Instructor:

Dr. Robin Ragland

Office: RBN 4006

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

Office Hours: (Student Hours)

MWF 11:15am-12:15pm

Class Schedule:

MWF 2:30pm-3:45pm RBN 4027

Course Purpose and Description

A study of functions, limits, continuity, differentiation of algebraic and trigonometric functions, applications of the derivative, definite and indefinite integrals with applications.

Prerequisites: Satisfactory math score on SAT, ACT or THEA and "C" or better in MATH 1316, or passing score on departmental trigonometry test, or "C" or better in MATH 2312.

Textbook

Essential Calculus: Early Transcendentals, 2nd Edition, by Stewart,

ISBN-13: 978-1-133-11228-0

Chapters 1 – 5

Learning Outcomes

Upon completion of this course the students should be able to:

- Discuss the solution to the tangent and area problems involving the calculus concepts of limits, derivatives and integrals.
- Use graphs of algebraic and transcendental functions to determine limits, continuity, and differentiability at a point.
- Determine whether a function is continuous and/or differentiable at a point using limits.
- Apply differentiation rules to differentiate algebraic and transcendental functions.
- Choose appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
- Compute definite integrals using the Fundamental Theorem of Calculus.
- Recognize and discuss the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.

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 20%

Exams 20% each (3 exams)

Final Exam 20%

Extra Credit

A student who turns in all homework on time, takes all exams, and earns all nonzero scores on homework and exams will automatically qualify to re-place their lowest grade on an in-class exam with their grade on the final, if that improves their score.

There will be no other 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 for exams 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 exams must be taken within 3 days after returning to class except for lengthy illnesses or hospitalizations.

Homework

The astute student will notice that the homework is weighted the same as an exam. In math, the only successful way to study is to practice. As such, I believe homework to be vital enough that I've given it the same weight as each of the exams. **Do your homework.**

Homework will be due at the beginning of class on Canvas. Late homework **will not** be accepted. I will be dropping your lowest homework grade at the end of the semester.

Please note that if your submitted pdf is not legible, you will not receive credit for that homework assignment.

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, etc) that you will need for learning.

Calculator Policy

No calculators are allowed in this course.

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 2413 students, the Math Learning Center, and your instructor. Canvas inbox 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: Friday, Sept. 19

Exam 2: Friday, Oct. 17

Exam 3: Friday, Nov. 14

Final Exam: Monday, Dec. 8, 2:30pm-4:30pm

All exams and quizzes are taken on paper during class.

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. AI 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.