IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Spring 2025**	Instructor Name:	**Caroline Bennett**
Course Title & #:	**Math 192: Calculus I**	Email:	**caroline.bennett@imperial.edu**
CRN #:	**20540**	Webpage (optional):	**N/A**
Classroom:	**Bldg. 200, Room 206**	Office #:	**Bldg. 2700, Room 2765**
Class Dates:	**2/11/2025 – 6/05/2025**	Office Hours:	**Mon/Wed: 12:30 – 1 pm [Office 2765] 8:30 – 9 pm [Room 2728] Tues/Thurs: 12:00 – 1 pm [Office 2765]**
Class Days:	**Tues/Thurs**	Office Phone #:	**(760) 355 – 6124**
Class Times:	**6:00 – 8:30 pm**	Emergency Contact:	**(760) 355 – 6155**
Units:	**4.00**	Class Format/Modality:	**Face – to – Face**

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)

PREREQUISITE: 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. (ILO1, ILO2)

Textbooks & Other Resources or Links

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

Calculator: Only scientific calculators are permitted on exams. Graphing calculators are useful for homework, but they are not required for this course, and are not permitted during exams.

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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

Course Grading Based on Course Objectives

EVALUATION:

Classwork/Quizzes	50
Projects	50
3 exams × 100 points each	300
Final Exam (cumulative)	+ 200
	600

GRADING SCALE

540 – 600	A
480 – 539	B
420 – 479	C
360 – 419	D
Below 360	F

The grade that is earned, according to the point scale above, is the grade that will be received. Grades are not subjective. Grades are not negotiable. All students will be treated equally.

NOTE: The final exam in this course is cumulative and mandatory for all students.

NOTE: Grades are not posted on Canvas. You may inquire about your grade at any time.

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Course Requirements and Instructional Methods

PRACTICE PROBLEMS: Recommended practice problems will be listed for each section that we cover from the Stewart text (Canvas → Pages → View All Pages). This is your source of practice so that you can reinforce the concepts that we cover in class and master the skills necessary for the subsequent math courses you will be taking. *These practice problems are NOT collected for points; however, your performance on exams (and therefore your exam scores and overall course grade) depends directly upon how many problems you have practiced. In this sense, it WILL affect your grade.*

PROJECTS: The only collected homework will come in the form of Projects that will appear as typed problem sets in Canvas (Canvas → Files → Projects). A total of 2 – 3 Projects will be given over the summer session. You may work individually or in groups of up to 4 students on Projects.

CLASS WORK: Many class lecture periods will include work upon 1 – 2 problems from current or recent topics. Students are encouraged to work together, but work will be collected individually and awarded points based upon effort and/or accuracy (depending upon circumstances). These problems are frequently taken directly from the Stewart textbook.

A couple of notes about class work:

1. Class work time is your opportunity to practice the current topics, receive assistance from the instructor and/or embedded tutor (in addition to office hours and review session times), and learn from one another. This is a crucial part of the learning process. However…

    - Class work does NOT replace the need to practice problems from the textbook outside of class. Class work alone would be highly insufficient preparation for exams.

    - There may be classes in which we do not have time for class work. If we are falling behind in the material according to the Course Calendar, then some classes may have to be 100% lecture so that we may catch up.

2. **Make-Up Work:** After the beginning of the summer session, I do not take attendance. Instead, the collected class work is primarily about attendance and participation, and therefore it cannot be "made up". The point values are generally very minimal (2 – 4 points for each collected class work); therefore, if you do miss a couple of classes, this should <u>not</u> have a significant impact on your grade (therefore there is no need to email me and ask about making up class work). It is only when students habitually miss a lot of classes, that the points start to add up and have a significant impact. [*If you do have a true medical or personal emergency during the semester that causes you to miss a significant amount of class, then you will have much larger concerns than a few missing class points*].

QUIZZES: Some quizzes MAY occur throughout the spring semester. Quiz dates are NOT included in the Course Calendar as exam dates are, since quizzes are on a largely "as-needed" basis dependent upon the overall skill level and progress of the class, which differs each semester/summer session. [For example, if a large number of students are struggling in a particular section due to a prerequisite deficiency regarding a specific trig identity, then we may have a quiz with problems involving that trig identity, to encourage students to review and practice it.] If/when they take place, upcoming quizzes will be announced both in class and on Canvas.

EXAMS: There will be 3 regular exams at 100 points each. All exams are closed-book and closed-note. A scientific calculator MIGHT be allowed during exams (will be announced ahead of time for each exam). Absolutely NO graphing calculators and NO cell phones or other electronic devices may be used during any exams.

FINAL EXAM: The Final Exam is cumulative and mandatory for all students.

MAKE-UP EXAMS: Missing an exam should be a rare occurrence. However, each student has the opportunity to make up ONE missed exam in the event of a true emergency. This opportunity is the Universal Make-Up Exam, which takes place toward the end of the summer session (see Course Calendar for exam dates). Any student who misses a test will take the same Universal Make-Up Exam, regardless of which exam needs replacing. This Make-Up Exam will contain material from each of Exams 1 – 3.

