Math 1113 Precalculus, section 15199

Daniel Mckenzie
Office: Boyd 434K
danmac29@uga.edu

Welcome to the Fall 2017 section of Math 1113, *Precalculus*. The course is designed to offer a broad introduction to the topics necessary to succeed in calculus. We will examine a range of issues from the definition of function, exponential and logarithmic functions, and trigonometric functions. The goal is not to solve particular equations. Our goal is to understand the different techniques and approaches.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

We will explore the following topics:

Topic	Important Ideas
Function	Determine the relationship between dependent and independent variables. Determine the range and domain of a given function.
Inverse Function	Determine an inverse function and relate it to the original function.
Exponential Functions	Define functions that model various phenomena and compare to other relationships such as linear and quadratic functions.
Logarithmic Functions	Relate logarithmic functions to exponential functions and solve equations with both exponential and logarithmic terms.
Trigonometric Functions	Relate trigonometric functions to the unit circle, define functions that model physical phenomena, solve equations with trigonometric terms, and define inverse functions for trigonometric functions.

Our evaluation is based on the following expectations:

Quality of Work	Expectations
Needs Improvement	Cannot identify basic equations Cannot determine solutions for basic systems of equations
Satisfactory	Can identify and solve all basic equations Can determine solutions of all basic equations
Good	Derive own systems Determine solutions and stability of own systems
Excellent	Tie together different concepts to solution techniques Can determine solution to any one system using a variety of techniques

Course Goals Be able to define functions that describe various physical phenomena. Be able to manipulate relationships to isolate particular quantities of interest. Demonstrate a working knowledge of the domain and range of a function and the relationship between the range and domain.

Textbook: Precalculus, Julie Miller and Donna Gerkin, McGraw Hill. A special edition for UGA is available at a reduced rate, and the ISBN is 978-1-30-700456-4. You will need access to the ALEKS 360 homework system which is included with the UGA edition of the book. The book should be available at the UGA bookstore as well as other local bookstores.

ALEKS 360 You will have an account set up on ALEKS. You will find a link to ALEKS from the course ELC web page. When you click through the first time, your account on ALEKS will be initiated. You should access ALEKS through the link on ELC. ALEKS has really good tech support so please use it if you encounter a technical problem!.

Web-pages: : `http://www.math.uga.edu/1113` and `danielmckenzie.github.io`

Meeting Times: We meet Mondays, Wednesdays, and Fridays from 1:25pm to 2:15pm in Aderhold Hall room 531.

Attendance Students who have more than five unexcused absences will be withdrawn from the course with a grade of W before the midpoint of the term. After the midpoint for the term the grade will be an F. The five unexcused absences should only be used for emergencies, and you may be asked to verify the reason for an absence and demonstrate that it was an emergency and not due to a social or work commitment. If you repeatedly leave class early or arrive late it may be counted as an absence.

Communication All course announcements will be made via ELC. If you have a question about a specific ALEKS problem, ask me via ALEKS messenger. If you have a general question about work covered in class, test dates or general course administrative stuff, ask it via the ELC discussion boards. Only email me with questions of a personal nature (grade enquiries, absences etc.)

Basic Skills Tests In addition to written tests there will be basic skills tests that will take place in the Mathematics Department's testing center. These will be tests on ALEKS, and the focus is on calculations and basic ideas. There will be three rounds of tests. In each round there will be two tests, and your grade for each round will be the higher of the two grades. Dates TBA.

Test Dates The tests are tentatively scheduled for **20 September**, **13 October**, and **17 November**. The tests will take place in your regular classroom during scheduled class. You should bring your own pencils and calculator. You can use a TI-30 or lower level calculator on the tests.

The final exam will take place on **12 December** from 7 to 10pm.

Grading The final grades are calculated using the following distribution:

45% Three In Class Tests.
10% Four Basic Skills Tests
20% Final Exam.
15% ALEKS Homework.
10% In-class quizzes and groupwork.

At the end of the semester we assign letter grades as follows: 92% for an A, 89% for an A-, 87% for a B+, 82% for an B, 79% for a B-, 77% for a C+, 72% for an C, 69% for a C-, and %60 for a D.

Your final grade cannot be more than one letter and a third grade higher than the grade on your final exam. For example, if the rubric above results in a A- but your final exam grade is a C, then your final grade will be a B+. Also, if your score on the final is a D you cannot be given a class grade greater than C+.

If your final exam is higher than your lowest exam score from the first three exams, then the lowest exam score will be replaced with the final exam score. This is only an option for students who maintain good standing in the course and maintain regular attendance.

Calculator Policy The recommended calculator for the course is the TI-30xs. It is available at the book store, many retail outlets, and many on-line sites. You should not use a calculator that can perform any basic algebra steps. You can use a TI-84 in class but cannot use it on quizzes or tests.

Make up Policy The right to miss a scheduled test and take a make up exam can be awarded only by your professor, and will be awarded rarely and only for a serious cause. **Do not count on being able to make up a test until you have explicit permission from your professor.** If for some reason you must miss a test (eg. UGA athletics) let me know beforehand!

Academic Accommodations If you require any kind of special accommodation please see your professor. Requests for academic accommodations should be made as soon as possible and at least one week prior to a graded activity to insure that we provide the proper resources. Students must register with the Disability Resource Center, to verify their eligibility for appropriate accommodations.

Office Hours Days and times TBD. Meetings can also be arranged by appointment.

Academic Integrity As a University of Georgia student, you have agreed to abide by the Universitys academic honesty policy, A Culture of Honesty, and the Student Honor Code. All academic work must meet the standards described in A Culture of Honesty found at: `https://ovpi.uga.edu/academic-honesty/academic-honesty-policy`. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation!