Instructor: Dr. Talitha Washington

Contact Info: Office: KC 318; Phone: 488-2213; Email: tw65@evansville.edu

Office Hours: TBA

Required Texts: Mathematics for Elementary Teachers, 7th Ed., Musser, Burger

Course Website: http://acebb.evansville.edu

Course Description: MATH 202 Mathematics for Elementary Teachers (3): Treats problem solving, the real number system, elementary number theory, geometric topics and others. For elementary education majors only. Prerequisite: Mathematics 101.

Course Learning Objectives: The goal is to provide an understanding of the mathematics necessary to teach at the elementary school rather than focus on mathematics teaching methods. The purpose of this course is to instruct students in ways of mathematical thinking beyond computation and to provide a broader view of mathematics by introducing a variety of uses within the topic framework. The general course goals are to help you:

- gain knowledge about the conceptual background which underlies the major mathematical themes found in the elementary school curriculum,
- develop an ability to communicate mathematical ideas clearly and effectively, both in writing and orally,
- develop ability to apply analytic skills to mathematical ideas and processes,
- develop an understanding of how mathematics applies to a wide array of different areas,
- develop critical thinking and problem solving skills, and
- develop an understanding of how to present the major concepts of this course to elementary school children for whom these concepts are developmentally appropriate.

Methods of Instruction: The method of instruction for most classes will be a lecture/discussion. Students are encouraged to participate in class by asking questions, contributing to discussions, and working problems. Outside of class, students are expected to read the text and complete all assigned homework.

Grading: The weights in determining your final grade are as follows:

- Assignments – 15%
- 4 Quizzes (Jan 18, Feb 15, Mar 28, Apr 25) – 15%
- Three Exams (Feb 1, Feb 29, Apr 11) – 15% each
- Comprehensive Final Exam (Thurs, May 1, 8 AM) – 25%

The usual course grades apply. (ex: $80 \leq x < 83 \rightarrow B-$, $83 \leq x < 87 \rightarrow B$, $87 \leq x < 90 \rightarrow B+$) Changes to the Exam and/or Quiz dates will be announced in class.

Course requirements and policies:

a. Calculators: Calculators will not be allowed during exams or quizzes. A scientific calculator is needed for this course for homework and in-class work (a TI calculator is recommended).

b. Attendance: You are expected to attend class on time every day. If you miss a day, it is up to you (not me, or your classmates) to catch up and learn what you have missed.

c. Assignments: I will post the assignments on the Course Website (Blackboard) as it is assigned. You are expected to complete all problems and understand the concepts behind them. The assignments are to be stapled and are due at the beginning of class every Friday. Late homework will not be accepted. I will NOT answer homework questions on Friday (for the assignment being turned in). Each assignment is worth 100 points. The lowest homework grade will be dropped. The importance of homework cannot be over-stressed: one can only learn mathematics by doing many exercises! Many questions on the quizzes and exams will be strikingly similar to those given in the homework.
d. Quizzes: There will be 4 announced quizzes. Each quiz is comprehensive.

e. Make-ups: Make-up quizzes and exams will be given only in extreme circumstances that are documented university approved excused absences, and only if I am aware of the circumstances prior to the exam. In particular, make-ups will never be given to accommodate travel plans.

f. Honor Code: It is expected that you are familiar with and will comply with the terms of the University's Academic Honor Code. Giving or receiving any type of aid on exams or quizzes is strictly prohibited, and will result in an F. Please note also that the computers are to be used during class only when you've been instructed to do so. In particular, there is to be no game playing, web browsing, online chatting, emailing, etc.

g. Accessibility: Please let me know immediately if you have a learning or physical disability requiring accommodation. For more information, contact the Office of Counseling and Health Education at 488-2663.

Schedule

Sets, Whole Numbers, and Numeration (2.1-2.4)
Whole Numbers: Operations, Properties and Computation (3.1-3.3, 4.1-4.3)
Number Theory (5.1-5.2)
Fractions (6.1-6.3)
Decimals, Ratio, Proportion, and Percent (7.1-7.4)
Integers (8.1, 8.2)
Rational Numbers, Real Numbers, and Algebra (9.1, 9.2)
Geometry (12.1, 12.2)
Measurement (13.1, 13.2)

Have a great semester!