

University of West Georgia

MATH 2008: Foundations of Numbers and Operations

Fall 2015

Course Syllabus

Instructor: Dr. Christopher Jett

Office: 322 Boyd Building

Class Location: 305 Boyd Building

Office Hours: M/W/F: 10–12; M/W: 2–3:30

E-mail: cjett@westga.edu

Phone: (678) 839-4130

Class Meeting: MW 3:30–4:50 p.m.

Catalog Description:

This course is an Area F introductory mathematics course for early childhood education majors. This course will emphasize the understanding and use of the major concepts of numbers and operations. As a general theme, strategies of problem solving will be used and discussed in the context of various topics.

Required Textbook:

Billstein, R., Libeskind, S., & Lott, J. (2013). *A problem solving approach to mathematics for elementary school teachers*, (11th ed.). Boston, MA: Pearson.

Student Learning Outcomes:

The students should be able to do the following:

- Strengthen their understanding of elementary vocabulary and mathematical notation.
- Understand operations, algorithms, and other number system and number theory properties.
- Make conjectures and use deductive methods to evaluate the validity of conjectures.
- Utilize multiple strategies to problem solve in multiple contexts.
- Communicate mathematical ideas and concepts.
- Develop an appreciation for mathematics from a historical perspective.
- Become familiar with the National Council for Teachers of Mathematics via the organization, website, journals, and other resources.
- Establish personalized reform-based visions for teaching mathematics successfully and effectively to all children aligned with the Common Core State Standards for Mathematics.

Attendance Policy:

It is my expectation that you will attend every class session and be punctual. Class participation entails being an active participant to your respective learning community. In the event of an absence, you are expected to get the materials and information relevant to the missed class from your peers. There are only 3 unexcused and excused absences allowed per semester. If you exceed 3 absences, you will fail the course. Please note that it is your responsibility to sign the attendance sheet during each class period.

Students with Disabilities:

Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which an accommodation is sought.

Instructional Methods and Activities:

During class sessions, a variety of pedagogical strategies will be employed to engage students in the mathematics teaching and learning dynamic. Students are expected to be professional and to be active participants in class activities, mathematics tasks, learning designs, etc.

Evaluation Techniques:

Test 1: 150 Points

Test 2: 150 Points

Test 3: 150 Points

Final Exam: 250 Points

Total – 1000 Points

Quizzes: 5 @ 20 Points Each

Homework : 3 @ 25 Points Each

Microteaching: 75 Points

Book Paper/Presentation: 50 Points

Exam Dates and Other Important Dates:

There will be no class on Monday, September 7th in observance of Labor Day. Exams are scheduled for Monday, September 21st, Wednesday, October 14th, and Wednesday, November 4th. Microteaching presentations are scheduled for November 9th, 11th, and 16th. The book presentation is scheduled for Wednesday, November 18th. The final exam is scheduled for Wednesday, December 9th from 2:00 p.m.–4:30 p.m.

Grading Scale:

A: 1000–900 Points

B: 899–800 Points

C: 799–700 Points

D: 699–600 Points

F: Below 600 Points

Class Policies and Procedures:

1. Homework must be submitted in a folder on scheduled test dates.
2. There will be no make up for quizzes under any circumstances.
3. There will be no make up for the book presentation or the microteaching presentation; failure to present on your scheduled date will result in a grade of zero.
4. Late work is accepted with a 50% penalty for only the book paper. Please note that this is the only assignment that can be submitted late.
5. If a student must miss a test and has excused documentation, then the final examination will be used for the missed test in the calculation of the final course grade.
6. Calculators can be used during the final exam; however, cell phones may not be used (even as calculators).
7. Please be sure that cellular phones are placed on vibrate or silent during class time.
8. Cheating is not tolerated. If a student is caught cheating, then the student will receive a zero for the test or assignment and will be reported for academic dishonesty.
9. Conferences can be beneficial and are encouraged. All conferences should occur during the instructor's office hours.
10. Office hours will not be kept during final exam week. If a meeting is necessary during the final exam week, then please schedule an appointment.
11. Please note that the weekly schedule is tentative. Changes might be made based on students' needs, inclement weather changes, etc.
12. Grades cannot be sent via e-mail to students. Students are expected to keep accurate records of their grades and ascertain where they stand in the course.

Mathematics Concepts Covered

Divisibility	Order of Operations
Explorations with Patterns	Percents
Greatest Common Divisor	Prime and Composite Numbers
Integers	Problem Solving Strategies
Introduction to Measures of Central Tendency	Rational Numbers
Least Common Multiple	Set Operations and their Properties
Numeration Systems	Set Theory
Operations on Decimals	Whole Numbers