

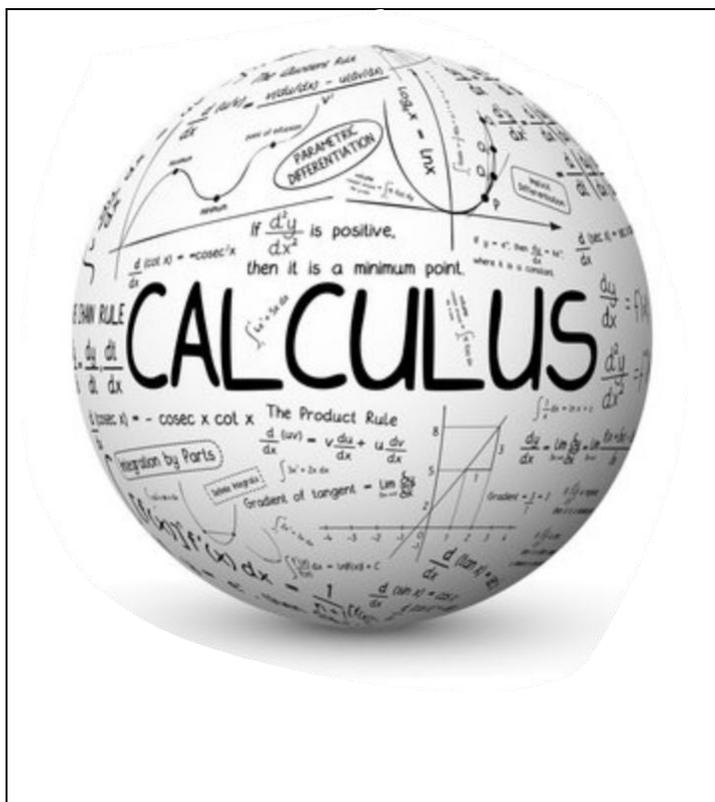
Basic Course Information

Semester:	Fall 2022	Instructor Name:	Jill Nelipovich
Course Title & #:	Math 192 – Calculus I	Email:	Jill.nelipovich@imperial.edu
CRN #:	10062	Webpage (optional):	canvas
Classroom:	2722	Office #:	2768
Class Dates:	08.15.22 – 12.09.22	Office Hours:	MW: 7:30 – 8:00 a.m. (2722) MW: 2:00 – 2:30 p.m. (2768) **Email me if you want to zoom at this time TR: 8:30 – 9:30 a.m. (Zoom)
Class Days:	MW	Office Phone #:	760-355-6297 (cell phone in canvas)
Class Times:	8:00 – 10:05	Emergency Contact:	Silvia Murray 760-355-6201
Units:	4	Class Format:	In person learning! YAY!

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Welcome Students! The Summer semester will be fun – we actually get to meet IN PERSON! YAY! The benefit to in person learning is HUGE! I want to see you succeed in this class and your next class and at the university!

Your first assignment – eat healthy, take your vitamins and exercise frequently! Keep your immune system healthy and strong.



Do you remember all that trigonometry you learned not so long ago?

Well, we get to remember much of that trig – especially the identities (my favorite part)

My job: To be available for you and to help you both learn and succeed.

What does success mean?

- Doing well in this course AND
- Succeeding in the next course (Math, 194, 210, 220)

I'm not going to sugar coat it – if your success in prior mathematics courses included help from outside sources on assessment, you may have some catching up to do! It is important that you have strong algebra skills to succeed in the higher level math courses.

Guess what? There will be an optional homework/algebra review sessions MW morning at 7:30 a.m.

Remember, you need to know some of the stuff you learned at IVC 😊 to succeed at the university. I am here to help you do so! And, you will be here to put in the necessary effort.

Course Description

Welcome to the *wonderful world of calculus*! Hopefully you have had some in-person mathematics courses as of recently. If you were an online learner – you may have some catching up to do. Results across the nation have shown that online learning has not been as academically prosperous as in-person learning. If you need to re-learn some of the mathie stuff you learned before, now is the time to do it! Make sure you allot extra time to ensure you learn the material well and you succeed at the university 😊

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) (UC credit limited. See a counselor.) (CSU/UC)

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 2015. *Calculus: Early Transcendentals* 8th. Brooks/Cole ISBN: 9781285741550.

