

University of West Georgia
DEPARTMENT OF MATHEMATICS
Foundations of Numbers and Operations
MATH 2008 – Sec 91

Instructor:	Mr. Robert Burnham	Classroom:	131 Newnan Center
Email:	rburnham@westga.edu	Class time:	TTh 2 pm – 4:30 pm
Office:	116 Newnan Center	Office Hours:	MF, 3pm–4:30pm, Other Times by Appointment
Phone:			

Prerequisite: Math 1001 or Math 1111 or Math 1113 with a grade of C or better.

Required Text: A problem solving Approach to Mathematics for Elementary Teachers (12th edition), by Billstein, Libeskind, Lott from Pearson Publishers.

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

Students should be able to demonstrate:

1. The student will be able to solve problems using various problem solving strategies
2. The student will be able to identify patterns and sequences including arithmetic, geometric, and Fibonacci sequences.
3. The student will be able to work with set operations and Venn diagram.
4. The student will be able to work with numeric systems of various bases.
5. The student will be able to understand mathematical properties including commutative, associative, and distributive properties..
6. The student will be able to understand various strategies in computing number operations for integers and fractions.

EXPECTATIONS / REQUIREMENTS

Grade :

Your grade will consist of two Tests (20% each), MyOpenMath/Homework Average (15%), Quiz Average (10%), In-Class Activities (10%) and a cumulative Final Exam (25%).

ASSESSMENT GRADING:

**Course Grade = .15*(MyOpenMath/Hw Ave)+.10*(Quiz Ave)+.20*Test1 + .20*Test 2
+.10*(In-Class Activities) +0.25*(Final Exam)**

When computing your Final Course Grade I will replace your lowest test grade with your Final Exam Grade, if the Final Exam Grade is higher than your lowest test grade. In the event of academic dishonesty the student forfeits this benefit.

Grading Scale :

Letter Grade	A	B	C	D	F
Grading Scale	90% to 100%	80% to 89%	70% to 79%	60% to 69%	0% to 59%

Calculator Policy: A graphing calculator is recommended (preferably a TI-83 or TI-84 model) however you can use any calculator you prefer. **The instructor reserves the right to when you are allowed to use Calculators on in class graded assignments.**

Lecture Notes: Lecture notes play a big role in this course. I have posted all of my lecture notes on CourseDen and I do expect you to print them off and bring them to class. Students who do not do this will have a difficult time keeping up in the class.

MyOpenMath/Homework:

Homework assignments will be completed using MyOpenMath.com via CourseDen. You will have assignments due on a weekly basis. Do not wait until the due date to do the assignments – if the site is not available, you will get a 0 for those assignments.

Quizzes :

Quizzes will be based on homework assignments as well as information discussed during class. There will be one quiz due every week on CourseDen. For each quiz you will get 3 attempts. Your quiz grade will be your highest score. Quizzes will be due every Sunday at 11:59pm.

In-Class Activities: There will be in class activities that will be taken for a grade nearly every class day.

Tests/Final:

There will be 2 Tests and a comprehensive final exam. I will announce (in class) the exact dates for each test at least one week prior to said test.

Final Exam: The Final Exam will be given on **Thursday, July 25th, 3:00 pm - 5:00 pm**

Make-up Policy:

There are no make-ups for online assignments. Make-ups for tests may be granted with a valid documented excuse, and only if you notify me before or on the day of the test.

Withdrawal Policy: The last day you can withdraw from this course and receive a “W” is Thursday **June 27th, 2019.**

Attendance: There is no attendance policy in this class. But you must come to class to success. Please do not arrive late or leave early.

Questions about grading: Questions about grading must be asked within one week of the graded works return.

University Closures: If the University is closed due to weather or for any other reason, any test, quiz, or graded assignment that may have been scheduled for that date will be administered on the next available class date. If an assignment is due that day, it will be due the next class.

UWG EMAIL POLICY: University of West Georgia students are provided a MyUWG e-mail account. The University considers this account to be an official means of communication between the University and the student. The purpose of the official use of the student e-mail account is to provide an effective means of communicating important university related information to UWG students in a timely manner. It is the student's responsibility to check his or her email.

