Basic Course Information

Semester:	**Spring 2026**	Instructor Name:	**Leobardo Rosales Jr**
Course Title & #:	**MATH 192: Analytic Geometry and Calc I**	Email:	**leobardo.rosales@imperial.edu**
CRN #:	**21288**	Webpage (optional):	**Refer to Canvas**
Classroom:	**2700-2721**	Office #:	**3900**
Class Dates:	**Feb 17-Jun 12/2026**	Office Hours:	**Fridays 9:30am-10:30am**
Class Days:	**F**	Office Phone #:	
Class Times:	8:00am-9:25am	Emergency Contact:	**Silvia Murray 760-355-6201**
Units:	4	Class Format/Modality:	Hybrid

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

Recommended textbook:

- Stewart, J., Clegg, D., Watson, S. . 2023. *Calculus: Early Transcendentals*. 9th Cengage Learning.
- ISBN: 978-1337613927

Course Requirements and Instructional Methods

This hybrid course will consist of lecture readings and videos, in-person classes on Fridays, and the following assessments:

- Assignments, due through Canvas.
- in-person Quizzes, administered on Fridays.
- online-Quizzes, due through Canvas.
- 3 Tests, administered on Friday March 13, April 17, and May 15, subject to change.
- A cumulative Final, administered on Friday, June 12.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a 16-week class. For this class that means approximately 12 hours of class and out-of-class time per week.

Course Grading Based on Course Objectives

Your grade will be computed as follows:

- Assignments 30%
- in-person Quizzes 20%
- online Quizzes 10%
- 3 Tests 20%
- Final 20%

The following grading scale will be used: 90% and above is an A, 80% and above is a B, 70% and above is a C, and 60% and above is a D. Below 59% is an F. The grading scale may be subject to change, depending on the performance of the class as a whole.

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.

Course Policies

1. The definition of an excused absence is one which is out of your immediate control. This can include but is not limited to illness, accident, and appointments set by official agencies. It does not include sleeping-in or forgetting about class.
2. If you do not attend the first **two** in-person classes, then I will drop you from the course. Send me an email if you must or have missed the first two in-person classes before 8am of the following day. You must also submit Assignment 0 by the end of **February 17**, or you will be dropped from the class.
3. Assignment due dates may be extended, or an Assignment may be excused due to an excused absence. Send me an email if you cannot or did not submit an Assignment due to an excused absence.
4. In-person Quizzes may be excused, or a replacement assessment may be given due to an excused absence. Send me an email if you cannot or did not take an in-person Quiz due to an excused absence.
5. Online Quiz due dates may be extended, or an online Quiz may be excused due to an excused absence. Send me an email if you cannot or did not take an online Quiz due to an excused absence.
6. If you miss a Test due to an excused absence, then your score for that Test will be replaced by your score for the next Test, or in case of Test 3 by the score on your Final. Send me an email if you cannot or did not take a Test due to an excused absence.
7. Attending the Final is absolutely mandatory. There is no make-up or replacement for the Final.
8. Except for the Final, replacement or make-up assessments may be given in special circumstances.
9. All general rules, including rules of etiquette, of Imperial Valley College apply.

The following are Academic Honesty policies.

1. You are encouraged to work closely on Assignments with other students. Assignments may be submitted in groups of up to three students. However, submitting photocopies of other people's work is strictly prohibited.
2. You are encouraged to work closely on the Quizzes with other students.
3. Tests are closed notes, closed friends and enemies. Electronic devices may not be used without prior approval.
4. The Final is closed notes, closed friends and enemies. Electronic devices may not be used without prior approval.

The first violation of these rules shall result in zero points for the assessment in question. The second violation shall result in an automatic fail for the course. Particularly egregious violations may result in further disciplinary measures.

Other Course Information

ADD POLICY: Students on the waitlist will be sent crash codes on February 17. If you are not on the waitlist and wish to add the course, then send me an email on February 18 after 8am to see if there is still space.

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.

Updated 11/2024

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

Module	Topic	Sections from the textbook
0	Course Orientation	
1 Feb 17 – Feb 22	Limits	2.1, 2.2
2 Feb 23 – Mar 1	Calculating Limits	2.2, 2.3
3 Mar 2 – Mar 8	Continuity	2.2, 2.4, 2.5
4 Mar 9 – Mar 15	Derivatives **Test 1 – Friday, March 13**	2.7
5 Mar 16 – Mar 22	Basic Derivative Formulas	2.8, 3.1, 3.2
6 Mar 23 – Mar 29	Intermediate Derivative Formulas	3.3, 3.4
7 Mar 30 – Apr 5	Advanced Derivative Formulas	3.5, 3.6, 3.9
8 Apr 13 – Apr 19	Limits Involving Infinity **Test 2 – Friday, April 17**	2.2, 2.6
9 Apr 20 – Apr 26	Limits Involving Indeterminate Forms	4.4
10 Apr 27 – May 3	More Limits, and Extremum Values	4.1, 4.3, 4.4
11 May 4 – May 10	Shapes of Graphs	4.3, 4.5, 4.6
12 May 11 – May 17	Tangent Lines **Test 3 – Friday, May 15**	3.10, 4.8
13 May 18 – May 24	Applications of Derivatives, and Antiderivatives	3.7, 3.8, 4.2, 4.7, 4.9, 5.4
14 May 25 – May 31	The Definite Integral	4.9, 5.1, 5.2, 5.4
15 Jun 1 – Jun 7	The Fundamental Theorem of Calculus	5.2, 5.3, 5.5
16 Jun 8 – Jun 12	**Final – Friday, June 12**	

Subject to change without prior notice