



Syllabus ELED 3150
Mathematical Methodology
Monday, July 12–Thursday, August 5
Summer 2010

Instructor Information:

Mrs. Tammy Parsons
Adjunct Professor
Website: www.flyparsons.com/MTSU.html

E-mail: tparsons@mtsu.edu
Office Phone and Office: n/a

Schedule and Office Hours:

	Class Meeting Times	Office Hours (KOM 160)
Monday	12:50 – 3:10 pm	3:10-3:40
Tuesday	12:50 – 3:10 pm	3:10-3:40
Wednesday	12:50 – 3:10 pm	3:10-3:40
Thursday	12:50 – 3:10 pm	3:10-3:40
Friday	12:50 – 3:10 pm	3:10-3:40

Course Prerequisites:

Admission to teacher education program, Math 1710 or Math 1010, Math 1410, Math 1420 (K-6, 4-8), and ELED 3050 or 3070.

Course Description (as published in the undergraduate catalog)

ELED 3150 is designed to prepare pre-service elementary and middle level teachers for teaching mathematics.

Course Goals

1. To increase theoretical and experiential knowledge about the teaching of mathematics.
2. To increase content as well as pedagogical knowledge of mathematics.
3. To learn about young children's mathematical thinking.
4. To develop a repertoire of mathematical tasks and activities.
5. To reflect on beliefs and experiences about how to teach mathematics.
6. To plan, present, and reflect on the teaching of mathematics.
7. To assess students current mathematical knowledge and devise a plan for helping students reach desired goals.
8. To become familiar with state and national mathematical standards.

Course Texts & Needed Websites

Required:

ETA/Cuisenaire Manipulative Bags. These are available in the bookstore or you may order it from ETA.
ETA: 1-800-445-5985

The following are not required to purchase:

- Sherman, H., Richardson, L., & Yard, G. (2005) *Teaching students who struggle with mathematics*. Pearson, Merrill Prentice Hall.
- Chappell, M, Schielack, J., & Zagorski, S. (2004) *Empowering the beginning teacher of mathematics: Elementary school*. NCTM, Reston, VA.
- National Council of Teachers of mathematics. (2000). *Principles and Standards for School mathematics*. Reston, VA. <http://www.nctm.org>
- Tennessee Curriculum Standards: <http://www.state.tn.us/education/ci/standards/>

Expectations from Students

Students are expected to attend class on time. Students should come prepared for each class having completed all assignments prior to the beginning of class. Please TURN CELL PHONES to vibrate before entering the classroom. We will take a break to allow opportunities for you to return phone calls and text messages if needed during class time. Make sure your class conduct is courteous to those around you. Professional dress and conduct are expected when observing, tutoring, and teaching. Reports of inappropriate dress or conduct from the local schools will result in the lowering of one's grade or a grade of F for the course.

Absentee Policy

Attendance in class is critical to a student's learning. This course draws upon experiences of every student and participation in class activities. Thus, missing class will cause gaps in a student's knowledge of mathematical methods. Excessive tardiness or extreme late arrivals or early departures will count as an absence. Absences will affect a student's grade in the following manner.

Three absences	Student's Grade Lowered One Level
Four Absences	Student's Grade Lowered One Letter Grade
Five Absences	Student will receive an F for the course

Course Assignments

Article Reflections (3 points each for a total of 12 points)

Students will be asked to read and react to four different articles throughout the course. The articles can be found on my website. Reflection papers must be between 250-300 words (typed in MS Word) that presents a personal reaction to the reading (not a summary). All reactions will be emailed to tparsons@mtsu.edu. Article due dates are: Thursday, July 15, Thursday, July 22, Thursday, July 29, and Wednesday, August 4. Each reaction must be sent by 10 PM. Please be ready to discuss the article in class the following date.

Student Tutoring, Log Completion including summary of tutoring experience (15 points)

Each student is to tutor an elementary student for 5 hours in your area of certification in mathematics. Students will need to log and document each tutoring experience. Tutoring sessions need to last an age appropriate length of time with no session exceeding 1 hour. These sessions must be conducted using exemplary methods (this is not a drill and kill session!). You must use your manipulative bags to reinforce or teach concepts during each session. Document what manipulative(s) you used during the session.

For each tutoring session complete a Student Tutoring Log. You can download the log from my website. Please note the following:

- The plan you had going in
- What actually happened
- Reflection on your learning and the student's learning (This must be thorough)

When you have finished with the minimum 5 hours, submit this onto TK20. Place the document in ONE file in MS Word 97-03. Start each new session with a page break. Due date: Tuesday, August 3. Be ready to discuss your experience on Wednesday, August 4 during class.

