Math 251: Calculus I

Fall 2023 – Section 101

**CRN:** 38313

**Credit hours**: 4

**Instructor:**...., email: ....

**Office:** ...., telephone: ....

**Office hours:** ....

**Time and place:** ....

**Canvas:** ....

**Textbook**: “*Essential Calculus*”, 2nd Edition by James Stewart. **Prerequisite**: Math 112Z or equivalent.

**Course 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**: At the end of this course, students will 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:

Quizzes:

Labs:

Midterm:

Final exam:

**Means of assessment**:

* **Homework**:
* **Quizzes**:
* **Labs**: this class uses Mathematica, a powerful mathematical software for which EOU has a site license, for computation and visualization purposes. No programming experience is required.
* **Midterm Exam:**
* **Final exam:**

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**Grade lines:** the course grade lines will not be harder than the standard grade lines: A 10093%, 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 Learning Center at Loso Hall 234 offers free tutoring service, both physical and virtual. Visit <https://www.eou.edu/lcenter/> for appointment.
* The Writing Center at Loso Hall 234 provides a place, both physical and virtual, where every EOU writer can find an interested, responsive reader. Go to eou.mywconline.com/ to schedule an appointment with the Writing Center.
* EOU’s Library has many good books and ebooks to check out: [https://library.eou. edu/](https://library.eou.edu/)

**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.

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