MATH.1320 Calculus II Fall 2023

Calc II Course Coordinator's Website, full of study resources: sites.uml.edu/jennifer-gonzalez-zugasti/teaching/calculus-ii/

Section 207 Class meetings MWF 2-3:15pm at Olsen Hall 102 (North Campus)
Instructor: Dr. Emily Gunawan
E-mail: Emily_Gunawan@uml.edu
Office: Southwick Hall 350M
Office Hours: Drop-in hours Mon Wed 12:15-1:45pm, at Olsen 412 (classroom)
Also available by appointment on MWF in Southwick
Math Tutoring: Mon to Fri 10am-5pm at Southwick 310, Sat/Sun 5-8pm on Zoom
CLASS Tutoring: Many subjects including Calculus II, Cumnock Lowell Level (North Campus) and Fox 103 (East Campus)

Course Description:

A continuation of Calculus I. Integration and techniques of integration including the substitution method, integration by parts, trigonometric integrals, trigonometric substitution, integration of rational functions by partial fractions, numerical integration, and improper integrals. Volumes using cross-sections, the disk method, the washer method, and the shell method. Arc length and surface area. Infinite series, power series, Maclaurin and Taylor series. Polar coordinates and areas and lengths in polar coordinates.

Prerequisites for the Course:

MATH.1290 Calculus IB, MATH.1310 Calculus I, or a grade of CR in NONC.CALC1

Course Materials:

Required Purchase (Online Homework):

We will be using an online homework application called **Pearson MyLab Math**. You can view an online version of the textbook on MyLab Math.

Options available through the bookstore or through Pearson:

- Soft cover text with MyLab access: 9780135308042
- Loose-leaf + MyLab access: 9780135308066
- Life of Edition MyLab access: 9780135183717
- 18-week MyLab access: 9780135910993

For those who have **not** used MyLab Math for Calculus I, IB or II at UMass Lowell:

If you buy a new physical textbook, it should come with an access code for MyLab Math. You may purchase an access code either through the UML bookstore or directly through Pearson. **Check the prices at both places before purchasing a MyLab Math access code!!**

For those who have used MyLab Math for Calculus I, IB or II at UML: Your old access code may not be expired yet. Please check.

Optional Textbook:

University Calculus Early Transcendentals Fourth Edition Pearson © 2020. *You can view the textbook online on MyLab Math (see the required purchase).*

Optional Calculator for homework:

Calculators will **not** be allowed in exams and quizzes, and they will not be necessary. You may, if you wish, use calculators or computer software while working on the homework to approximate answers to certain decimal places.

Assignment Guidelines:

Class Attendance:

Class attendance is strongly recommended but not required except on exam and quiz days. *Please do not come to class late and please do not leave class early.* It is disruptive to the instructor and to other students.

Occasionally there are class work and class activities that contribute a small percentage of the course grade; if you are sick or cannot make it to class, please let me know so that these won't affect your course grade.

Reading Assignments:

Each week we will cover specific topics. Please read the appropriate section of your textbook prior to class. It will prepare you for the lecture and give you additional examples. *Bring any questions about the reading and the examples to class and office hours.*

Homework:

For each section of the textbook, there will be an online problem set in **Pearson MyLab Math** (MML), which you can access via our Blackboard course. In addition to the online homework, occasionally you may need to submit handwritten work.

You are allowed unlimited attempts to answer each problem on MML, so you can aim to earn full credit for MML. If you enter an incorrect answer into MML you will be asked to try again; after several tries, you'll be given a new version of the problem. Your efforts on these problems will be graded by the MML system. Please come to office hours and <u>Math Tutoring</u> to get homework help!

IMPORTANT MML NOTICE: Please create a notebook containing your final drafts of solutions (handwritten and separable by assignment) to the MML problems. The notebook can be a physical or digital notebook. Please clearly show all work and steps. This is for multiple reasons. First, it will help you practice writing out clear work, which you will need to do on quizzes and exams. Second, if you have any questions about a problem, you will be able to show me or a Math Tutor what you have tried so far. Finally, it will give you study material for quizzes and exams.

HINT: Do not wait until the last day to complete homework.

If you do not complete an MML homework by the due date, you will still be allowed to work on the homework to increase your grade and practice your Calculus skills; however, **the grade earned on work completed after the due date will be reduced by 25%.** Note: The portion of the work completed prior to the due date will still earn full credit, even if you finish the assignment late.

Quizzes:

There will be an in-class quiz (on paper) almost every week at the beginning of class. A quiz may fall on a Monday, Wednesday, or Friday. The first three quizzes have been scheduled to fall on Sep 13, 20, and 27. The rest will be announced at least one week ahead of time. The lowest quiz score will be dropped.

There are no make-ups for missed Quizzes; if you are sick or are away because of a UMass Lowell-sponsored event, please let me know and I will drop that day's quiz score.

Three Exams:

There will be three, in-class exams on the following (tentative) dates:

(Exam 1) Monday, October 2

(Exam 2) Monday, November 6

(Exam 3) Monday, December 4

No electronic devices or notes will be allowed on any exam.

Final Exam:

There will a 2.5-hour final exam that the university will schedule during the period Saturday, December 16 - Saturday, December 23. **Please do not plan to travel until the final exam period is over.** The date and time for the Final Exam will be posted in SiS later in the semester.

There will be no make-ups for exams, unless prior arrangements have been made with me; in cases of emergency, requests for make-up work may be discussed with me and will be handled on an individual basis.

How You Will Be Graded:

Grade Category	Percentage of Final Grade
MyMath Lab HW	13%
Quizzes	13%
Written work and participation	2%
Exam I	18%
Exam II	18%
Exam III	18%
Final Exam	18%

The Final Exam grade will replace the lowest grade of Exam I, Exam II, Exam III – if it improves the Final Numeric Grade. There will be no scaling.

Your final letter grade is determined based on your numeric grade as follows.

Final Numeric Grade	Letter Grade
[0,63)	F
[63,67)	D
[67,70)	D+
[70,73)	C-
[73,77]	С
[77,80)	C+
[80,83)	B-
[83,87)	В
[87,90)	B+
[90,93)	A-
[93,100]	A

Academic Integrity Policy:

UMass Lowell students are expected to be honest and to respect ethical standards in meeting academic assignments and requirements. A student who cheats on an examination or assignment is subject to administrative dismissal. Please visit <u>www.uml.edu/Catalog/Undergraduate/Policies/Academic-Policies/Academic-Integrity.aspx</u> for details.

Student Disability Services:

UMass Lowell students requiring academic accommodations should contact <u>https://www.uml.edu/student-services/Disability/default.aspx</u> for assistance.