Group Presentation and Reflection (20 points)

Students will work in a group of two to create a lesson to present during the last week of class. The lesson should have a literature component, one of Kagan's Cooperative Learning Structures, and *be something you will be able to use in your placement in the fall*. Please choose your partner based on this information. Each presentation should be between 15-20 minutes in length. Each student is to upload their lesson plan to TK20. A rubric is available on my webpage for assessment purposes. Students are to write a brief (250-300 words) reflection on their lesson after teaching. What worked? What did not? What changes would you make if you were to teach this to a class of students tomorrow?

Planning and Teaching Experience (20 points)

Students are to work in groups of two to plan and teach twice during this class in a lower grade (K-2) and an upper grade (3-6). You will be teaching approximately 35-40 minutes to one grade level and then moving quickly to the next grade level to teach for 35-40 minutes to the alternate grade level. The dates have been set for Monday, July 26 and Tuesday July 27. There will be a sign-up sheet during the first couple days of class. The presentation days will be either at Reeves Rogers Discovery School or Mitchell Nielson Elementary. Whichever day you are not presenting to students, you will be expected to be in class. Your lesson plan for this “Plan and Teach” experience must be submitted via TK-20 by Thursday, July 22 at 10:00 PM. Each person must submit a lesson plan to TK20.

In-class Reflection (14 points)

Students will complete an in-class reflection at the end of each class session. Students will be asked to reflect on their own learning, discuss standards covered, ask any questions of the instructor, and complete a formative and/or assessment component daily.

Weekly Check-Ups (9 points)

Students will take brief assessments (on Friday) over material presented during the week.

Final Exam (10 points)

Students will be given a culminating test over mathematical content and pedagogy.

Breakdown of Evaluations

Assignment	Points	
Article Reflections	12	
Student Tutoring	15	
Group Presentation and Reflection	20	
Planning and Teaching at School	20	
Daily In-Class reflection	14	
Weekly Check-up (3 x 3 points each)	9	
Final Exam	10	<i>Final Exam Date: Thursday, August5</i>
Total	100	

*** All assignments must be completed. If a student has a 0 for any assignment, the student’s grade will be lowered one letter grade.

Evaluation & Grading

A	89.95-100	D	59.95-69.94
B	79.95-89.94	F	below 59.94
C	69-95-79.94		

All grades will be rounded to the hundredths place. A plus-minus system will be used when calculating grades with absences and tardies taken into account.

Accommodations:

If you have a disability that may require assistance or accommodation, or you have questions related to accommodations for testing, note-takers, readers, etc.; please contact me as soon as possible. You may also contact the Office of Disabled Student Services (898-2783) with questions about such services. You must be registered with Disability Services to receive special accommodations.

Diversity Statement

As identified and described in the College of Education's conceptual framework Educator as Reflective Decision-maker, ELED 3150 is constructed with an understanding of diversity. Mathematical Methodology ensures candidates a variety of appropriate assessment alternatives and uses technology as instruction and as a median of instruction. Using the TK20 software, the Comprehensive Assessment System (CAS) clearly aligns content and pedagogical knowledge with programmatic objectives, professional goals, and accreditation standards. Faculty members draw upon multiple data sources on which to analyze, interpret, and improve their teaching practice on behalf of candidates' knowledge, skills, and dispositions.

Academic Integrity:

According to the Rights and Responsibility section of the Students Handbook, cheating is defined as intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours. If a student is believed to be in violation of MTSU's policy on academic misconduct, procedures will be following as outlined in the Students Handbook.

Academic Misconduct:

The instructor has the primary responsibility for control over the classroom behavior and can direct the temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct which otherwise violates the general rules and regulations of the institution. The instructor may report such misconduct to the assistant dean for Judicial Affairs for implementation of such disciplinary sanctions as may be appropriate, including extended or permanent exclusion from the classroom.

Tennessee Education Lottery Scholarship (TELS)

Do you have a lottery scholarship? To retain Tennessee Education Lottery Scholarship eligibility, you must earn a cumulative TELS GPA of 2.75 after 24 and 48 attempted hours and a **cumulative** TELS GPA of 3.0 thereafter. You may qualify with a 2.75 **cumulative** GPA after 72 attempted hours (and subsequent semesters), if you are enrolled full-time and maintain a **semester** GPA of at least 3.0. A grade of C, D, F, or I in this class may negatively impact TELS eligibility. Dropping a class after 14 days may also impact eligibility; if you withdraw from this class and it results in an enrollment status of less than full time, you may lose eligibility for your lottery scholarship. Lottery recipients are eligible to receive the scholarship for a maximum of five years from the date of initial enrollment, or until a bachelor degree is earned. For additional Lottery rules, please refer to your Lottery Statement of Understanding form, review lottery requirements on the web at <http://scholarships.web.mtsu.edu/telsconteligibility.htm>, or contact the Financial Aid Office at 898-2830.