ALEKS: All students in MATH 1113 are required to have an ALEKS Account. The hard copy of the textbook is not required. Go to www.aleks.com to purchase an account. The course code for this section is UHCCX-MUMC4

Prerequisites: 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.

1 Courses 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.

2 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 solve systems of equations
10. An understanding of how to find the values of the trigonometric functions from right triangles and circles
11. An understanding of how to graph the trigonometric functions
12. An understanding of how to prove trigonometric identities
13. An understanding of how to use the sum, difference, double-angle and half-angle formulas for sine and cosine
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
3 Grading and Evaluation

ALEKS (module 1 - 14): 10%.

Quizzes (Ten quizzes): 10%.

Tests (Four tests): 55%. (Green scantron is needed)
Tentative test dates are September 2, September 28, October 26, and November 18.

Final Exam: 25%. The final exam is comprehensive and cumulative. (Green scantron is needed)


4 Policies

Attendance: You are required to attend every class. If a class is missed, you are responsible for all materials and assignments.

Make-ups: Make-up will be granted only for excused absences. Official documents are needed. The student is required to contact the instructor in advance to reschedule the make-up. If that is impossible, the student must contact the instructor the same day of the test by email or phone to let the instructor know. Any make-up must be arranged within 7 days from the original date. No make-up for final exam.

Calculators: Graphing calculators equivalent to the TI 83, 84, 85, and 86 will be allowed on the exam. The TI-89 and other equivalent calculators will not be allowed. Any cell phone is NOT allowed to use in class or during an exam.

University Policies and Academic Support: 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.

Academic Honesty: Definitions of academic dishonesty are defined in the student handbook:

Disabilities Act/Accessibility for the Course: If you are a student whom is disabled as defined under the Americans with Disabilities Act and require assistance or support services, please notify me and provide me with a copy of your packet from Student Services. The university will provide you with resources for any audio/visual needs that you may have with the learning management system or course content. Please contact UWG Accessibility Services for more information.

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.

5 Important Dates

August 10      First day of class
September 5    Labor Day Holiday (no classes)
September 30   Last day to withdraw with a grade of W
October 6-7    Fall Break (no classes)
November 21-25 Thanksgiving Holiday (no classes)
December 2     Last day of class
December 5, 2:00-4:00 pm   Final Exam

The instructor retains the right to modify this syllabus to better serve the course objectives.