

## Math 1113 Precalculus, section 15196

Daniel Mckenzie  
Office: Boyd 643  
danmac29@uga.edu

Welcome! This course is designed to offer a broad introduction to the topics necessary to succeed in calculus and beyond. 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:** Swokowski-Cole, Precalculus: Functions and Graphs, 12th ed, Cengage Publishing. You can obtain electronic access to the book at a reduced cost at <http://www.cengagebrain.com/course/site.html?id=1-22JK09T> This option will also give you access to Webassign.

**Web-pages:** : <http://www.math.uga.edu/1113>  
[www.piazza.com](http://www.piazza.com)  
[danielmckenzie.github.io](https://github.com/danielmckenzie)

**Webassign** You will have an account set up for you on Webassign, <https://www.webassign.net/login.html>. The user name is your regular UGA id. The institution is “uga.” You should have received an email from Webassign that has the details about how to use your account. If you have a problem with the website please make use of the help resources at Webassign.

**Meeting Times:** We meet Mondays, Wednesdays, and Fridays from 9:05am to 9:55am in Boyd 222.

**Attendance** Students who have more than three 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 three 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.

**Homework** Homework will be assigned via Webassign. Due dates will be announced in class and displayed in Webassign. Homework is important!! Mathematics is best learned by doing it, and you should practice until you are proficient. It is no different than learning music or athletic skills.

**Quizzes** There will be seven web quizzes available on Webassign. The lowest quiz score will be dropped in the calculation of your final score. The quizzes will consist of ten problems and will be similar to the book or Webassign problems. The due dates will be made available on Webassign. There will also be in class quizzes and activities which will be announced before they are given.

**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 webassign, and the focus is on calculations and basic ideas. There will be four 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. The first three rounds will focus on specific material, and the final round will be comprehensive. The dates for these tests will be announced in class.

**Participation** Throughout the semester there will be opportunities to earn participation credit. These could be, but are not limited to, presenting a homework problem to the class, answering questions on Piazza or attending a review session. Each opportunity counts 0.2% towards your final grade, up to a maximum of 2%. This might not seem like a lot but it could mean the difference between a *C* and a *C+* or an *A-* and an *A*!

**Test Dates** The tests are tentatively scheduled for **14 September**, **12 October**, and **11 November**. The tests will take place in your regular classroom. 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 **8 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
- 17% Final Exam.
- 15% Webassign Homework.
- 6% Webquizzes
- 5% In-class quizzes and groupwork.
- 2% In-class and online Participation.

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 exam 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 an exam, you must apply in writing **before** the exam. Include your local address, phone number,

and reason with written documentation attached. If you are unable to attend the exam due to an emergency that day you must contact the professor as soon as possible and provide documentation to confirm why you cannot take part in the exam. An unexcused absence will result in a grade of zero on the exam.

**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 University's 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!