

University of West Georgia
DEPARTMENT OF MATHEMATICS
Precalculus
MATH 1113 – Sec 91

Instructor:	Mr. Robert Burnham	Classroom:	186 Newnan Center
Email:	rburnham@westga.edu	Class time:	MW 9:30 – 10:45 am, F 9:55-10:45am
Office:	116 Newnan Center	Office Hours:	MW: 8 – 9am, 5 – 6pm, F: 12 – 1pm
Phone:			Other Times by Appointment

Prerequisite: A grade of C or better in MATH 1111 or an SAT Math score of at least 500 or an ACT Math score of at least 20. Math Department recommends a minimum ALEKS Placement score of 61 to be successful in the class.

Required Text: *College Algebra and Trigonometry*, by Julie Miller and Donna Gerken (McGraw Hill Education)

ALEKS: All students in MATH 1113 are required to have an ALEKS Account. Go to www.aleks.com to purchase an account. The course code for this section is HNAJM-4X4LW

Course Description: This course is designed to prepare students for calculus, physics and related technical subjects. Topics include an intensive study of algebraic and transcendental functions.

Learning Outcomes

Students should be able to demonstrate:

1. An understanding of functions and how to graph functions
2. An understanding of operations on functions including function composition
3. An understanding of types of functions.
4. An understanding of rational functions and their graphs, including intercepts and asymptotes
5. An understanding of how to find the zeros of a polynomial and how to factor polynomials
6. An understanding of inverse functions and how to find them graphically and algebraically
7. An understanding of the properties of exponential and logarithmic equations
8. An understanding of how to solve exponential and logarithmic equations
9. An understanding of how to find the values of the trigonometric functions from right triangles and circles
10. An understanding of how to graph the trigonometric functions
11. An understanding of how to prove trigonometric identities
12. An understanding of how to use the sum, difference, double-angle and half-angle formulas for sine and cosine
13. An understanding of how to solve trig equations
14. An understanding of how to solve triangle using the law of sines and law of cosines
15. An understanding of polar coordinates and graphs
16. An understanding of how to analyze and solve applied problems

EXPECTATIONS / REQUIREMENTS

Grade :

Your grade will consist of four Tests (12.5% each), ALEKS/Homework/Quizzes (22%), Attendance (3%) and a cumulative Final Exam (25%).

ASSESSMENT GRADING:

Course Grade = .03*(Attendance)+.22*(Hw/ALEKS/Quizzes)+.125*Test1 + .125*Test 2 +.125*Test 3 +.125* Test 4+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: Graphing calculators equivalent to the TI 83, 84, 85, and 86, as well as scientific calculators are allowed for use in this course. The TI-89 and other equivalent calculators will not be allowed. **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 will post 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.

ALEKS/Homework:

You will have a module due on ALEKS about every week (12 total). The module closes at 11:59pm on the due date. Do not wait until the due date to do the module – if the site is not available, you will get a 0 for that module.

Quizzes :

Quizzes will be based on homework assignments as well as information discussed during class. I will announce (in class) the exact date of quizzes at least one class period in advance. Quizzes maybe given in class or online in ALEKS.

Tests/Final:

There will be 4 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 **Wednesday, May 2, 8:00 am-10:00 am**

Make-up Policy:

In the event of a student missing a Test for any reason, I will allow the final exam grade to replace that missing test grade. There will be no make up quizzes.

Withdrawal Policy: The last day you can withdraw from this course and receive a “W” is Wednesday **Feb 28th, 2018.**

Attendance: Attendance is 3% of your final course grade. You are allowed 3 unexcused absences without penalty. After 3 unexcused absences you will have a penalty of 1 percentage point for each absence until you have 0% for this grade. You must come to class to be successful. 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 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:

http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf

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.

For important policy information, i.e., the UWG Honor Code, Email, and Credit Hour policies, as well as information on Academic Support and Online Courses, please review the information found in the Common Language for Course Syllabi documentation

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

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:

Monday, January 8th

Drop Ends:

Wednesday, January 10th

Last Day to Withdrawal with W:

Wednesday, February 28th

Last Day of Class:

Monday, April 30th

Final Exam Period:

May 2-8 (see The Scoop for specific times)

No classes:

Monday, January 15th (MLK Jr Day)

Friday, March 9th (Math Day)

March 19th-24th (Spring Break)

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

COURSE OUTLINE

MODULE	Section	Title	Learning Outcome
1	2.3	Functions and Relations	1
	2.6	Transformations of Graphs	1
2	2.7	Analyzing Graphs of Functions and Piecewise Defined Functions	3
	2.8	Algebra of Functions and Function Composition	2
	3.1	Quadratic Functions	3
3	3.2-3.4	Polynomials	5
	3.5	Rational Functions	4
	3.6	Polynomial and Rational Inequalities	4,5
		TEST 1	
4	4.1	Inverse Functions	6
	4.2	Exponential Functions	7
5	4.3	Logarithmic Functions	7
	4.4	Properties of Logarithms	7
6	4.5	Exponential and Logarithmic Equations	8
	4.6	Modeling with Exponential and Logarithmic Functions	16
		TEST 2	
7	5.1	Angles and Their Measures	
	5.2	Right Triangle Trigonometry	9
8	5.3	Trigonometric Functions of Any Angle	9
	5.4	Trigonometric Functions Defined on the Unit Circle	9
9	5.5	Graphs of Sine and Cosine	10
	5.6	Graphs of Other Trigonometric Functions	10
	5.7	Inverse Trigonometric Functions	6
		TEST 3	
10	6.1	Fundamental Trigonometric Identities	11
	6.2	Sum and Difference Formula	12
11	6.3	Double Angle and Half Angle	12
	6.5	Trigonometric Equations	13
12	7.1	Applications of Right Triangles	16
	7.2	Law of Sines	14
	7.3	Law of Cosines	14
	8.1	Polar Coordinates	15
	8.2	Graphs of Polar Equations	15
		TEST 4	
		Review	