IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Fall 2025**	Instructor Name:	**Jill Nelipovich**
Course Title & #:	**Math 170 – Introduction to Calculus with Applications**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**11061**	Webpage (optional):	**Canvas**
Classroom:	**2728**	Office #:	**2760**
Class Dates:	**08/11/25 – 12/06/25**	Student Hours:	**M/W: 6:55 – 7:25 Room 2760** **M: 1:00 – 2:00 Room 2760** **T/TR: 12:30 – 1:30 Room 2760**
Class Days:	**MW**	Office Phone #:	**760-355-6297**
Class Times:	10:15 a.m. – 12:50 p.m.	Emergency Contact:	**760-355-6201**
Credits:	4	Class Format/Modality:	

Course Description

This course presents a study of the techniques of calculus with emphasis placed on the application of these concepts to business and management related problems. Students take this course to prepare for courses for which calculus is recommended and/or required, as well as to study the ideas and concepts of advanced mathematics as applied to a modern computerized society. Topics covered include pre-calculus concepts, applications of derivatives and integrals of functions including polynomials, rational, exponential and logarithmic functions, differential equations, and functions of several variables.(C-ID: MATH 140) (CSU, UC credit limited. See a counselor.)

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

Successful completion of College Algebra or appropriate placement as defined by AB 705.

Student Learning Outcomes

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

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.

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Course Objectives

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

1. Find the derivatives of polynomial, rational, exponential, and logarithmic functions.
2. Find the derivatives of functions involving constants, sums, differences, products, quotients, and the chain rule.
3. Sketch the graph of functions using horizontal and vertical asymptotes, intercepts, and first and second derivatives to determine intervals where the function is increasing and decreasing, maximum and minimum values, intervals of concavity and points of inflection.
4. Analyze the marginal cost, profit and revenue when given the appropriate function.
5. Determine maxima and minima in optimization problems using the derivative.
6. Use derivatives to find rates of change and tangent lines.
7. Use calculus to analyze revenue, cost, and profit.
8. Find definite and indefinite integrals by using the general integral formulas, integration by substitution, and other integration techniques.
9. Use integration in business and economics applications.
10. Analyze functions of several variables.

Textbooks & Other Resources or Links

Required: Pearson Registration Instructions Course ID: nelipovich08154

Calculator: A scientific calculator is required. Graphing calculators are not allowed on exams.

Text: Pearson provides full access to the textbook. If you wish to have a hard copy:
Lial, Greenwell, Ritchey, 2022. Calculus with Applications, 12th edition. Pearson ISBN: 9780137342402

Course Requirements and Instructional Methods

Quizzes: Quizzes will predominantly be given in class. It is expected that you will remain in the classroom for the entire class period to complete the quiz. Quizzes may also be given on Canvas.

Exams: There will be three exams. The exams are to evaluate your understanding of the material. In other words, show me what you have learned! Every student is allowed one make-up test at the end of the semester. My strong recommendation is to not take any test for granted! This mindset may come back to "haunt" you.

Final Exam: A Comprehensive exam that ties all the concepts together.

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Course Grading Based on Course Objectives

Quizzes: In class and on Canvas……..10%

Exams: (three)……60%

Projects/Homework ……..5%

Final Exam……25%

A: 90% - 100% B: 80% to 89.4% C: 70% - 79.4% D: 60% - 69.4% F: 0 – 59%

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.

Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through ***DSPS***, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

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Course Policies

1. Form study groups.
2. Become a family.
3. Apply to be a part of our new MESA (Mathematics, Engineering and Science Achievement) center.
4. If you are not admitted to MESA (for not meeting the state defined qualifications), our MESA director provides a different acronym for you: (ASEM – Achievement in Science, Engineering and Mathematics) for you and you are all part of the same extended family.
5. Don't cheat.
6. Cell phones are only allowed for taking pictures of the work on the board. We will have a productive couple of hours with our math family. If you are on your cell phone excessively for purposes other than photos of the board, you will be kindly asked to take care of what you need to outside.
7. I do provide a break within an hour. Group work does not equal breaktime. It is expected that you remain in class and collaborate with your peers. Be responsible. Since you are being paid to be a student (you do not see the money), treat school like a job!

Other Course Information

1. During exams there are no restroom breaks.
2. There are no make-up tests. Every person in the class is provided the opportunity to show me what they didn't learn on a challenging test the last week of the semester (this will either be week 15 or 16.

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Makings SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

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.

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Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic
Week 1 August 11 - 15	Syllabus Chapter 1 and 2 Review
Week 2 August 18 - 22	3.1, 3.2 3.2, 3.3
Week 3 August 25 - 29	3.3, 3.4 3.4, 3.5
Week 4 Sept 1 - 5	Holiday 4.1, 4.2
Week 5 Sept 8 – 12	4.2, 4.3 4.3, Review
Week 6 Sept 15 – 19	Exam 1 4.4, 4.5
Week 7 Sept 22 – 26	5.1 5.2
Week 8 Sept 29 – Oct 3	5.3 5.4
Week 9 Oct 6 – 10	Chapter 5 Catch up 6.1, 6.2
Week 10 Oct 13 – 17	6.2, 6.3 6.3, 6.4
Week 11 Oct 20 – 24	6.4, 6.5 Review
Week 12 Oct 27 – 31	Exam 2 7.1, 7.2
Week 13 Nov 3 – 7	7.3, 7.4 7.5
Week 14 Nov 10 – 14	8.1, 8.2 8.3, 8.4
Week 15 Nov 17 – 21	Review Exam 3
Holiday Nov 24 – 28	
Week 16 Dec 1 - 5	Review Final Exam

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

Updated 11/2024