

# Math 251: Calculus I

Fall 2022 – Section 002

**Course number:** 38313

**Credit hours:** 4

**Instructor:** Tuan Pham, email: [tnpham@eou.edu](mailto:tnpham@eou.edu)

**Office:** Loso Hall 225, telephone: 541-962-3465

**Office hours:** M,T,Th,F 12:00-1:00 PM or by appointment

**Time and place:** M,T,Th,F 9:00 - 9:50 AM at Badgley 146 (Inlow 013 on lab days).

**Canvas:** <https://eou.instructure.com/courses/36959>

**Textbook:** “*Essential Calculus*”, 2nd Edition by James Stewart.

**Prerequisite:** Math 112 or equivalent.

**Catalog description:** Differential Calculus including functions, limits, continuity, differentiation formulas, implicit differentiation, higher order derivatives, related rates, differentials, optimization problems, how the derivative affects the shape of a graph and an introduction to antiderivatives.

**Learning Outcomes:** Upon successful completion of this class, a student should be able to:

1. Calculate limits of functions;
2. Compute derivatives of a wide variety of functions including polynomial, rational, trigonometric, and compositions thereof;
3. Use derivatives to solve many types of problems regarding rates of change, approximations, optimization, curve sketching, and root finding;
4. Develop the ability to approach complex, multi-step problems by dividing them into manageable pieces.
5. Use mathematical software to solve problems related to limits and derivatives.

## Grading components:

Homework: 25%

In-class activities: 15%

Maple labs: 15% (plus 3% extra credit)

Midterm: 20%

Final exam: 25%

## Means of assessment:

- **Homework:** there will be 9 homework sets to be turned in on paper at the beginning of the class every Tuesday. A schedule of homework assignments was posted on the course website and Canvas.

Students are encouraged to work together, but must individually write in his/her own words and reflect his/her own understanding. The lowest homework score will be dropped. Only a few selected problems will be graded in detail. The rest will be given credit on the basis of completion.

- **In-class activities:** to better understand the topics taught, practice and discussion are very important. There will be worksheets handed out in class at random times on random days. Students will work together in groups with the instructor’s help. Students

who participate will receive 1 point. Students who do not participate receive 0 point. Worksheets will not be collected.

- **Maple labs:** this class uses Maple, a mathematical software for which EOU has a site license, for computation and visualization purposes. No programming experience is required. The class will meet at Inlow Hall 013 on lab days (see the class schedule below). There will be 6 lab assignments. The first 5 labs are for credit and to be submitted on Canvas as PDF files. The last lab is for extra credit.
- **Midterm Exam:** there will be one midterm exam held in class on **November 3, 2022**. A single sided, handwritten, 3" x 5" note card is allowed. A scientific calculator is allowed. Graphing/programmable/transmittable calculators are not allowed.
- **Final exam:** this exam will only cover the material after the midterm exam. Thus, it is not a cumulative exam. It will be held at the regular classroom **from 8 AM to 9:30 AM on Wednesday, December 14, 2022**. A single sided, handwritten, 3" x 5" note card is allowed. A scientific calculator is allowed. Graphing/programmable/transmittable calculators are not allowed.

**Make-up work:** make-up exams will be given only in exceptional circumstances, with appropriate documentation, such as illness or family emergency. If possible, notify the professor as soon as you are aware of the issue. Late assignments may be accepted within one week after the due date under similar conditions.

**Grade lines:** the course grade lines will not be harder than the standard grade lines: A 100-93%, A- 92.99-90%, B+ 89.99-87%, B 86.99-83%, B- 82.99-80%, C+ 79.99 - 77%, C 76.99-73%, C- 72.99-70%, D+ 69.99-67%, D 66.99-63%, D- 62.99 - 60% and F < 60%.

#### **Other Learning Resources:**

- The instructor has office hours dedicated to help you. Don't hesitate to make an appointment if the office hours conflict with your schedule.
- Your fellow classmates are also a good resource. Form a study group and you will find it helpful.
- You can find peer tutors at the Math Lab in Loso Hall 232. They have drop-in hours (no appointment necessary) which vary from term to term. You can find the latest information here: <https://www.eou.edu/lcenter/math-lab-schedule/>
- The Learning Center at Loso Hall 234 (next to the Math Lab) and the Library are great places for you and your group to practice Maple.

#### **Academic Misconduct Policy:**

Eastern Oregon University places a high value upon the integrity of its student scholars. Any student found responsible for an act of academic misconduct (including but not limited to cheating, unauthorized collaboration, fabrication, facilitation, plagiarism or tampering) may be subject to having his or her grade reduced in the course in question, being placed on probation or suspended from the University, or a combination of these.

#### **Students with Disabilities policy:**

Any student who feels he or she may need an accommodation for any type of disability must contact the Disability Services Office in Loso Hall, Room 234. Phone 541-962-3081.