are in accordance with AU bulletin/Tiger cub absence policy. Medical and legal documentation must be provided within 7 days of the absence or it will be considered an unexcused absence. Students are still required to contact their professor in advance of an absence or soon thereafter, in the event of an emergency. Any absence not in accordance with AU Tiger Cub absence policies is considered unexcused and may result in a five point reduction (per absence) from the earned actual final grade (at the discretion of the professor for this course only). After three unexcused absences students will be referred to the Office of Academic Affairs for withdrawal from the class. Should an extended illness or family emergency arise please notify your instructors as soon as possible. Please follow the AU Tiger Cub for guidelines as to what qualifies as an excused absences based on AU policy. In the event of a medical emergency (or something pretty close to it) please make every effort to notify me in advance (prior to the class meeting). In that event, you are required to contact the instructor personally in advance for the absence via e-mail, telephone, or leave a message with the administrative asst. (Elaine Prust 844-4434) of the Dept. of Curriculum and Teaching, if you are unable to contact me personally.

*Please arrive at each class on time (6:00 pm) and be prepared to discuss and respond to issues and topics covered in the class (unless you have discussed with the instructor that you will be a few minutes late due to another course). Excessive tardiness will not be accepted and two tardies (more than 10 minutes late) will be considered as one absence and will result in a 5 point deduction from your final grade. Moreover, late students may not be permitted to enter class and may be counted as an unexcused absence at the discretion of the professor of the course.

*If you miss a weekly class, you are still required to turn in the assignments on time for full credit. Please contact me prior to turning in your assignment via e-mail as an attachment only. NO assignments will be accepted late at anytime. In the event that you are have an excused absence in accordance with AU's excused absence policy all assignments must be turned in no later than 3 days after the date you miss class. Preferably, unless you have a medical emergency make every effort to turn assignments in on the date that they are due even if you have an excused absence.

Unannounced quizzes: There will be at least 2 unannounced quizzes.

Accommodations: Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternative time can be arranged. To set up this meeting, please contact me by e-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with the Program for Students with Disabilities at 1244 Haley Center, 844-2096 (V/TT).

Honesty Code: The University Academic Honesty Code and the Tiger Cub Rules and Regulations pertaining to Cheating will apply to this class.

Professionalism: As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or dispositions are listed below:

- Engage in responsible and ethical professional practices
- Contribute to collaborative learning communities
- Demonstrate a commitment to diversity
- Model and nurture intellectual vitality

Distance Learning Students: Unless specific instructions have been given for a designated course, students in distance education courses shall take all closed resource examinations under the supervision of an approved proctor. Examples of approved proctors include a school superintendent, a principal of a high school, or a dean or department head of a college. Proctors shall be verified and exams shall be sent directly to the proctor who will manage the examination in a secure manner, requiring students to present a picture ID.

9. Justification for Graduate Credit (for Graduate Credit Only)

Policies and Procedures

Confidentiality is essential in this course. Any assignments, discussions, cases or episodes are not to be shared outside of this class.

Late/remedial work policy

If you miss a weekly class, you are still required to turn in the assignments on time for full credit. NO late assignments will be accepted. All assignments are due at the start of each class meeting on the date they are scheduled.

*Please note that lack of professionalism in this course will not be tolerated. This includes making any derogatory or negative comments with regards to the course and its course contents, students, or the instructor of the course which can be deemed as unprofessional and will be duly noted and reported to the appropriate administration.

Article critique #1 and Article critique #2 must follow the same guidelines.

Each critique is worth 15 points.

Please select an article from one of the following suggested journals,

Science Teacher

Science Scope

Journal of Research in Science Teaching

Science Education

School Science and Mathematics

Additional journals that may address issues related to science and science education may include:

Review of Educational Research

Journal of Negro Education

Journal of Counseling Psychology

Educational Researcher

You may also access many journals online via Eric or onlinejournals.com, or Auburn University library systems journals database. If there is a question about the journal you would like to use please see me. Please bring me the title of the journal and article that you plan to critique prior to the assignment due date for article critiques.

The article should relate to current issues related to evaluation and assessment in science and/or science education. Please let me know if you have difficulty locating articles. Critique should address the criteria listed below and discussed in class. Write a maximum 5 page critique (no less than 3 pages).

Format:

1. Name on the bottom of the last page; No creative margins please.
2. Attach a copy of the article to the critique.
3. All articles must be from research journals and no articles prior to 2000.
4. Include a complete citation for the article at the bottom of the last page in APA 5th edition style.
5. Allow sufficient margins for the instructor to make marginal notes and comments.
6. Please do not staple. Place a paperclip in the upper left corner.

Criteria for grading assignments: 15 points total

1. Writing must be clear, and paper well organized. Please type all papers. (2 pts)
Attach a copy of the article to the critique. All articles must be from research journals and no articles prior to 2000.
2. The soundness of your critique and validity of your perceptions of the article determine the value of your work. Please spell-check and proofread all assignments. Please organize thoughts with the reader in mind. Discuss the author's major assertions. (2 pts)
3. Identify major themes of the article. (2 pts)
4. Please do not re-write article. Summarize the article in a brief introductory paragraph. All critiques should be in your own voice. (2 pts)
5. Article must be a maximum 5 pages in length and no less than 3 pages (2 pts)
6. Presentation of article to class (5 pts) brief discussion of article and your perspectives, etc.
7. Grades on assignments, as well as questions, or concerns can be discussed during appointment times.