IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Summer 2022**	Instructor Name:	**Jill Nelipovich**
Course Title & #:	**Math 192 – Calculus I**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**30103**	Webpage (optional):	**canvas**
Classroom:	**MW: 2728** **TR: RT-OL**	Office #:	**2768**
Class Dates:	**6.20.22 – 7.28.22**	Office Hours:	**By appt**
Class Days:	**M,T,W,TR**	Office Phone #:	**760-355-6297 (cell phone in canvas)**
Class Times:	9:00 – 12:10	Emergency Contact:	**Silvia Murray 760-355-6201**
Units:	4	Class Format:	Hybrid

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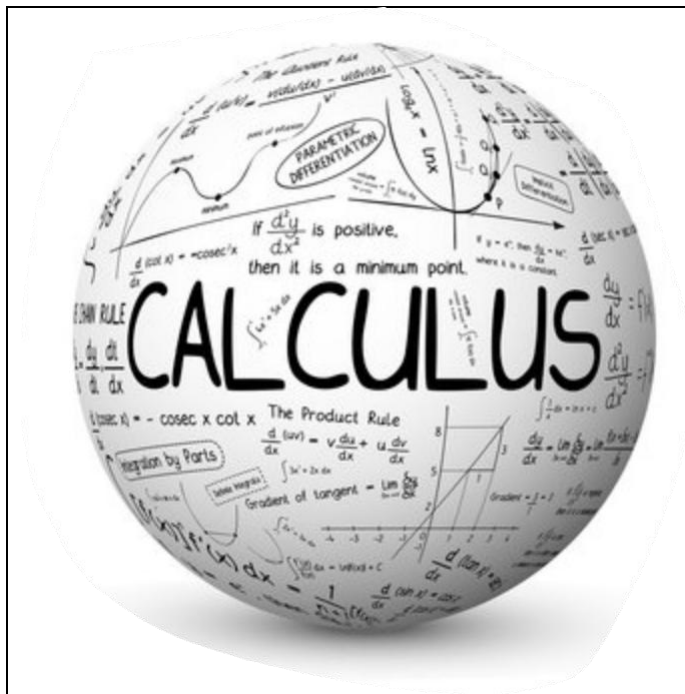
Do you remember all that trigonometry you learned not so long ago?

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 210, 220)

I'm not going to sugar coat it – if your success in Math 192 included alternate sources, you will have some catching up to do.
Again – we want you to succeed at the university!
 Guess what? You need to know some of the stuff you learned at IVC 😊 If you are in that position, make sure you allot additional study time.

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 Transcednetals* 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: The opportunity to share your knowledge of your homework will be provided on quizzes. In class, we will randomly select 2 or 3 problems. You will have at most 8 minutes to copy down the problems completely from your homework. If you do not do your homework and/or your homework is not organized and neat, you will not have time to complete the quizzes. They will come directly from the homework. I may ask you Chapter 2.3 #4 (in which case, you look in your homework for chapter 2.3 # 4 and write it down). Homework – this should be done with you and your classmates intelligence. Enjoy the productive struggle. On Tuesday and Thursday, I will expect you to do some homework problems (these will be a little longer) and submit your work for the problems online. You can simply take a picture of the problem that you did from your homework and upload it to Canvas. It is expected that the work comes from you, not Chegg or Photomath or any other platform. You are our future engineers, computer scientists, doctors, biologists – and once you get in the work place, Chegg is not there to save you.

Exams: There are three exams 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.

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

Part I: In person on Wednesday. I will share with you which sections to focus on by Week 5.

Part 2: This portion is online. We will not "have class" that day –I will have a project for you to work with your groups. We can decide on the groups in Week 5. The project will open at 6:00 a.m and is due by 11:59 p.m. It will consist of a couple of challenging math problems. I will be interested in your thought processes, not just the "correct solution". Count on working you're your team for 2 to 3 hours to complete the project. This can be entirely on zoom or if you want to meet with each other, you can do so as well. Your time window is 6:00 a.m. to 11:59 p.m.

Course Grading Based on Course Objectives

Projects …………………………………………5%

Homework Quizzes…..……….………………….10%

Exams…………………………………………..60%

Final……….……………………………………25%

To be assured the grade you want to earn:

A: $90\% \leq x$

B: $80\% \leq x < 90\%$

C: $70\% \leq x < 80\%$

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!
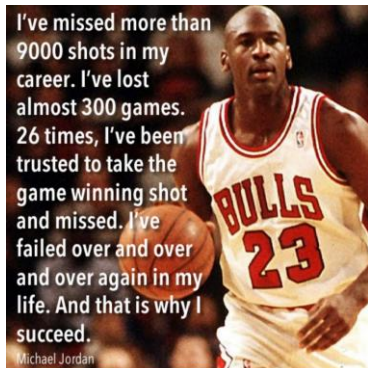
2. Come to class AND participate in class! It doesn't do you, your peers or myself any good if you are texting throughout class and your mind is concentrated on your weekend rather than "the now".
3. Do a little bit of work each and every day. 1% improvement each day equates to a lot of time spent learning (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 the 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: 6/22/22

Last Day to Drop with a W: 7/20/22

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	
June 20	Syllabus, Review, 2.1	
June 21	2.2, 2.3	HW Quiz Chapter 1 Online
June 22	2.4, 2.5	HW Quiz 2.2, 2.3 In Class
June 23	2.6, 2.7	HW Quiz 2.4, 2.5 Online
June 27	2.8, 3.1	HW Quiz 2.6, 2.7 In Class
June 28	3.2, Review	HW quiz 2.8, 3.1 Online
June 29	Exam 1	Exam 1
June 30	3.3, 3.4	HW Quiz 3.2 Online
July 4	Holiday	
July 5	3.5, 3.6	HW Quiz 3.3, 3.4 Online
July 6	3.7, 3.9	HW Quiz – 3.2, 3.4, 3.5 In class
July 7	4.1, 4.2	HW Quiz 3.6. 3.7, 3.9 online
July 11	4.3, 4.4	HW Quiz 4.1, 4.2 in class
July 12	Catch up, Review	HW Quiz 4.3, 4.4 online
July 13	Exam 2	Exam 2
July 14	4.5, 4.7	
July 18	4.9, 5.1	HW Quiz 4.5, 4.7 In class
July 19	5.2, 5.3	HW Quiz 4.9, 5.1 online
July 20	5.4	HW Quiz 5.2, 5.3 In class
July 21	5.5, Review	HW Quiz 5.4 online
July 25	Review, Exam 3	Exam 3
July 26	5.5	HW quiz 5.5 online
July 27	Final Exam Part I	Final Part I
July 28	Final Exam Part II	Final Part II

Subject to change without prior notice