

MATH 1634

Calculus I

Spring 2018

Instructor: Dr Scott Gordon

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Office Hours: 10:30–12:30 MW, 10:00–12:00 F (212 Boyd), 2:00–3:00 MW (205 Boyd), or by appointment

Time and Location: MW 12:30–1:45 (Callaway Annex 146); F 12:05–12:55 (Anthropology 12)

Textbook: *Calculus, Early Transcendentals, 7th Ed.*, by James Stewart. We will cover Chapters 2–5.

Course Description: Limits and continuity, rates of change, the derivative, techniques of differentiation, max-min problems, integration, the Fundamental Theorem of Calculus.

Homework Exercises: Problems assigned after each lesson will be divided into two categories: exercises and turn-in problems. Exercises will not be graded and are designed to help you understand the important concepts and prepare for the tests.

Turn-in problems: There will be approximately 200 points worth of turn-in problems assigned during the semester. Your work should include a clear and complete explanation of how you solved the problem and (in accordance with university's honor code) cite any outside sources. If a problem is turned in late, 20% of its point value will be deducted from your grade for each day past the due date.

Math Tutoring Center: The Math Tutoring Center (205 Boyd) is an excellent resource for help with this class. No appointment is needed - you simply sign in, begin working, and consult a tutor if you have a question. The tutoring center hours can be found on the Math Department's website under the "Students" tab.

Tests: There will be four 1-hour tests worth 80 points each.

Rescheduling Tests: If you have a valid reason for missing a test, you may be allowed to reschedule, but you must make arrangements with me *in advance*.

Final: There will be a *cumulative* final exam worth 160 points on 5/2, 11:00–1:30.

Grading: Your numerical grade will be your total points (on tests, turn-in problems, and the final) as a percentage of the total number of possible points. Your letter grade will be determined according the following grading scale: A: 88–100, B: 76–87, C: 64–75, D: 52–63, F: 0–51.

Withdrawal: February 28 is the last day to withdraw from the course with a grade of W.

Important policies: Please carefully review the following information at the link below. It contains important material pertaining to your rights and responsibilities in this class.

http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf

Learning Outcomes: The student will be able to

1. Compute limits
2. Use the limit definition of the derivative to compute a derivative
3. Compute derivatives of polynomial, rational, exponential, logarithmic, and trigonometric functions
4. Apply rules of differentiation to compute derivatives
5. Apply calculus to related-rate problems and max-min problems
6. Interpret definite integrals in terms of areas bounded by functions
7. Compute definite and indefinite integrals using the Fundamental Theorem of Calculus