Course Requirements and Instructional Methods

Projects: There will be projects assigned throughout the semester. The projects are designed to help you think more deeply about solving math problems. You are expected to work as a group. One paper per group should be turned in.

Quizzes: Quiz questions may come directly from your homework or will be similar to your homework problems. Canvas quizzes will be either multiple choice or fill in the blank. For each test, I would like you to turn in a notebook (or neatly stapled papers of the same size) with the work from your homework quizzes for that chapter. If this is not done, you will not receive the credit for your homework quizzes. I know how easy it is to get outside assistance. If you use apps for your homework, use them to check your work. It is your responsibility to embrace the productive struggle necessary to be successful in a STEM major.

Exams: There are four tests in the semester where you are given the opportunity to share your knowledge and what you have learned.

The exams must be done in person. No make-up tests. No test will be dropped. If you should miss an exam, there will be one make-up test at the end of the semester. I find this to be the only fair way to ensure I can get test results returned in reasonable time frame for your peers.

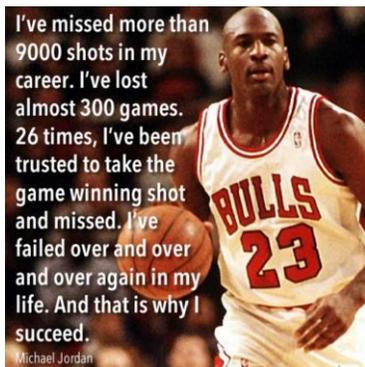
Final Exam: The final exam is cumulative. The emphasis will be on the latter chapters. Your exam will be in two parts:

Course Grading Based on Course Objectives

Group Projects	7%	To be assured the grade you want to earn:
Homework Quizzes/Quizzes.....	8%	A: $90\% \leq x$
		B: $80\% \leq x < 90\%$
Tests (4)	60%	C: $70\% \leq x < 80\%$
Final.....	25%	D: $60\% \leq x < 70\%$
		F: $60\% > x$

Course Policies

1. Have a lot of fun! Learning is no fun if you stress about learning! Always have a positive attitude. Stop, think, and relax! Allow your mind to be creative, give yourself permission to fail and embrace your success!



2. Come to class AND participate in class! It doesn't do you, your peers or myself any good if you are texting throughout class and your mind is concentrated on your weekend rather than "the now".
3. Do a little bit of work each and every day. 1% improvement each day equates to a lot of time spent learning (learning is different than studying) – it is productive studying!
4. Show up on time, prepared and ready to learn. In zoom class, I do not like talking to myself. Respond, ask questions and slow me down, if necessary. Participate in zoom class – don't just have the zoom on. Be responsible for your own learning.
5. Do your homework – and keep your homework organized and neat and legible. Bring your homework with you to class.
6. Due to state policy, we may not bring children to class.
7. Work together in study groups. It's amazing how much better students do when they collaborate.
8. Use our embedded tutor. She is there to help you. I am available most evenings, Friday, Saturday and Sunday on zoom.

Other Course Information

Last Day to add: 08/27/22

Last Day to Drop with a W: 08/28/22

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

Date or Week	Activity, Assignment, and/or Topic	Canvas Quizzes – open Wednesday, due by Sunday Other quizzes – either in class or take-home
August 15	Syllabus, Algebra Review	
August 17	2.1, 2.2	
August 22	2.3, 2.4	
August 24	2.5, 2.6	
August 29	2.7, 2.8	
August 31	Review, Catch up	
September 5	Holiday	
September 7	Test #1 – Chapter 2	
September 12	3.1, 3.2	
September 14	3.3, 3.4	
September 19	3.4, 3.5	
September 21	3.5, 3.6	
September 26	3.6, 3.7	
September 28	3.8, 3.9	
October 3	Review	
October 5	Test #2 – Chapter 3	
October 10	4.1, 4.2	
October 12	4.2, 4.3	
October 17	4.4, 4.5	
October 19	4.5, 4.7	
October 24	4.8, 4.9	
October 26	Review	
October 31	Test #3 – Chapter 4	
November 2	5.1	
November 7	5.2	
November 9	5.3	
November 14	5.4	
November 16	5.5	
November 21	Holiday	
November 23	Holiday	
November 28	Review	
November 30	Test #4 – Chapter 5	
December 5	Review	
December 7	Final Exam	

