

MATH 1113 - Precalculus

Hours Credit: 4 hours

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

COURSE INSTRUCTOR

Instructor: Carrie Carmack

Office: Boyd 104

Email: ccarmack@westga.edu

OFFICE HOURS:

Monday – before class

Tuesday and Thursday – before and after class

REQUIRED COURSE MATERIALS.

- **TEXT:** *College Algebra and Trigonometry, Abramson, Openstax.* Student can download for free at <https://openstax.org/details/books/algebra-and-trigonometry>. Students should go to “Download a PDF” and download the High Resolution version.
- **Binder with notebook paper for taking notes.**
- **Calculator**
NOTE: Graphing calculators equivalent to the TI 83, 84, 85, and 86 will be allowed on the exam, as will scientific calculators. The TI-89 and other equivalent calculators will not be allowed.

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.

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

COURSE ASSESSMENT

Students' mastery of course learning outcomes will be assessed using the following methods:

- 1) EXAMS: You will be given 3 in-class exams during the semester. Each exam will be worth 100 points.
 - **An exam can be taken up to 4 days late (including weekends). The student will incur an **automatic 20 point deduction** on their exam grade if they take the test late.
 - *To take an exam late, the student must contact the teacher within 2 days of the exam and schedule the exam during office hours only. The student will not be given extra time to complete the exam.

****A student's Final Exam grade will replace their lowest exam grade.**
- 2) Class Participation: Students will be given assignments in class. The student must be in attendance during the assignment to receive credit.
 - *The lowest class participation assignment will be dropped at the end of the semester.**
- 3) FINAL: Students will have a comprehensive final exam. Students are required to take the final exam on their scheduled day.
 - **A student's final exam grade will replace the lowest test grade, if higher.**

ASSESSMENT GRADING:

Your final course grade will be weighted.

Exams: 20% each

Class Participation: 15%

Final Exam: 25%

Grading Scale:

90% - 100%:	A
80% - 89%:	B
70% - 79%:	C
60% - 69%:	D
<60%:	F

OTHER COURSE INFORMATION

1) **Homework:** Homework will be given but not assigned for a grade. Homework is for practice only but is very important in retaining information. Homework can be found in the online text.

2) **Extra Credit:** Extra credit will be offered in this class via:

Math Tutoring Center – Boyd 205: 1 hour of attendance at the MTC will yield 0.5 bonus points.

*You can acquire up to 20 bonus points at the MTC.

*You must keep up with your attendance using the attendance form **AND** you must **sign into the MTC when you arrive – sign out when you leave**. You will not receive bonus points if you did not sign in at the MTC.

*While at the MTC, you must actively work on math content to receive bonus.

****You may receive a maximum of 20 bonus points during the semester to go toward your lowest exam grade.**

3) **Miscellaneous**

*Students are expected to come to class and be “present”. **Cell phone/laptop use in class is not permitted (unless you have prior approval from the instructor)**

*If a student is absent from class, it is their responsibility to catch-up on any missed material. Students will not be permitted to have a copy of the instructor’s notes. If a student is absent from class, contact the instructor via email for any announcements and topics covered.

COURSE POLICIES AND INFORMATION

University Policies and Academic Support

Please carefully review the following Common Language for all university course syllabi at the link:

https://www.westga.edu/administration/vpaa/assets/docs/facultyresources/common_language_for_course_syllabi_v2.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.

Academic Honesty

All forms of academic dishonesty will be reported. The student will receive an automatic 0% on the assignment with no make-up privilege. Cheating on the final exam will result in an automatic “F” for the course.

Definitions of academic dishonesty are defined in the student handbook:
www.westga.edu/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.