

Fall 2019 MATH 1113 – Precalculus Section 04 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. This course satisfies Area A2 of the Core Curriculum.

Class meets: Pafford 305 Mon/Wed 9:30 – 10:45am, Boyd 307 Fri 9:55 – 10:45am

COURSE INSTRUCTOR

Instructor: Mr. Jim Bellon **Office:** Boyd 104C

Email: please contact me through CourseDen first, but if needed use jbellon@westga.edu

OFFICE HOURS: Mon/Wed 10:50am – 12pm and 4:20 – 5pm, Fri 9 – 9:50am and 2:15 – 2:45pm

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.

A graphing calculator is REQUIRED (preferably one of the TI-83 or 84 models).

HW website: Students must register for FREE account at www.myopenmath.com and join my course: CourseID 52243

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
17. A strong foundation in college-level mathematical concepts and principles.
18. The ability to apply symbolic representations to model and solve real-world problems.

IMPORTANT DATES:

First Day of Class:	Wednesday, August 14th
Drop Ends:	Tuesday, August 20th
Last Day to Withdrawal with W:	Wednesday, October 9th
Last Day of Class:	Friday, December 6th
Final Exam:	Wednesday, December 11 th , 8 – 10am
No classes:	Monday, September 2 nd (Labor Day) Friday October 4 th (Fall Break) Monday Nov 25 th – Friday Nov 29 th (Thanksgiving break)

COURSE ASSESSMENT and GRADING:

- Online HW assignments (avg counts 25%), the 2 lowest HW will be dropped.
**HW's are due 3 days after we finish covering that section (at end of the day).
- 5 written tests in class (avg counts 50%), the lowest test grade will be dropped.
- Written Final exam (25%). Final exam will be cumulative.

Grading Scale: Final grades will be rounded to nearest whole %

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

COURSE POLICIES AND INFORMATION

Make-up policy: There are no make-ups for online assignments. You are expected to keep up with learning the material each day, completing assignments by the due dates, and getting help when needed. Make-ups for tests may be granted with a valid documented excuse, and only if you notify me before or on the day of the test. A missed test that results in ZERO cannot be your dropped test.

Extra-credit policy: There will be NO extra credit given, period! All other points can be earned only as stated above.

Attendance Policy: Students are expected to pay attention to CourseDen calendar and check for assignments online. Failure to do so will result in missing assignments and maybe being dropped. Grades will not be altered for attendance. HOWEVER, students are expected to attend class and complete all work when assigned. Students are responsible for the topics covered and assignments due whether present or not. "I was not here" is NOT a valid excuse

Student Conduct and Academic Honesty

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. Please do not talk or text on cell phone during the class. You are not allowed to use your phone as a calculator on tests. Please respect your instructor and other students in the class. No talking or any distracting behavior. If you fall asleep in class, you will be asked to leave. It is expected that students be familiar with the Student Conduct Code, Disciplinary Procedures and Disciplinary Sanctions in the Student Handbook. Cheating and/or any conduct that disturbs the classroom, the instructor, or the students WILL NOT be tolerated!! Any serious violations will be reported.

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.

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.

Meeting with Instructor: can be beneficial and is encouraged. Meeting should occur during the instructor's office hours, whenever possible. If these hours conflict with a student's schedule, then appointments should be made. The meeting time is not to be used for duplication of lectures that were missed; it is the student's responsibility to obtain and review lecture notes before consulting with the instructor. As your instructor, I am very concerned about the student's achievement and well-being and encourages anyone having difficulties with the course to contact me for extra help.

Math Tutoring:

** Offered directly for precalculus classes through a math department tutoring program. Anyone who would like help can signup for weekly tutoring sessions. Priority will be given to students struggling in the course.

** Offered by the math Department Math Tutoring Center in Boyd 205, you can just walk in and get help. Hours are Mon/Tues/Wed/Thurs 9am-7pm, Fri 9am-3pm. There are 2-3 tutors on duty who will rotate between students. There are also textbooks and computers to use while you are in the tutoring center.

** Offered by the Center for Academic Success in UCC building. You will be assigned a 1-1 personal tutor, or attend available drop in sessions.

This is a tentative schedule of assignments and topics to be covered in class sessions. Changes will be made as needed. Once we finish a section, we will immediately move along to the next section. It is recommended that you read over text sections BEFORE we cover them in class. After we cover topics, you should complete assignments and do any extra practice or get help as needed. Don't wait until its too late (like after doing bad on a test).

- 8/14 – 8/16 Introduction, Review algebra from chapters 1 and 2
- 8/19 – 8/23 Review algebra from chapters 2, 3, 4, 5, and 11
- 8/26 – 8/30 Finish algebra review, Cover sections 3.4 Function Composition, 3.5 Transformation of Functions, 3.7 Inverse Functions
- 9/2 – 9/6 **Monday 9/2 LABOR DAY - No Class**
Review for test #1 Test #1 on Friday September 6th (review and chapter 3)
- 9/9 – 9/13 Cover sections 5.6 Rational Functions, 6.1 Exp Functions, 6.2 Graphs of Exp Functions
- 9/16 – 9/20 Cover sections 6.3 Log Functions, 6.4 Graphs of Log Functions, 6.5 Log Properties
- 9/23 – 9/27 Cover sections 6.6 Exp/Log Equations, 6.7 Exp/Log Models
Review for test #2 Test #2 on Friday September 27th (Chapters 5 and 6)
- 9/30 – 10/4 Cover sections 7.1 Angles, 7.2 Right Triangle Trigonometry, 7.3 Unit Circle
Friday 10/4 FALL BREAK
- 10/7 – 10/11 Cover sections 7.4 Other Trig Functions, 8.1/8.2 Graphs of Trig Functions
- 10/14 – 10/18 Cover section 8.3 Inverse Trig Functions
Review for test #3 Test #3 on Friday October 18th (Chapters 7 and 8)
- 10/21 – 10/25 Cover sections 9.1 Trig Equations (intro), 9.2 Sum and Difference Identities
- 10/28 – 11/1 Cover sections 9.3 Double-Angle, Half-Angle and Reduction Formulas
9.4 Sum to Product and Product to Sum Formulas
- 11/4 – 11/8 Cover section 9.5 Trig Equations (advanced),
Review for test #4 Test #4 on Friday November 8th (Chapter 9)
- 11/11 – 11/15 Cover sections 10.1 Law of Sines, 10.2 Law of Cosines, 10.3 Polar Coordinates
- 11/18 – 11/24 Cover sections 11.3 Nonlinear systems of equations, 11.4 Partial Fractions
Review for test #3
- 11/25 – 11/29 **THANKSGIVING BREAK**
- 12/2 – 12/6 **Test #5 on Monday December 2nd (Chapters 10 and 11)**
FINAL REVIEW
- Wednesday Dec 11th FINAL EXAM (all chapters) 8 – 10am in our classroom.**