ELEM 631 Teaching Mathematics in the Elementary Classroom

Credit Hours: 3 credit hour
Professor: Linda James Woolard
Office: Room 234 Gilchrist Complex
Phone: 252-335-2163
Email: ljwoolard@mail.ecsu.edu
Course Location: Gilchrist Complex Room 204

Course Description

This course focuses on analyzing and examining the research in mathematics teaching and teacher education. Course participants will consider the various ways of studying the teaching of mathematics and analyze what has been learned from the study of teaching. Participants will analyze research and identify issues related to the initial preparation of teachers of mathematics and to the professional development of practicing teachers of mathematics. Prerequisite: Admission to the Ph.D. Program with emphasis in Mathematics Education or CI.

Course Objectives

Upon completion of this course, students will demonstrate the following:

1. Knowledge about the major research paradigms for the study of mathematics teaching, both past and present.
2. Knowledge of the theoretical and research literature on mathematics teaching and mathematics teacher education.
3. Knowledge about the recommendations of various professional groups for teacher education programs in mathematics and the various program options currently being employed.
4. The ability to create differentiated learning center assignments for mathematics instruction.

Evaluation of Student Outcomes

- Course discussion will be used to provide insights regarding course readings.
- The review of the literature regarding a specific topic in mathematics education will reveal students’ ability to conduct an examination of the research literature and to synthesize the research literature.
- The presentation will give the students an opportunity to present the information gleaned from the literature review.
- An exam will provide evaluation of students’ ability to respond to questions related to topics addressed in the course.
Grading Criteria

1. Class Participation 10 points
2. Article reviews 20 points
3. Midterm exam 10 points
4. Differentiated Math Center 25 points
5. Presentations 25 points
6. Final Exam 10 points

100 points

Required Textbooks


Subscribe to Annenberg Learner - [http://www.learner.org/](http://www.learner.org/)

Articles:
The course text will be a selection of research articles that address each of the topics listed in the content outline. These articles will change for each implementation of the course to allow for the inclusion of historical overview and current research reports.

Other Classroom Policies:

- **Attendance Policy:** Regular attendance is required for all scheduled weekly discussion boards which count as class meetings. Each individual student is responsible for the assigned readings, class discussions, class lectures, handouts and activities.

- **Missed Assignments / Make-up Work:** Assignments must be turned in on or before the due date. Late work will be penalized with a deduction of 10 points for each day the assignment is late.

- **Student Conduct** - Students preparing to become educators are expected to conduct themselves in an ethical manner consistent with North Carolina Professional Guidelines and Competencies.

- **Drop Policy:** Follow the printed guidelines in the ECSU Policy and Procedures Manual

Policy on Academic Honesty:

As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The examples and definitions given below are intended to clarify the standards by which academic honesty and academically
honorable conduct are to be judged. The following list is merely illustrative and is not intended to be exhaustive.

- **PLAGIARISM.** Plagiarism is presenting another person’s work as one’s own. It includes paraphrasing or summarizing the works of another person without acknowledgement, including submitting another student’s work as one’s own.

- **CHEATING.** This involves giving or receiving unauthorized assistance before, during or after an examination.

- **UNAUTHORIZED COLLABORATION.** Submission for academic credit for a work, product or a part thereof, represented as being one’s own effort that has been developed in substantial collaboration with or without assistance from another person or source is a violation.

- **FALSIFICATION.** It is a violation to misrepresent material or fabricate information in an academic exercise or assignment.

- **MULTIPLE SUBMISSIONS.** It is a violation of academic honesty to submit substantial portions of the same work for credit more than once without the explicit consent of the instructor(s) to whom the material is submitted for additional credit. In cases where there is a natural development of research or knowledge in a sequence of courses, use of prior work may be desirable or even required.

**Accommodation Statement:**

ECSU is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

The university is required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels.

Any student in the class who has a disability that may prevent full demonstration of ability should contact the instructor personally before the end of the first week of classes so that a discussion can be held regarding accommodations necessary to ensure full participation and facilitate individual educational opportunities.