

MATH 1290 - 202 Calculus IB (Formerly 92.129), Fall, 2022

Last updated, September 2, 2022

Class meets: MWF 2:00PM - 3:15PM, Olsen Hall 408 - NC.

Instructor: Shiwen Zhang

Contact Information: Southwick Hall 304C, shiwen_zhang@uml.edu

Course website: https://faculty.uml.edu/shiwen_zhang/Teaching/F22/F22math1290.html

In person Office Hours: Mon, Wed, 3:30-4:30pm at Southwick Hall 304C

Remote Office Hours: Thu, 8:00-9:00pm at <https://uml.zoom.us/j/92888445313>

Course description and Prerequisites: Provides a review of pre-calculus, algebra and trigonometry integrated with the second half of Calculus I. Inverse trig functions and their derivative, logarithmic functions and their derivative, related rates, L'Hospital's Rule, optimization problems, curve sketching, linearization, Newton's Method, hyperbolic functions and their derivative, antiderivatives. Completion of this course is equivalent to MATH.1310 Calculus I. Pre-req: MATH.1280 Calculus IA.

Textbook: University Calculus: Early Transcendentals 4th Edition.

Author(s): Hass, Joel; Heil, Christophe; Bogacki, Przemyslaw; Weir, Maurice; Thomas Jr, George.

Textbook ISBN-13: 9780134995540

We will most sections from Section 3.7 (Implicit differentiation) to Section 5.5 (Indefinite Integrals using u-substitution).

There are two options regarding the text:

1. Purchase a bundle which includes a copy of the textbook with the MyMathLab Access Kit included. OR
2. Go online and purchase access to MyMathLab (see link below) and view the text online.

Grading: Your final numeric grade will be a weighted combination of your **two midterm exam grades (E1 and E2)**, your **final exam (F1)**, your **quiz grade (Q)**, your **HW grade (MML)**, and your **attendance grade (A)** as follows:

$$\text{Final Grade} = 15\%E1 + 15\%E2 + 30\%F1 + 20\%Q + 15\%MML + 5\%A$$

Your final letter grade is then determined using the following table based on your numeric grade:

Numeric Grade	[92,100]	[88,92)	[84,88)	[80,84)	[76,80)	
Letter Grade	A	A-	B+	B	B-	
Numeric Grade	[72,76)	[69,72)	[66,69)	[63,66)	[60,63)	[0,60)
Letter Grade	C+	C	C-	D+	D	F

MyMathLab (MML) Access Kit: This is the on-line Homework application provided through the CourseCompass website sponsored by Pearson-Addison Wesley. You must purchase access to MyMathLab. Temporary access (2 weeks) is available if you are unable to purchase right away. Please do not delay in signing up. **There is a HW assignment due every week. HW1 Implicit Differentiation is Due on Monday 09/12/22 11:59pm.**

You will find all the information you need by first logging into your MyMathLab account. In MyMathLab there is a Handouts and Links tab that will take you to the Weekly Lecture Schedule, the Academic Calendar, the Memorization Requirements, the Survival Guide, the Basic Algebra Guide, Intro to Logarithms, Derivatives of Inverse Functions and sample practice exams. It's all there in one central location.

MML assignments will consist of 15-45 problems for each weekly HW assignment (averaging 5-15 problems per class). If you enter an incorrect answer into MML you will be alerted and you will be allowed additional attempts to answer each problem. Your efforts on these problems will be tracked and graded by the MML system. On-line MML HW will be worth 15% of your grade. Typically you will be given a week to work on an assignment. All assignments will be due on Monday at midnight, with the exception of holiday weeks and your HW will be due on Tuesday. No extensions will be given.

Course ID for On-line MML: zhang61644

Midterm 1&2: There will be 2 **non-cumulative** midterm exams each worth 15% of your grade. They will be given on **Wednesday, October 12th, and Wednesday, November 16th, 7PM-8PM in the evening.** You will not be able to use a calculator for the exams. You are not allowed books, notes or formula sheets for the exams.

Final Exam: The final exam will be worth 30%. The final exam will be two hours long **cumulative** and will be given during **finals week December 14- December 20 (specific date and time TBA).** **Please do not make travel plans during finals week until the exam schedule has been posted.**

Exams conflicts: If you have any conflicts with the exam dates you must address them ASAP. You may not miss a scheduled exam without prior permission, unless in the case of a sudden emergency. If you miss any exam without an official excuse, you will not be allowed to make it up. Documentation of a health condition that requires absence from class should note the date(s) of necessary missed attendance and date of clearance and be signed by the health care provider. Diagnoses and descriptions of illness should not be included.

Quizzes: Quizzes will be worth 20% of your grade. There will be a short (usually 10-15 minutes containing 2-3 problems) quiz **every Friday at the end of class**, with the exception of the exam weeks. **The first quiz is on Friday, September 9 th.** There are no makeups on the quizzes. However, to accommodate illness or absence, I will drop your lowest quiz grade. Please do not ask to makeup a quiz since the drop policy exists to allow you to miss a quiz without damage to your grade.

Suggested homework: It is suggested to do as many exercises in the textbook (after each section) as possible. Although it will not be collected, it is highly recommended that you do it in order to do well in this course. Over 80% of the quiz and exam problems will be highly related to the suggested homework. *Mathematics is learned by doing problems.* You are encouraged to work with friends on the homework problems.

Attendance, Dishonesty & Other policies: You are responsible for everything presented in class meetings. Don't miss exams. See UML policy on academic dishonesty at ACADEMIC INTEGRITY.

Additional resources:

- Undergraduate Studies in Mathematics: <https://www.uml.edu/sciences/mathematics/students/>.
- The Math Department provides daytime math tutoring both on-campus (Southwick 310) and online. Check details at FALL 2022 TUTORING SCHEDULE.
- UML Dates and Deadlines: 2022 Fall Undergraduate Academic Calendar
- Disability Services Office: <https://www.uml.edu/student-services/disability/>
- UMass Lowell Testing Centers: <https://www.uml.edu/testing-centers/>
- UML Wellness Center: <https://www.uml.edu/student-services/wellness-center/>