

AP CALC - Math 251/252: Calculus I/II

Fall 2024/Winter 2025 – Section 101

CRN: _____

Credit hours: 4

Instructor: Kelsy Forrester, email: kelsy.forrester@crookcountyschools.org

Office: CCHS 212, telephone: 541-419-6900 x 3138

Office hours: Before school and during ELO

Time and place: Fall M-F 2nd period, Winter M-F 4th period

Google Classroom: _____

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

Math 251 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.

Math 251 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.

Math 252 Course description: Integral Calculus including the definite integral, the fundamental theorem of Calculus, area between curves, volumes by slicing, L'Hospital's Rule, the Calculus of the exponential and logarithmic functions, techniques of integration, improper integrals and arc length.

Math 252 Learning Outcomes: At the end of this course, students will be able to:

1. Find areas using Riemann Sums;
2. Evaluate definite and indefinite integrals of various functions including exponential, logarithmic, and trigonometric functions using various techniques including, substitution, integration by parts, trig substitution, and partial fraction decomposition;
3. Determine if functions are one-to-one and find their inverse;
4. Demonstrate an understanding of the Fundamental Theorem of Calculus;
5. Accurately apply L'Hospitals Rule;
6. Evaluate volumes of three dimensional objects using various techniques including disks, washers, and shells;
7. Evaluate arc length;
8. Determine the area bounded by two curves;
9. Solve simple differential equations.

Grading components:

Homework/Quizzes/Labs: 30%

Unit Exam/Final exam: 70%

Means of Assessment: Homework, Quizzes, Labs, Midterm/Unit Exams, Final exam

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%

F < 60%.

Make-up Policy:

1. **Test Retakes:** Since this is a college course through Eastern Oregon University, retakes and corrections are not allowed.
2. **Homework/Daily Work:** Achievement of learning standards will be assessed separately from behavior (i.e. attendance, disruption, late work, tardiness, preparation, effort, attitude, etc.).

College credit:

- Students may receive 4 credits each for Math 251 and Math 252 through EOU.
- Students will register for college credit in early January.
- Students must receive a C or above to register and take Calculus the following year.
- More information will be sent home with instructions regarding the registration process.

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/>

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.

CCHS Citizenship, Classroom Rules, Behavior Expectations:

- Come to class prepared with notebook, calculator, and writing utensil
- Complete weekly HW/Openers on a regular basis
- Turn in assignments, HW's, and reviews on time (before or on unit test day)
 - **Once a unit is completed, any late work from that unit will be deducted points**
- Be present and attentive: take notes, ask questions, do the practice!
- Technology use:
 - Cell phones are put away (see cell phone policy below)
 - Chromes will be allowed during class when directed by teacher
- When absent, check google classroom and complete the daily assignment(s) posted.

The Board expects student conduct to contribute to a productive learning climate. Students shall comply with the district's policies, administrative regulations, school and classroom written rules, pursue the prescribed course of study, submit to the lawful authority of teachers and school officials and conduct themselves in an orderly manner during the school day and during district-sponsored activities.

Careful attention shall be given to procedures and methods whereby fairness and consistency without bias in discipline shall be assured to each student. The objectives of disciplining any student must be to help the student develop a positive attitude toward self-discipline, realize the responsibility of one's actions and maintain a productive learning environment. See [CCSD Board Policy JFC](#) for more details.

Cell Phone Policy: "NO CELL FROM BELL TO BELL"

Students may use their cell phone before school starts, between classes, at lunch time, and after school.

Students may not use their cell phone in any way during class time.

Cell phones will be put in the pocket organizer at the front of the classroom or in the student's backpack.

Students may not use headphones during class time. These should remain in the student's backpack unless otherwise noted in a student's 504 Plan or IEP*.

If a parent/guardian has an urgent message for their student, please contact the main office. (541-416-6900) and we will deliver the message to your student.

In the case of a school emergency, students will be permitted to use their phones.

Please sign below and turn in: *We have read and understood the expectations and policies in Mrs. Forrester's classroom. We are committed to success in this class!*

Student Name

Student Signature

Date

Parent/Guardian Name

Parent/Guardian Signature

Date