
Instructor: Dr. Yunrong Zhu **Office:** PS 328B **Phone:** 282-3819 **E-Mail:** zhuyunr@isu.edu

Course Website: [MOODLE](#) **Office Hours:** MW 11:00 am - 12:00 pm, or by appointment

Textbook: *Single Variable Calculus: Early Transcendentals*, Eighth Edition, by James Stewart, 2016, Brooks/Cole, ISBN: 978-1-285-74155-0.

Prerequisites: MATH1144 or MATH1147 (Passed with C- or better).

Course Description: This is the first course in the Calculus sequence (MATH 1170, 1175, 2275). Real-valued functions of one variable: limits, continuity, derivatives, integrals and applications. We will cover most of Chapter 2-6 of the textbook.

Learning Objectives: The overall goal of the course is to develop conceptual and computational understanding of limits, derivatives, and integrals, and to be able to use each to solve geometric and applied problems. More specifically,

- Develop a conceptual understanding of limits and the fundamental connection between derivatives (slope, velocity) and integrals (area, displacement).
- Learn techniques for computing limits, derivatives, and integrals.
- Use derivatives to solve geometric problems about the shape of a graph and applied problems involving optimization or rates of change from physics (velocity, acceleration), economics (marginal cost), and/or biology (population growth).
- Use integrals to solve geometric problems involving areas and volumes and applied problems involving distance, mass, or work.

Homework/Quizzes: The homework problems will be posted on [MOODLE](#) and due Thursday in class each week. Quizzes will be given regularly throughout the semester. The questions on the quizzes will be based on the homework and examples shown in class. You must be present in the class to take the quizzes, and **NO make-up** will be given for any reason. Your lowest HW score and two lowest quiz scores will be dropped.

Exams: There will be two in-class midterm exams and one **Comprehensive Final Exam** with the tentative schedule as follows:

Exam #1: **Thursday, May 30**
Exam #2: **Thursday, Jun. 20**
Final Exam: **Wednesday, Jul. 03, 9:00 am - 11:00 am**

All these exams will be held in the classroom PS 303.

Makeup Exams: There will be **NO** makeup exams. Exceptional and well-documented circumstances will be considered on an individual basis. Any missed exam will be 0.

Calculators: A graphing calculator is strongly recommended and will be especially helpful for gathering numerical and graphical evidence for limits, exploring different functions, illustrating what your calculations tell you about a graph, etc. However, the calculator and other electronic devices are **NOT** allowed in the quizzes and exams. Using such devices or other form of unauthorized materials during an exam amounts to cheating.

Grading: : Students course grade will be based on quizzes, two in-class midterm exams, and the final exam. There will be NO “extra credit” work. The weights are distributed as follows:

15% HW + 15% quizzes+ 40% Midterm Exams + 30% Final.

A+	93% and above	C	73%–76%
A-	90%–92%	C-	70%–72%
B+	87%–89%	D+	67%–69%
B	83%–86%	D	63%–66%
B-	80%–82%	D-	60%–62%
C+	77%–79%	F	59% and below

Attendance Policy: Class attendance is required. Please make sure to sign the daily attendance sheet. **A student who earns a failing grade via course work (exams, homework, etc.) and has unexcused absences that total more than 30% of class meetings will receive a grade of “X”.**

Academic Integrity and Dishonesty: Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is expected of all individuals in academe. Academic dishonesty in any form is unacceptable. Academic dishonesty includes, but is not limited to, cheating and plagiarism. All Idaho State University Policies regarding ethics and honorable behavior apply to this course (see <http://www2.isu.edu/policy/4000/index.shtml>).

Extra Help: Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. Free tutoring is available from the Math Center in the Student Success Center, Rendezvous 327 in Pocatello and CHE Room 220 in Idaho Falls. Information is available at <http://www.isu.edu/success/math/index.shtml>.

ADA Policy: Idaho State University is committed to providing equal opportunity in education for all students. If you have a diagnosed disability or if you believe you have a disability (physical, learning, hearing, vision, psychiatric) that might require reasonable accommodation in this course, please contact the Disability Services Center, Rendezvous Building, Room 125 (282-3599) <http://www.isu.edu/disabilityservices>.