

Chabot College Department of Mathematics

Math 1, Calculus I, CRN 31107

Instructor: Eugene Ionel. Email: collegemath.net@gmail.com

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M,W,F 10:30-11:55 AM, Room 1711

Office Hours: M, W 12-12:30 PM, Room 3918

Course Description

Elements of analytic geometry, derivatives, limits and continuity, differentiation of algebraic and trigonometric functions, the definite integral.

Prerequisites: Precalculus

Required Course Materials:

Textbook: University Calculus, Hass, Weir, Thomas, Addison Wesley, 2008

Student's Solutions Manual: Supplement to textbook above

MathXL account WWW.MATHXL.COM Course ID: [XL0U-I1BC-201Y-73W2](https://www.mathxl.com/course/XL0U-I1BC-201Y-73W2)

Expected Outcomes for Students:

Upon completion of the course the students should be able to:

1. use delta notation;
2. explain limits and continuity;
3. use Newton's method;
4. apply the definition of the derivative of a function;
5. define velocity and acceleration in terms of mathematics;
6. differentiate algebraic and trigonometric functions;
7. apply the chain rule;
8. find all maxima, minima and points of inflection on an interval;
9. sketch the graph of a differentiable function;
10. apply implicit differentiation to solve related rate problems;
11. apply the Mean Value Theorem;
12. find the value of a definite integral as the limit of a Riemann sum;
13. integrate a definite integral using the Fundamental Theorem of Integral Calculus;
14. differentiate appropriate functions using the Fundamental Theorem of Integral Calculus;
15. find differentials and use differentials to solve applications;
16. integrate using the substitution method;
17. find the volume of a solid of revolution using the shell, disc, washer methods;
18. find the volume of a solid by slicing;
19. find the work done by a force;
20. find the hydrostatic force on a vertical plate;
21. find the center of mass of a plane region;
22. approximate a definite integral using Simpson's Rule and the Trapezoidal Rule.

Course Grading

There will be three midterm examinations and a final. If final percentage score would be greater than the lowest exam score then this score will be replaced by a final exam percentage score. MathXL assignments will be weighted at 20% of your grade.

- Mid Term 1 20%
- Mid Term 2 20%
- Mid Term 3 20%
- MathXL 20%
- Final 20%

A	90%
B	80%
C	60%
D	50%
F	Below 50%

Class Policy:

You are responsible for all said and done in class. Your being absent does not relieve you from all your duties as a student. It is your responsibility to be present for all tests.

There will be no make-up tests.

SPECIAL INFORMATION:

Absenteeism Policy: Students are responsible to drop or withdraw themselves, and I reserve the right to drop a student who missed 4 academic hours in a row or 6 academic hours during semester without documented excuse.

Academic Dishonesty: Academic dishonesty, in all of its forms, including plagiarism, is not tolerated. Specifically, students who are caught cheating will be given a zero score on the exam in question.

Disruptive Behavior: Students are required to respect classroom activities and show common courtesy to both instructor and peers. Behavior such as excessive discussion between classmates on content which is unrelated to course materials will not be tolerated. It is the instructor's discretion to determine what disruptive behavior is and request appropriate remedy which may result in student's expulsion from the class.

Please turn your cell phone ring into vibration mode.

Last Day to Drop with NGR: February 5, 2012

Last Day to Drop with W: April 6, 2012

Final Exam: Monday, May 21 10:00-11:50 A.M.

Last but not the Least: Failure to take the final at the proper time and place will result in an automatic F in the course. Exceptions are made in case of documented illness.