



## Basic Course Information

Semester:	<b>Fall 2023</b>	Instructor Name:	<b>Jill Nelipovich</b>
Course Title & #:	<b>Math 192</b>	Email:	<b>Jill.nelipovich@imperial.edu</b>
CRN #:	<b>10062</b>	Webpage (optional):	<b>Canvas</b>
Classroom:	<b>2722</b>	Office #:	<b>2768</b>
Class Dates:	<b>8/14/23 – 12/09/23</b>	Office Hours:	<b>MW: 7:00 – 7:30 Rm 2722 MW: 1:00 – 1:30 Rm 2768 TR: 8:00 – 9:30 Zoom TR: 3:45 – 4:00 Centi-C 6:40 – 7:00 Centi-C</b>
Class Days:	<b>MW</b>	Office Phone #:	<b>760-355-6297</b>
Class Times:	<b>7:30 – 10:05</b>	Emergency Contact:	<b>Silvia Murray 760-355-6201</b>
Units:	<b>3.5 Lecture, 1.5 Lab</b>	Class Format/Modality:	<b>In person</b>

## Course Description

A first course in differential and integral calculus of a single variable: functions; limits and continuity; techniques and applications of differentiation and integration; Fundamental Theorem of Calculus. Primarily for Science, Technology, Engineering & Math Majors. (C-ID: MATH 210) (CSU, UC credit limited. See a counselor.)

## Course Prerequisite(s) and/or Corequisite(s)

MATH 190 - or equivalent with a grade of "C" or better, or appropriate placement as defined by AB705.

## Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester.



## Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Compute the limit of a function at a real number
2. Determine if a function is continuous at a real number
3. Find the derivative of a function as a limit
4. Find the equation of a tangent line to a function
5. Compute derivatives using differentiation formulas
6. Use differentiation to solve applications such as related rate problems and optimization problems
7. Use implicit differentiation
8. Graph functions using methods of calculus
9. Evaluate a definite integral as a limit
10. Evaluate integrals using the Fundamental Theorem of Calculus
11. Apply integration to find area

## Textbooks & Other Resources or Links

Stewart, James, Clegg, Daniel, Watson, Saleem, 2021. *Calculus: Early Transcendentals*. 9th Brooks/Cole. ISBN: 9781337613927 or 9780357022269

## Course Requirements and Instructional Methods 9780357022269

1. Class participation: Be present in mind, body and spirit! You need to participate to succeed. Calculus is not easy. Your algebra must be strong! Your trig – yep! You need that knowledge too (especially in Calc 2). Do not spend time on your cell phone. Time on your cell phone is time away from calculus.
2. Love to learn! Embrace the productive struggle. Take joy in not knowing how to do a problem and working it out with your peers. Learn a little every day and refrain from learning a lot in one day. You need time to digest the material.
3. Exams – Four exams! Study a little bit every day.
4. Final Exam – you get to share with me what you learned!
5. No Make-up tests. If you miss an exam, the week before finals, EVERY student will have the opportunity to get some points back on their lowest test.

## Course Grading Based on Course Objectives

Quizzes: In class and on Canvas.....	10%
Exams: (four).....	60%
Projects.....	5%
Final Exam.....	25%



## Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

- a. DO NOT CHEAT.
- b. If you use alternative sources for your homework, I can copy Shakespear as well! It doesn't mean I understand it. Writing down gibberish does nothing for your learning and you embracing the productive struggle. Use alternative sources as "checking" mechanisms, not HOW you do it. Those sources will NOT be available on any test.

## Course Policies

1. Have fun
2. Don't cheat
3. 10 hours per week on the course outside of class is about 1 hour 30 minutes daily. Spend the time now rather than playing catch up in future courses.

## Other Course Information

1. MESA program is starting soon! Stay tuned!

## IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.



## Anticipated Class Schedule/Calendar

[Provide a tentative overview of the readings, assignments, tests, and/or other activities for the duration of the course. A table format as in the example below may be used for this purpose.]

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1 August 14 - 18	Introduction, Syllabus, Algebra Review & Trig review Chapter 2.2, 2.3	Pages 1-502
Week 2 August 21 - 25	Chapter 2.4, 2.5 Chapter 2.6, 2.7	Pages 504-505
Week 3 August 28–Sept 1	Chapter 2.8, 3.1 Review	Due 9-16-2015
Week 4 September 4 - 8	No Class Sept 4 Exam 1 – Chapter 2	
Week 5 Sept 11 - 15	Chapter 3.1, 3.2 Chapter 3.3, 3.4	
Week 6 Sept 18 - 22	Chapter 3.5, 3.6 Chapter 3.7, 3.9	
Week 7 Sept 25 - 29	Chapter 3.9, 3.10 Chapter 3.11, Review	
Week 8 Oct. 2 - 6	Review Exam 2 – Chapter 3	
Week 9 Oct. 9 - 13	Chapter 4.1, 4.2 Chapter 4.3, 4.4	
Week 10 Oct. 16 - 20	Chapter 4.5, 4.6 Chapter 4.7	
Week 11 Oct. 23 - 27	Chapter 4.8, 4.9 Review	
Week 12 Oct. 30 – Nov 3	Exam 3 – Chapter 4 Chapter 5.1, 5.2	
Week 13 Nov 6 - 10	Chapter 5.2, 5.3 Chapter 5.3, 5.4	
Week 14 Nov 13 - 17	Chapter 5.5 Review	
Holiday Nov 20 - 24		
Week 15 Nov 27 – Dec 1	Review Exam 4 – Chapter 5	
Week 16 Dec 4 - 8	Review Final Exam	

**\*\*\*Subject to change without prior notice\*\*\***