Math 3365.001 Spring 2026 Syllabus

Instructor:

Dr. Robin Ragland

Office: RBN 4006

Email: rragland@uttyler.edu (Preferred method of communication is Canvas Inbox)

Office Hours: (Student Hours)
TTh 11:00am-12:10pm

Class Schedule:

TTh 9:30am-10:50am RBN 4034

Course Purpose and Description

We will be studying Euclidean geometry very much in the same fashion as it has been studied for 2300 years. For most of that time, every educated person in the western world studied Euclidean geometry. The number of printed editions of the geometry text, Euclid's Elements, is only exceeded by editions of the Bible. Why was this work so influential? Why was this topic studied rather than the myriads of other possible topics? We will explore these topics and more modern fields of geometry, non-Euclidean geometry.

The prerequisite for this course is a C in MATH 3425 Foundations of Mathematics.

Textbook

Geometry From Euclid to Knots, Saul Stahl, Dover Books, 2010, ISBN-10: 0-486-47459-3, ISBN-13: 978-0-486-47459-5

[Library provided eTextbook](#)

*Limited to 1 user at a time. Recommended access: Copy and paste into your own document to keep (allowable by publisher).

Learning Outcomes

At the conclusion of this course, you will be able to

1. Write complete, correct and coherent proofs (critical thinking and communication).

2. Understand and use abstract mathematical concepts (critical thinking).

3. Discuss the differences between Euclidean, spherical, hyperbolic and other non-Euclidean geometries.

4. Discuss the axiomatic approach to mathematics.

5. Discuss the historical significance of Euclidean geometry.

Grading Policies

The grading scheme for this course will be no more harsh than

90-100 A

80- less than 90 B

70- less than 80 C

60- less than 70 D

less than 60 F

The categories for grading are as follows:

Homework 10%

Presentations 5%

Exams 20% each (3 exams)

Final Exam 25%

Homework

Homework assignments will appear on Canvas and will be due weekly on Thursdays **before** class. It should be submitted on Canvas as a pdf file **no later than** 9:30am on the Thursday it is due. Late assignments will not be graded.

During the last half of class every Thursday (except exam days) we will have homework presentations. On the weeks we have an exam, presentations will happen on Tuesday (*even if the homework is due on Thursday*). You will be asked to get up and present your solutions. If you have not done a problem, you may be asked to get up and try it. If you started a problem, but couldn't finish it, you will be asked to present what you did, and then get suggestions from the rest of the class on how to finish it.

During presentations, the audience will be expected to politely comment on the presentations and will receive classwork credit for good comments. Commenting must be about the mathematics, not trivialities like the person's handwriting or speaking skills. Comments about how you did the problem differently will not usually get much credit unless your method is markedly different. If the presenter gets stuck or makes an error, much credit will be given for giving the presenter helpful hints, but not doing the problem for them.

Extra Credit

There will be no extra credit available in this course. Do not ask for extra credit.

Make-ups

Make-ups for **documented** absences that are **required** as part of a UT Tyler obligation (e.g. athletes participating in an event, participating in a debate contest, etc) or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required. Other make-ups are granted in only extreme cases such as hospitalization and at the sole discretion of the instructor.

Make-ups will be allowed for the following excused absences:

1. Illnesses, with a doctor's note, no exceptions.

2. Your child's illness, with a doctor's note.

3. Court appearances, including citizenship court, with documentation.

4. Weddings, funerals, or military advancement, with documentation **and** a photograph showing that you attended the event.

Doctor's notes must be dated either before you miss the class or within 2 days after you missed the class, unless you or your child are hospitalized. In case of hospitalization, bring evidence of hospitalization.

Make-ups for test must be taken within 3 days after returning to class except for lengthy illnesses or hospitalizations.

Attendance

Class attendance is mandatory. If you want to do well in this class, you will need to attend every class meeting and come prepared with all the materials (pencil, paper, calculator, etc) that you will need for learning.

Calculator Policy

Non-graphing calculators will be allowed on exams. You may not use your phone. **All work must be shown if you want to receive credit**.

Cell Phones and other electronic devices

Please set your cell phones to silent mode. If you are expecting an emergency call, please notify your instructor in advance, sit near the door, and answer the phone outside. You will not be allowed to wear electronic devices (except hearing aids) during an exam. During exams, cell phones must be turned off and placed in sight on your desk.

Academic Dishonesty

Your work must be your own. Violations will be processed according to the established guidelines of the department, college, and university. Violations of academic integrity include, but are not limited to, cheating, fabrication, or plagiarizing. A range of academic sanctions may be taken against a student who engages in academic dishonesty. Below are ideas related to academic integrity.

Resources you are encouraged to utilize in this course include the textbook and unassigned problems, notes from class, assigned homework problems, your fellow Math 1342 students, the Math Learning Center, and your instructor. Email is the best way to contact me. I reply to emails from

9:00 A.M.– 4:00 P.M. Monday–Friday.

Exam Dates

Exam 1: Thursday, Feb. 13

Exam 2: Thursday, March 13

Exam 3: Thursday, April 17

Final Exam: Thursday, March 1 9:30am - 11:30am

A.I.

UT Tyler is committed to exploring an using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. Al uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and student must not use protected information, date, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, AI is **not** permitted at all. In order to get the most of this course, you must complete all assignments without the aid of any AI tools. Refrain from using AI tools to generate any course context (e.g., text, video, audio, images, code, etc.) for any assignment or classroom assignment.