

MATH 1113 Section N01 – Precalculus

Hours Credit: 4 hours

Prerequisites: None

COURSE INSTRUCTOR

Instructor: Mr. Kyle Carter

Office: Boyd 104 - D

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Phone: 678-839-5134

OFFICE HOURS:

Boyd 104 – D (On Campus): Tuesday 8:30 am – 9:30 am and 1:00 pm - 2:00 pm
Thursday 1:00 pm – 2:00 pm

Online (in CourseDen): Wednesday 10:00 am – 12:00 pm (Noon)

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.

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.

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:

- i. Students demonstrate a strong foundation in college-level mathematical concepts and principles.
- i. 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:

Study Journal: This portion of your grade will be assessed in the form of study journal entries that are due every other week in the discussion area of the class. Every other week, you should post in the corresponding week's study journal discussion board in CourseDen. The study journals' due dates are posted as part of their title, and they need to consist of at least 2 describing your experiences in the class that for the previous two week period. You don't have to go into great detail or spend a lot of time on these, but sharing what you studied/worked on, what was easy/challenging, what study methods you used, how much time you spent on the material, questions/concerns, and any other creative feedback you would like to share is acceptable.

Homework in CourseDen (MyOpenMath assignments in CourseDen): This portion of your grade is based on your completion of weekly homework assignments. Each week, you will work through 2-3 homework assignments that help you learn the required topics for this course. You will only have one week to work through each set of homework assignments in order to not fall behind in preparation for the tests.

Tests in CourseDen (MyOpenMath assignments in CourseDen): There will be 4 Online Tests that will be completed in CourseDen. You will have one attempt per Online Test, and they will only be available until a specific deadline. The dates are posted in the Calendar in CourseDen (and are listed below for convenience), and I will remind you when we approach those dates. Once you start each test, you will have 3 hours to complete it. Each test is between 20 and 30 questions long, and I have designed them to take around 1.5 hours, but I want to give plenty of time to review and double check, so this is the reason for the 3 hour window.

Test 1: Due 1/31

Test 2: Due 2/28

Test 3: Due 3/27

Test 4: Due 4/27

Proctored Final Exam: There will be one Proctored Final Exam at the end of the semester. This proctored exam is cumulative, and it is on Thursday, 4/30 from 11 am - 1 pm in Boyd 303. If you are unable to make this time for the final exam due to conflicts with other finals, please let me know as soon as possible so that we can make other arrangements for you to take the final exam during my office hours.

GRADE BREAKDOWN

Study Journal: 10%

Homework: 25%

Online Tests: 40% (10% each)

Proctored 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 Quizzes and Online 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.