

Course Syllabus: Honors Calculus Two HNRS2414.001

Class Time: MWF 10:10am - 11:25am HPR 135

Professor: Dr. Regan Beckham

Email: rbeckham@uttyler.edu

Office Hours: TBA(see Canvas) or by appointment

Course Information

Textbook: Class Notes

Course Topics: A second course in Calculus, covering sequences, series, techniques of integration, improper integrals, applications of integration, and polar coordinates,. The goal is to prepare you to make use of calculus as a practical problem-solving tool.

Student Learning Outcomes:

Upon completion of this course, students should be able to do the following.

- Find the Taylor and MacLaurin series to represent elementary functions and use their polynomial approximations in applications.
- Define sequences and series, and determine convergence or divergence.
- Apply techniques of integration to evaluate definite and indefinite integrals.
- Apply integration to solve problems involving area, volume, and physical work.
- Apply the concepts of limit, convergence and divergence to evaluate some classes of improper integrals.
- Apply the ideas of polar coordinates to find areas, lengths of curves and representations of conic sections.

If you chose to take this class you agree to:

- Read the Notes – Read the material being covered prior to attending class and again after.
- Attend Class – You should not take this course if you are not committed to attending class.
- Complete Homework – Homework completion is vital to the understanding of the material.

UT Tyler Honor Code

To embrace honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

Plagiarism and Academic Dishonesty

Any work submitted must represent your own effort!

Make-up Policy

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.

Classroom Policy

When you attend class you are to be actively engaged in the classroom activity. Also, you are to be respectful of those around you and conduct yourself in a collegial manner. Students not adhering to this may be asked to leave the classroom.

Grading Policy

Your final grade will be based on the following:

Exams

There will be 5 exams worth 20 point each.

Quizzes

There will be 10 quizzes worth 2 points each.

Note: Your grade will depend exclusively on the scores you receive on your exams and quizzes!!

No assignments will be dropped. No extra credit or special assignments will be given. No exceptions.

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Your final grade will be no more harsh than the following scale.

Percentages

100 - 85 A, below 85 - 70 B, below 70 - 52 C, below 52 - 50 D, below 50 F

Points

120 - 102 A, below 102 - 84 B, below 84 - 62 C, below 62 - 60 D, below 60 F

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A bit about grading

Below is the grading scheme that will be used for all exam problems. Whether this splits up to each part of a multi-part problem depends on the necessary work to move through each problem.

0 - No progress or relevant information given for the problem

1 - Some progress which could lead to a correct solution

2 - Significant progress, major elements present, partial explanation/proof

3 - Essentially complete and correct solution, with minor gaps, errors, or lack of explanation

4 - Fully correct and complete solution with all relevant information and explanation

Below is the grading scheme that will be used for all quizzes.

0 - Unsatisfactory progress made on the problem.

1 - Satisfactory progress made on the problem but not complete and correct.

2 - Essentially complete and correct solution,

Important Dates

August 24th: First day of classes

September 7th: Labor Day, no class

September 8th: Census Date

October 30th: Last Day to Withdraw

November 23rd- 27th: Thanksgiving Break

December 7th - 11th: Final Exam Week

A bit about study groups

In my experience, study groups are most successful when the following is done. The problems should be attempted by the group members before the group meets. If problems are worked from start to finish in the group only the strongest students will benefit.

AI Policy

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All 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 students must not use protected information, data, 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. You may use AI or other resources while studying, learning, and practicing the material in this course. However, to best support your learning, you must complete all graded assignments by yourself to assist in your learning. This exclusion of other resources to help complete assignments includes artificial intelligence (AI). Refrain from using AI tools to generate any course context (e.g., text, video, audio, images, code, etc.) for an assignment or classroom assignment.

AI is not permitted on graded assignments in this course at all.