

UNIVERSITY OF WEST GEORGIA – SPRING 2015 SEMESTER

Course: MATH 2008 section 01, Foundations of Numbers and Operations - 3 credit hours

Course 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.

Learning Outcomes: Upon successful completion of this course, students will demonstrate:

1. A better understanding of standard vocabulary and symbols of elementary mathematics;
2. An understanding of the development of number systems from the whole numbers to integers then rational numbers and reals;
3. An understanding of operations, algorithms, place value, elementary number theory;
4. An ability to apply concepts of fractions, decimals, percents, ratio, and proportion in problem-solving situations;
5. An appreciation for mathematics from an historical prospective;
6. A better understanding of the uses of manipulatives, technology, and other materials for the P-8 level;
7. A better understanding of the vision of math education in NCTM's Principles and Standards (2000);
8. A better understanding of the scope and sequence of elementary school mathematics programs;

Instructor: Mr. Jim Bellon jbellon@westga.edu (best way to contact me is through UWG-CourseDen)

Office & Hours: Boyd 212 MW 9-10am, 3:30-4:30pm Fri 9-10am
Boyd 205 Math tutoring Center MW 10-11am, 1-2pm Fri 10-11am

Class Meets: MWF 8:00 – 8:52am Boyd Building: Room 307

Materials Needed: A calculator is required, any kind will do. Bring a notebook to class.
Students are required to purchase the textbook
“A Problem Solving Approach To Mathematics for Elementary Teachers”
11th edition by Billstein, Libeskind, Lott; from Pearson Publishers.

Grading: In class there will be 3 tests (test avg counts 40%), a **cumulative** Final exam (20%),
Homework (avg counts 20%), Group worksheets (avg counts 20%).
Final grades will be determined as follows:

89.1% and up	= A
79.3% to 89.0%	= B
69.5% to 79.2%	= C
60.0% to 69.4%	= D
59.9% and below	= F

HW Assignments: Every week or two there will be HW assignments. You must write out your work NEATLY and hand in by the due dates. The HW will be worksheets or textbook problems.

****Group Learning:** In this section of MATH 2008 we will be utilizing a non-standard method of instruction in addition to standard lectures. Most weeks we will break into groups and discuss concepts, work problems, and interact and help one another. There will be several graded group worksheets, most in class, others may be take-home. They will require collaboration, critical thinking, and communicating results. If you miss one of these for a valid reason, you must notify me immediately and you may complete it on your own. Assignments will be graded on content, organization, and communication. It is suggested the take-home assignments be typed. They can be submitted electronically if desired.

Last Day to Withdraw: *Friday, February 27th* Any student who withdraws after this date will receive a grade of “F”.

Attendance Policy: You will be allowed a total of 3 absences. Only ONE may be unexcused absence. The other two must be with a documented excuse that was beyond your control (doctor said so, car accident, etc.) Poor planning and poor judgment, which result in missing class, do not count as excused. For every absence beyond those mentioned above, your overall course grade will be lowered by 5%. Students are expected to attend class and complete all work when assigned. Students are responsible for the topics covered and assignments due whether present or not. **"I was not here" is NOT a valid excuse.**

Make-up policy: HW assignments, if handed in late, will receive a penalty of 20 points for each class meeting it is late. Makeups for in class assignments and exams may be granted with a VALID and documented excuse, but only if you contact me before or the same day as the assignment/exam.

Extra-credit policy: **There will be NO extra credit given, period!** Points can be earned only as stated above.

Class Rules: You are to turn off your cellular phone during the class. You are not allowed to use your phone as a calculator. Please respect your instructor and other students in the class. No talking or any distracting behavior. If you fall asleep in class, you will be asked to leave. It is expected that students be familiar with the Student Conduct Code, Disciplinary Procedures and Disciplinary Sanctions in the Student Handbook. Cheating and/or any conduct that disturbs the classroom, the instructor, or the students WILL NOT be tolerated!! Any serious violations will be reported; appropriate actions will be taken; and consequences will result. Please see the general policies for UWG at <http://tinyurl.com/UWGSyllabusPolicies>.

Meeting with Instructor can be beneficial and is encouraged. Meeting should occur during the instructor's office hours, whenever possible. If these hours conflict with a student's schedule, then appointments should be made. The meeting time is not to be used for duplication of lectures that were missed; it is the student's responsibility to obtain and review lecture notes before consulting with the instructor. As your instructor, I am very concerned about the student's achievement and well-being and encourages anyone having difficulties with the course to contact me for extra help.

Note: If you have a documented disability, which will make it difficult for you to carry out the course work as I have outlined and / or if you need special accommodation or assistance due to disability, please contact me as soon as possible.

Math Tutoring Center: Boyd 205 Hours are Mon/Tue/Wed 9am-8pm, Thurs 9am-7pm, Fridays 9am – 3pm. You can just walk in and get help. There are 2-4 tutors on duty who will rotate between students. There are also textbooks and computers to use while you are in the tutoring center.

This is a tentative schedule of assignments and topics to be covered in class sessions. Changes will be made as needed. Once we finish a section, we will immediately move along to the next section. It is recommended that you read over text sections BEFORE we cover them in class. After we cover topics, you should complete assignments and do any extra practice or get help as needed. Don't wait until its too late (like after doing bad on a test).

1/5 – 1/9	Introduction. Chapter 1 – Introduction to Problem Solving. <u>Sections 1-1 and 1-2 only</u>
1/12 – 1/16	Chapter 2 – Numeration Systems and Sets. <u>All Sections</u>
1/19 – 1/23	Monday 1/19 MLK-DAY - No Class Finish chapter 2
1/26 – 1/30	group worksheet #1 on Monday January 26th Chapter 3 – Whole Numbers and their Operations. <u>All Sections</u>
2/2 – 2/6	Finish Chapter 3 Review for test #1
2/9 – 2/13	Test #1 on Monday February 9th Chapter 4 – Number Theory. <u>All Sections.</u>
2/16 – 2/20	Finish Chapter 4
2/23 – 2/27	group worksheet #2 on Monday February 23rd Chapter 5 – Integers. <u>All Sections.</u>
3/2 – 3/6	Finish Chapter 5 Review for test #2
3/9 – 3/13	Test #2 on Monday March 9th Chapter 6 – Rational Numbers and Proportional Reasoning. <u>All sections.</u>
3/16 – 3/20	SPRING BREAK
3/23 – 3/27	Finish Chapter 6
3/30 – 4/3	Chapter 7 – Rational Numbers and Percent. <u>All sections.</u>
4/6 – 4/10	group worksheet #3 on Monday April 6th Review for test #3
4/13 – 4/17	Test #3 on Monday April 13th FINAL REVIEW

FINAL EXAM (all chapters) on Friday April 24th 8 – 10:30am in our classroom.