Subject to change without prior notice

Recommended Homework Problems:

Date or Week	Activity, Assignment, and/or Topic	Guidelines to have completed
Chapter 1	pp. 68 – 69: Concept Check 1, 2, 3, 4, 6, 7, 8a-g pp. 69 – 70 Exercises: 1, 3, 5, 7, 17, 25	Friday: 8/19 Friday: 8/19
Chapter 2	2.2: 1, 3, 5, 7, 9, 11, 15, 17, 19, 31, 33, 37, 41 2.3: 1 – 31 odd, 41 2.4: 1, 3, 13, 19, 23, 29 2.5: 1, 3, 5, 7, 9, 11, 13, 17, 19, 21, 25, 35, 39, 45, 53, 55, 67 2.6: 1, 3, 5, 7, 9, 15, 17, 19, 23, 25, 27, 29 2.7: 1, 3, 5, 7, 11, 13, 17, 21, 31, 33, 47, 53, 59 2.8: 1, 3, 5, 7, 9, 11, 13, 15, 21, 23, 25, 27, 29, 41, 43, 49	Sunday: 8/21 Tuesday: 8/23 Tuesday: 8/23 Friday: 8/26 Friday: 8/26 Tuesday: 8/30 Tuesday: 8/30
Chapter 3	3.1: 3 – 37 odd, 45, 49, 55, 61, 71, 75 3.2: 3 – 33 odd, 43, 45, 49 3.3: 1 – 23 odd, 33, 37, 39, 43, 57 3.4: 1 – 53 odd, 59, 61, 65, 71, 75, 77 3.5: 1 – 27 odd, 35, 37, 49, 51 3.6: 3 – 33 odd, 37, 39 – 49 odd, 51 3.7: 1, 3, 5, 7, 9, 13, 31, 35 3.8: 3, 5, 9, 15 3.9: 1, 3, 5, 7, 9, 11, 13, 17, 19, 23, 27, 33, 44	Tuesday: 9/13 Tuesday: 9/13 Friday: 9/16 Tuesday: 9/20 Friday: 9/23 Tuesday: 9/27 Tuesday: 9/27 Friday: 9/30 Friday: 9/30
Chapter 4	4.1: 1, 7 – 43 odd, 47 – 61 odd, 69, 73 4.2: 1 – 13 odd, 17, 19, 21, 25, 27 4.3: 1 – 53 odd 4.4: 1 – 65 odd, 79 4.5: 1 – 35 odd, 45, 27, 49, 61 4.7: 1, 3, 5, 7, 9, 11, 13, 15, 18, 19, 23, 31, 35, 49, 61 4.8: 3, 7, 17 4.9: 1 – 21 odd, 25 – 35 odd, 41, 43, 45, 59, 61, 69, 77	Tuesday: 10/11 Friday: 10/14 Friday: 10/14 Tuesday: 10/18 Friday: 10/21 Friday: 10/21 Tuesday: 10/25 Tuesday: 10/25
Chapter 5	5.1: 1, 3, 5, 15, 21, 23 5.2: 1, 3, 5, 7, 9, 17, 19, 21, 23, 33, 35, 39, 41, 47, 49, 51 5.3: 1 – 43 odd, 45, 47 5.4: 1 – 17 odd, 21 – 43 odd, 63 5.5: 1 – 35 odd, 39, 41, 43, 45, 47, 53 – 73 odd, 93	Friday: 11/04 Tuesday: 11/08 Friday: 11/11 Tuesday: 11/15 Friday: 11/18