

MATH 1113 - PreCalculus

Hours Credit: 4 hours

Prerequisites: None

COURSE INSTRUCTOR

Instructor: Mrs. Carrie (Thielemier) Carmack

Office: Boyd 104

Email: cthielem@westga.edu

OFFICE HOURS

Monday

10:00AM–10:55AM

1:00 PM – 1:55 PM

Wednesday

10:00AM – 10:55 AM

Friday

10:00AM – 10:55 AM

1:00 PM – 1:55 PM

Tuesday

10:00AM – 10:55

12:30 – 3:30

REQUIRED COURSE MATERIALS

1) *MyMathLab* Access Code (available at the bookstore, or online @ www.mymathlab.com)

*You do not have to purchase a book for this class.

2) Three-ring binder with notebook paper for note-taking

3) Calculator (Graphing is preferred. TI-89 will not be permitted)

MYMATHLAB INFORMATION

Course Title: PreCalculus Fall 2015

Course ID: **thielemier98347**

To register, go to www.mymathlab.com and begin the registration process for Student. Use the Access Code you purchased and the CourseID above to add my class.

*It is your responsibility to keep up with your username and password for MyMathLab. I cannot retrieve your log on information and you must contact MyMathLab directly. If you have trouble logging on, notify me immediately so we can determine the cause. However, if you miss the deadline to submit quizzes because you could not remember/have wrong log-in information, you will not be allowed to make those grades up.

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

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

COURSE ASSESSMENT

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

1) **Exams**: There will be **6 required** exams this semester **and** a final exam. All exams will test over material covered in class, in-class assignments, and in optional homework. ***All exams must be taken on the scheduled exam day. No late submissions will be allowed.**

(Early submissions may be possible at the instructor's discretion. You MUST contact the instructor 3 days before the exam date to be eligible to take the exam early.)

***Your final exam will replace your lowest test grade (if your final exam grade is higher than your lowest test grade).**

***You will have the option to RETAKE exam 1, 2, or 3, 4, or 5. The retake exam will cover the same content, but will have different questions. The Retake exam will be multiple choice.**

TO BE ELIGIBLE TO RETAKE AN EXAM, YOU MUST MAKE A 70% OR HIGHER ON ALL MYMATHLAB HOMEWORK BY DATE: 11/30/2015 @ 11:59 pm.

2) **Final Exam:** You will be required to take a final exam in this class. The final will consist of all multiple-choice questions. The day/time for the final exam can be found in SCOOP.

3) **Class Participation:** There will be a few small assignments given throughout the semester during class and outside of class. Most of these assignments will be random and not given on a scheduled time. If you are given an in-class assignment, it must be completed before you leave, and it cannot be taken at a later time.

OTHER COURSE INFORMATION

1) **Homework:** Homework will be given but not be assigned for a grade. However, you must complete all homework assignments with a grade of **70% or better** to be eligible to take a retake. Homework will be assigned in MyMathLab.

***It is a recurring theme that students who do not do their homework significantly struggle in the class. I recommend that you practice your homework MULTIPLE times in order to master the topic.**

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

Supplemental Instruction: You must attend 50 minutes of a 1 hour session with our SI leader for 1 bonus point.

Tutoring: You must attend 1 hour of tutoring in the Center for Academic Success for 1 bonus point.

*(You must submit a CAS verification card)

Intervention Tutoring: If you are a High-Risk student, you can attend a 1 hour intervention tutoring session for 1 bonus point.

You may receive a maximum of **20 bonus points** during the semester to go toward your exam grade. The dates for eligibility will be **August 31-November 20.**

3) **Attendance:** Attendance will be taken but not used as a grade. However, keep in mind if you are given an in-class assignment on a day you are absent, you will not be able to make-up the missed assignment.

***Students are expected to come to class and be "present". If you come to class to sleep, be disruptive, or use your phone, you may be asked to leave.**

*It is the student's responsibility to catch-up on any missed material. You will not be permitted to have a copy of the instructor's notes. It is your responsibility to find out any announcements/changes made during class.

ASSESSMENT GRADING

6 Exams: 60% (10% each)

Final Exam: 30%

Class Participation: 10%

Grading Scale:

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

***I WILL NOT INCREASE GRADES ON AN INDIVIDUAL BASIS. PLEASE DO NOT ASK.**

***I WILL NOT ALLOW ANY EXTRA CREDIT OTHER THAN WHAT IS LISTED ABOVE.**

***WHEN GRADES ARE CALCULATED, I WILL ROUND ACCURATELY (89.4% = B, 89.5% = A)**

Grade Turnaround: Exams will be graded within 2 weeks of the exam date. Many times you will receive your grade more quickly.

COURSE POLICIES AND INFORMATION

University Policies and Academic Support

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

http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.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

Any form of academic dishonesty will result in a failing grade for the assignment for the first offense. A second offense will result in a failing grade for the course. All forms of academic dishonesty will be reported. 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. The following is also mandatory:

- 1) Cell phones and laptops will not be permitted in class, unless prior arrangements have been made with the instructor (emergencies, disabilities, etc). Continued use of cell phones/laptops will result in your dismissal of class.
- 2) Students are required to be courteous to others and the instructor. If a student is being disrespectful or disruptive, they will be asked to leave.

IMPORTANT NOTE

I reserve the right to modify this syllabus at any time during the course of the term, particularly regarding the course schedule. If such a modification is substantial, I will reissue a revised syllabus and announce the change in class.

COURSE TOPICS

Section

Review Chapter P and 1.1-1.6 **

1.7 Composite Functions

1.8 Inverse Functions

Review Chapter 2.1-2.5 **

2.6 Rational Functions and Their Graphs

2.7 Polynomial and Rational Inequalities

3.1 Exponential Functions

3.2 Logarithmic Functions

3.3 Properties of Logarithms

3.4 Exponential and Logarithmic Equations

3.5 Exponential Growth and Decay

4.1 Angles and Radian Measures

4.2 The Unit Circle

4.3 Right Triangle Trigonometry

4.4 Trig Functions of Any Angle

4.5 Graphs of Sine and Cosine

4.6 Graphs of Other Trig Functions

4.7 Inverse Trig

4.8 Applications of Trig Functions

5.1 Verifying Trig Identities

5.2 Sum and Difference Formulas

5.3 Double-Angle and Half-Angle Formulas

5.5 Trigonometric Equations

6.1 Law of Sines

6.2 Law of Cosines

6.3 Polar Coordinates

- 6.4 Graphs of Polar Equations
- 7.1 Systems of Equations in Two Variables
- 7.2 Systems of Equations in Three Variables
- 7.4 Systems of Nonlinear Equations
- 6.6 Vectors

** any student having difficulties during the review sections should be encouraged to switch to MATH 1111.

The final exam schedule can be found on the SCOOP at www.westga.edu.