

UNIV 1108: Essentials of Math Modeling Spring, 2023 Section 25368

The last day to join this class is March 23rd by 5pm.

Course Instructor Information

Instructor: John Riggott Email: jriggott@uga.edu Phone: 706-870-3868 Office: 251 Milledge Hall

Course Meeting Information

Meetings: MWR 9:10-10:00 Location: MLC Room 251

Student Hours:

You may email me questions or use my number to call or text me questions at any time (please no calls after midnight) or you can join me for office hours during the following times:

Monday Thru Thursday nights from 10pm-midnight on my zoom page. Or by appointment

UNIV Courses are offered by the Division of Academic Enhancement, a unit of the Office of Instruction at the University of Georgia. The Division of Academic Enhancement empowers all students to *Learn Differently* through innovative courses, programs, services, and student-centered initiatives. The DAE supports students as they transition into higher education and sustains their progress through the University's unique academic environment.

Course Description

This course intends to help students develop skills necessary for success in Introduction to Mathematical Modeling.

Learning Objectives

Upon successful completion of this course, students will be able to:

- 1. develop and understand transferable math modeling skills necessary for success in MATH 1101 and beyond
- 2. use graphing calculators to solve, graph and analyze functions
- 3. use and interpret function notation
- 4. create and use linear, quadratic, exponential and logarithmic functions to solve real world problems
- 5. analyze and interpret real world data by choosing the appropriate functional model

Assignments and Projects

Students will be evaluated in the following areas:

Homework/Classwork:

Homework will be assigned through in-class handouts and posting on ELC and will count for 40% of your overall grade.

Tests

You will have four in class tests. Your test average will count for 40% of your overall grade.

Final Exam:

Your final exam which will be discussed later in the course will count for 20% of your overall grade.

Grading/Evaluation

90-100 = A, 85-89=B+, 80-84=B, 75-79=C+, 70-74=C, 65-69=D+, 60-64=D, 0-59=F.

Grade Appeal Process

University of Georgia students have the right to appeal academic decisions. The burden of proof for an appeal rests with the student. The policies governing the process of appealing grades are covered in the Academic Affairs Policy Manual, General Academic Policy: Student Appeals (Section 4.05-01). All grade appeals must be initiated in writing to the instructor within one calendar year from the end of the term in which the grade was recorded. The process for appealing a grade in a UNIV course can be found at: https://dae.uga.edu/courses/appeal-process/.

Course Materials

You will need a ti-84 or ti-83 graphing calculator.

Course Policies

Please be considerate of the students around you and do not use your technology for anything non course related during class time. Checking text messages or email or working on other assignments during class is very distractive to your fellow classmates.

Participation Policy

Since this is a math class that will build upon itself on a daily basis you are strongly encouraged to attend all meetings. If you have to miss a class of test please let me know as soon as possible so that I can get you any missed handouts or arrange for a make up test time.

Disability Statement

If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with the Disability Resource Center (Voice: 706-542-8719 or TTY: 706-542-8778) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

Academic Honesty Policy

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: https://ovpi.uga.edu/academic-honesty/academic-honesty-policy. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

Diversity and Inclusion Statement

In this classroom, you will be treated with respect, and I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations,

ability – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class. (Source: modified from https://docs.asee.org/public/LGBTQ/Diversity Statement.pdf)

Announcements Policy

I will make most announcements in class; I will send others to your UGA email. You are responsible for the content of all announcements, even if you miss class or fail to check your UGA email.

FERPA Notice

The Federal Family Educational Rights and Privacy Act (FERPA) grants students certain information privacy rights. See the registrar's explanation at http://apps.reg.uga.edu/FERPA/

Course Evaluations

I encourage you to complete the online evaluation near the end of the semester. Student evaluations of teaching are used by university administrators to evaluate instructional faculty. I also take your feedback seriously; note that it is delivered anonymously and is not visible to me until after I have submitted all final course grades.

Office of Student Care and Outreach

If you have a personal crisis during the semester, you will want to contact the Office of Student Care and Outreach so that they can support you: http://sco.uga.edu/sco/services-students

Other Division Resources

From peer tutoring through the Academic Resource Center to Academic Coaching to Student Success Workshops and more, the Division is committed to the success of all students at the University of Georgia. For more on these and other resources, visit https://dae.uga.edu.

Course Outline:

The schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better student learning.

Week		General Topic
1	Jan. 9 th – 13 th	Review of algebraic concepts
2	Jan. 16 th - 20 th	Solving different types of equations using the calculator (no class on the 16 th)
3	Jan. 23th - 27th	Introduction to functions
4	Jan. 30 th – Feb. 3 rd	Using functions with the calculator and properties of functions
5	Feb. 6 th – 10 th	Review/ test 1
6	Feb. 13- 17 th	Linear Functions
7	Feb. 20 th – 24 th	Linear models for real world data
8	Feb. 27 th – mar. 3rd	Introduction to model error and average error
9	Mar. 6 th – 10 th	Spring Break No Class
10	Mar. 13 th – 17 th	More practice with average error, Review/ test 2
11	Mar. 20 th – 24 th	Introduction to quadratic functions
12	Mar. 27 th – 31 st	Real world applications of quadratic functions, Test 3
13	Apr. 3 rd - 7 th	Introduction to exponential functions
14	Apr. 10 th – 14 th	Real world applications of exponential models
15	Apr. 17 th – 21 st	Review/ test 4
16	Apr. 24 th – 28 th	Systems of linear equations
17	May 1	Last day of class Review for final

^{***} The withdrawl deadline is March 23rd.

Note: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.