

Course: MATH 1113 Precalculus, Section 15 4 credits

PREREQUISITE: Four years of high school mathematics including algebra and trigonometry
OR MATH 1111.

Course 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 accompanied by analytic geometry. Credit for this course is not allowed if the student already has credit for MATH 1634.

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 polynomial and rational graphs, including intercepts and asymptotes
4. An understanding of how to find the zeros of a polynomial and how to factor polynomials
5. An understanding of inverse functions and how to find them graphically and algebraically
6. An understanding of the properties of exponential and logarithmic equations
7. An understanding of how to solve exponential and logarithmic equations
8. An understanding of how to find the values of the trigonometric functions from right triangles and circles
9. An understanding of how to graph the trigonometric functions
10. An understanding of how to prove trigonometric identities
11. An understanding of how to use the sum, difference, double-angle and half-angle formulas for sine and cosine
12. An understanding of how to solve triangle using the law of sines and law of cosines
13. An understanding of polar coordinates and graphs
14. An understanding of how to analyze and solve applied problems

Instructor: Mr. Jim Bellon (best way to contact me is through CourseDen) or jbellon@westga.edu

Office & Hours: Boyd 104C MW 8:30–8:55am, 10–11am, 3-3:25pm Fri 8:30–8:55am, 10–11am
Boyd 205 Math tutoring Center MW 12-3pm Fri 11am-12noon

Class Meets: in Boyd 230 (Crider lecture hall), MWF 9 – 9:52 am and online

Course Materials: A graphing calculator is REQUIRED (preferably one of the TI-83 or 84 models). Students are required to purchase web access to the **E-book**. Options are:

#1: get immediate access by paying with credit card at pearsonmylabandmastering.com during the registration process.

#2: buy MyMathLab-Student-Access-Kit at the bookstore.

#3: find MyMathLab access code kit on Amazon.com (cheapest but takes a few days for shipping)

****while you are waiting for access code or funds, you can still register with temporary access.**

Once you register at the website, you need to join our course. The course ID is: **bellon95084**
The actual textbook is optional. “Precalculus” 5th edition by Blitzer, from Pearson Publishers.

Grading: There will 4 written work tests (test avg counts 40%), online HW assignments (avg counts 35%), and a cumulative Final exam (25%). Your lowest online HW assignment will be dropped.

Final grades determined as follows:

89.5 % and higher	=	A
79.5 % to 89.4 %	=	B
69.5 % to 79.4 %	=	C
60 % to 69.4 %	=	D
Below 60 %	=	F

Make-up policy: There are no make-ups for online assignments. You are expected to keep up with learning the material each week, 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.

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

Attendance Policy: Students are REQUIRED to login to CourseDen at least once a week (Mon-Sun) and also check for assignments on MyMathlab. Failure to do so will result in missing assignments and maybe being dropped. Grades will not be altered for attendance. 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.

Last Date to Withdraw: *March 3rd* Any student who withdraws after this date will receive a grade of “F”.

Class Rules: You are to turn off your cellular phone during the class. You are not allowed to use your phone as a calculator. 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; appropriate actions will be taken; and consequences will result. Please see the general policies for UWG at <http://tinyurl.com/UWGSyllabusPolicies>.

**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.

Note: If you have a documented disability, which will make it difficult for you to carry out the course work as I have outlined and / or if you need special accommodation or assistance due to disability, please contact me as soon as possible.

Math Tutoring: On Campus Boyd 205 Hours are Mon/Tue/Wed 9am-8pm, Thurs 9am-7pm, Fri 9am-3pm
You can just walk in and get help. 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.

You can also get 1-1 tutoring appointments through the Center for Academic Excellence in the UCC.

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).

1/11 – 1/15	Introduction, review Chapter P, sections 1.1 – 1.6, section 2.1 – 2.5, section 7.1
1/18 – 1/22	Monday 9/18 MLK-DAY - No Class Cover sections 1.7 Composite Functions, 1.8 inverse functions
1/25 – 1/29	Cover sections 2.6 Rational Functions and Their Graphs 2.7 Polynomial and Rational Inequalities
2/1 – 2/5	Cover section 3.1 Exponential Functions Review for test #1 Test #1 on Friday February 5th (Sec 1.7, 1.8, 2.6, 2.7, 3.1, some review material)
2/8 – 2/12	Cover sections 3.2 logarithmic functions, 3.3 properties of logarithms, 3.4 exp/log equations
2/15 – 2/19	Cover sections 3.5 growth & decay, 4.1 Angles and radian measure, 4.2 The Unit Circle, 4.3 Right Triangle Trigonometry
2/22 – 2/26	Cover 4.4 Trig Functions of Any Angle Review for test #2 Test #2 on Friday February 26th (Chapter 3 and sec 4.1-4.4)
2/29 – 3/4	Cover sections 4.5 Graphs of Sine and Cosine, 4.6 Graphs of Other Trig Functions 4.7 Inverse Trig functions
3/7 – 3/11	Cover sections 4.8 Applications of Trig Functions, 5.1 Verifying Trig Identities, 5.2 Sum and Difference Formulas
3/14 – 3/18	SPRING BREAK
3/21 – 3/25	Cover 5.3 Double/Half Angle Formulas, 5.5 Trigonometric Equations Review for test #3 Test #3 on Friday March 25th (Chapters 4 and 5)
3/28 – 4/1	Cover sections 6.1 Law of Sines, 6.2 Law of Cosines, 6.3 Polar Coordinates
4/4 – 4/8	Cover sections 6.4 Graphs of Polar Equations, 6.6 Vectors
4/11 – 4/15	Cover sections 7.2 Systems of Equations in Three Variables, 7.4 Systems of Nonlinear Equations Review for test #4
4/18 – 4/22	Test #4 on Monday April 18th FINAL REVIEW

FINAL EXAM (all chapters) on Monday April 25th 8 – 10:30am in our classroom.