CourseDen: Course materials will be posted on CourseDen. Please check CourseDen often for updates. You may log in to CourseDen at www.westga.edu or <http://webct.westga.edu>. If you are having problems logging into CourseDen, please go to <http://uwgonline.westga.edu/students.php> or call 678-839-6248

Accessibility Services:

Students with a documented disability may work with UWG Accessibility Services to receive essential services specific to their disability. All entitlements to accommodations are based on documentation and USG Board of Regents standards. If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, you should notify me in writing and provide a copy of your Student Accommodations Report (SAR), which is available only from Accessibility Services. I cannot offer accommodations without timely receipt of the SAR; further, no retroactive accommodations will be given. For more information, please contact Accessibility Services.

Math Tutoring Center (MTC): The Math Tutoring Center is located in 205 Boyd (at the Carrollton campus) is available for any student who needs help. No appointments are necessary for the MTC. There are computers available in the MTC so students can get help with online assignments as well as homework assignments. The MTC is scheduled to open starting the second week. The hours for the MTC this semester will be announced in class as soon as they become official.

Center for Academic Success: The Center for Academic Success provides services, programs, and opportunities to help all undergraduate students succeed academically. For more information, contact them: 678-839-6280 or cas@westga.edu

Student Conduct:

Students are expected to abide by the guidelines detailed in the university catalog. Respect and courtesy are required of all students while in the classroom.

Cell Phones/Laptops:

You are expected to give your full, undivided attention while class is in session. Turn off or do not bring electronics that will distract you and the class. Electronic devices are not to be used during the lecture, unless permitted by the instructor.

COURSE POLICIES AND INFORMATION:

University Policies and Academic Support

Please carefully review the following Common Language for all university course syllabi at the link:

<https://www.westga.edu/UWGSyllabusPolicies/>

It contains important material pertaining to university policies and responsibilities. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

Academic Dishonesty:

All students of the University of West Georgia are expected to follow the Honor Code as described in the student handbook (<https://www.westga.edu/administration/vpsa/assets/docs/2016-2017-student-handbook.pdf>). Any student who commits academic dishonesty will receive the following penalties.

1. For a first charge of academic dishonesty the student will receive a grade of "0" for said assignment. In the event of academic dishonesty the final exam grade will not replace your lowest test grade if it is higher.
 2. For a second charge of academic dishonesty the student will receive a grade of "0" for the course.
- Note that all incidents of academic dishonesty will be reported to the University.

IMPORTANT DATES:

First Day of Class:

Tuesday, June 4th

Drop Ends:

Tuesday, June 4th

Last Day to Withdrawal with W:

Thursday, June 27th

Last Day of Class:

Tuesday, July 23rd

Final Exam Period:

July 25-26 (see The Scoop for specific times)

No classes:

Thursday, July 4th (Independence Day)

****Note**** This syllabus provides a general plan for the course; deviations may be necessary

COURSE OUTLINE

Section	Title
1.1	Mathematics and Problem Solving
1.2	Explorations with Patterns
2.1	Reasoning and Logic: An Introduction
2.2	Describing Sets
2.3	Other Set Operations and Their Properties
3.1	Numeration Systems
3.2	Addition and Subtraction of Whole Numbers
3.3	Multiplication and Division of Whole Numbers
3.4	Addition and Subtraction Algorithms, Mental Computation, and Estimation
3.5	Multiplication and Division Algorithms, Mental Computation, and Estimation
Test 1	Chapters 1-3
4.1	Divisibility
4.2	Prime and Composite Numbers
4.3	Greatest Common Divisor and Least Common Multiple
5.1	Addition and Subtraction of Integers
5.2	Multiplication and Division of Integers
6.1	The Set of Rational Numbers
6.2	Addition, Subtraction, and Estimation with Rational Numbers
6.3	Multiplication, Division, and Estimation with Rational Numbers
6.4	Proportional Reasoning
Test 2	Chapters 4-6
Final Exam	Chapters 1-6