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 KCFNM-NTMQV

Prerequisites: A grade of D 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 - 12):** 20%. This portion of your grade is based on your completion of modules in ALEKS. Please note that the deadline in ALKES is firm.

**ALEKS Online Tests (Three tests):** 60%.
The three test dates are June 13-14 (Test 1), June 26-27 (Test 2), July 11-12 (Test 3). The tests are only available on the above dates, and you will have only ONE attempt (4 hours limit) per Online Test.

**Final Exam:** 20%. The final exam is also online in ALEKS, but there is an in-class final exam option. If you prefer an in-class final exam, please notify me. Otherwise, I assume an online final exam for you. The final exam is on July 20 (available 8am - 5pm, but only ONE attempt with 5 hours limit).

**Grades:**
- 90-100: A
- 80-89: B
- 70-79: C
- 60-69: D
- 0-59: F

4 Policies

**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 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, Online Courses and Campus Carry, etc, please review the Common Language for Course Syllabi: [https://www.westga.edu/UWGSyllabusPolicies/](https://www.westga.edu/UWGSyllabusPolicies/).
You should read this at the beginning of each semester.

5 Other on campus resources

**Math Tutoring Center:** Located in Boyd 205, MTC has a number of computers and some math tutors who can help you in study math courses.

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