MATH 1113 Section 01 – Precalculus

**Hours Credit:** 4 hours

**Prerequisites:** None

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**COURSE INSTRUCTOR**

Instructor: Mr. Kyle Carter
Office: Boyd 104 - D
Email: kylec@westga.edu
Phone: 678-839-5134

**OFFICE HOURS:**

Boyd 104 – D: Monday 11:30 am – 12:30 pm

Wednesday 11:30 am – 12:30 pm

Friday 1:00 pm - 2:00 pm

Online in CourseDen: Tuesday 10:30 am - 12:30 pm

or by appointment

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**REQUIRED COURSE MATERIALS**

**TEXT AND OTHER 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.

CALCULATOR: A graphing calculator (TI-84 or equivalent) is required for this course.

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**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.

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**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

In addition, since this course satisfies Area A2 of the Core, upon successful completion of the course:

- Students demonstrate a strong foundation in college-level mathematical concepts and principles.
- Students demonstrate the ability to apply symbolic representations to model and solve real-world problems.
COURSE ASSESSMENT
Students’ mastery of course learning outcomes will be assessed using the following methods:

Meeting With Instructor: This portion of your grade is assessed by a brief, one time meeting between you and your instructor. After the first couple of weeks of classes, your instructor will reach out to everyone offering to set up meeting appointments. These can be conducted during office hours or even online through a SKYPE/blackboard collaborate session. The purpose of this meeting is to briefly discuss your experiences with math and talk about the class and resources that are available if needed. My main goal in teaching is student success, so these sessions will be used to inform that goal and help me to adapt to your specific learning needs/styles.

Study Journal: This portion of your grade will be assessed by completion of weekly study journal entries. Each week you will write briefly (3-4 sentences) and/or answer a few questions about your study time that week. This is not designed to take much time, and this information will be used to help faculty understand how to best develop courses around their students’ needs and habits.

Homework: This portion of your grade is based on your completion of homework that covers the material before each test. Homework assignments are a great place to look for test questions. There will be four homework assignments through the semester, and you are free to work with classmates on homework assignments. Homework assignments may be turned in late, but late work will be penalized 10 points per weekday that they are late. The homework assignments will be provided through CourseDen.

Tests: There will be 4 Tests (the first will be take-home while the remaining 3 will be in class). We will review during the class period before each test as much material as possible what will be on the test. Tests cannot be taken late, so if you see that you are going to miss a test, please let me know ahead of time so that we can schedule a time to take it before the actual test is administered to the class.

Test 1 – September 4th - September 9th (Take-Home Test)
Test 2 – Wednesday, October 2nd (In Class)
Test 3 – Wednesday, October 30th (In Class)
Test 4 – Wednesday, November 20th (In Class)

Final Exam: There will be one Final Exam at the end of the semester, and it will be cumulative. We will review before the Final as much as time allows. The final for this class will be Monday, Dec. 9, 11:00 -1:00 pm (In Class). The final exam will be primarily made up of question types form Tests 1-4, so those are the best items to study for the exam.

(The last day to withdraw from this class with a grade of W is October 9th)

GRADE BREAKDOWN
Meeting with Instructor: 3%
Study Journal: 7%
Homework: 25%
Tests: 40% (10% each)
Final: 25%

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

COURSE POLICIES AND INFORMATION
University Policies and Academic Support
For important policy information, i.e., the UWG Honor Code, Email, and Credit Hour policies, as well as information on Academic Support and Online Courses, please review the information found in the Common Language for Course Syllabi documentation at http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf.

Academic Honesty
While some parts of this course may be completed in groups (such as the Homeworks), the Tests are meant to be completed alone,
without the help of any other person. Any serious form of academic dishonesty will be reported to the University. 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/discussion board.