Students who do NOT miss any of Exam 1 – 3 will have the option of either ignoring the Make-Up Exam with no penalty to their grade, or attempting the Make-Up Exam and replacing their lowest exam score if their lowest score is beaten. Please note that this option is only available for students who do not miss any of the regularly scheduled exams.

Course Policies

ATTENDANCE

• A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.

• Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped. Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

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ACADEMIC HONESTY:

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

• Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.

• Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service.

• The consequences of academic dishonesty are severe and may include the possibility of expulsion. For further information, refer to the Standards of Student Conduct on pp. 45-46 of the 2019-2020 General Catalog.

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.

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Other Course Information

Out-of-Class Commitment: 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 semester. The Western Association of Schools and Colleges (WASC) has adopted a similar requirement. Since Math 192 is a 4-unit class, **during a 16-week fall or spring semester, you should plan to spend a bare minimum of 8 – 10 hours per week** working on homework, studying, working with a tutor, etc., outside of class time, in order to achieve success.

The above-state guideline is for students with proficient prerequisite skills. If you have prerequisite deficiencies (lacking any necessary foundational skills from algebra, trigonometry, or precalculus), then you should be planning to commit at least an additional 2 – 4 hours per week acquiring these prerequisite skills, ON TOP of the 8 – 10 hours per week working on Math 192 skills.

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.

CANVAS LMS: Canvas is Imperial Valley College's Learning Management System. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.

IVC's services include, but are not limited to:

- Tutoring Labs
- Career Services Center
- Child Development Center
- Student Counseling and Health Services
- Military and Veteran Success Center
- Extended Opportunity Program and Services (EOPS)
- Disabled Student Programs and Services
- Student Equity & Achievement Program*
- Library Services and Information Literacy

***What if I cannot afford food, books, or need other help?**

The Student Equity & Achievement Program has many resources that are available to you. Please tell us what you need by submitting your request(s) here:

https://www.imperial.edu/legacy/students/assessment-center/

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Anticipated Class Schedule/Calendar

(**With the exception of the Final Exam, these dates are tentative and subject to change with or without prior notice!*)

Tuesday	Thursday	Weekly Goals
2/11 **First day of class**	2/13	2.1 – 2.2
2/18	2/20	2.3 – 2.5
2/25	2/27	2.5 – 2.8
3/4	3/6 **EXAM 1**	Catch up/review/exam
3/11	3/13	3.1 – 3.3
3/18	3/20	3.4 – 3.7
3/25	3/27	3.8 – 3.11
4/1	4/3 **EXAM 2**	Catch up/review/exam
4/8	4/10	4.1 – 4.3
4/15	4/17	4.4 – 4.6
4/22 **S P R I N G**	4/24 **B R E A K**	
4/29	5/1	4.7 – 4.9
5/6	5/8 **EXAM 3**	Catch up/review/exam
5/13	5/15	5.1 – 5.2
5/20	5/22 **MAKE-UP EXAM**	5.3 – 5.4
5/27	5/29	5.4 – 5.5
6/3	6/5 **FINAL EXAM**	Review, Final Exam

IMPORTANT DATES AND DEADLINES:

February 14	Holiday (Lincoln's birthday)
February 17	Holiday (Washington's birthday)
February 22	Last day to add class
	Last day to withdraw and be eligible for refund
April 20 – 27	Spring Break (no classes)
May 10	Last day to withdraw and receive a "W"
May 26	Holiday (Memorial Day)
June 4	Final Exam (comprehensive)

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☆ ☆ **GET TUTORING HELP WHEN YOU HAVE QUESTIONS** ☆ ☆

1

Our class's own **embedded tutor, Alonzo Perez,** will be holding free tutoring sessions for two hours each week (solely for students in our Math 192 class).

Tuesday/Thursday: **4:30 – 5:30 pm**

Location: **IVC Library**

2

The Learning Services Department is offering math tutoring both in person at the IVC Library and online through Zoom:
https://www.imperial.edu/students/learning-services/study-skills-center/

Or, simply click on **"IVC Tutoring"** from the menu on the left of our Math 192 Canvas page to their online tutoring. For both in-person and online tutoring, appointments are not necessary for "drop-in" sessions.

3

I will be holding office hours each week at the following days and times:

Monday/Wednesday:	12:30 – 1:00 pm	[Office: 2765]
	8:30 – 9:00 pm	[Room 2728]
Tuesday/Thursday:	12:00 – 1:00 pm	[Office: 2765]

Please note: Office hours are a time for additional questions, clarifications, further examples, etc., to supplement what was covered in class. Office hours are NOT to be used for repeating entire lectures for students who missed class. If you must be absent for any reason, it is your responsibility to catch up on whatever material you missed that day.

I do not provide copies of my lecture notes or videos for students who are absent; therefore, if you are absent, it will be necessary to catch up by obtaining lecture notes from a classmate, reading the textbook, and/or finding other resources to help you obtain the missed material.

"Never regard your study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spirit for your own personal joy and to the profit of the community to which your later work belongs."
-- Albert Einstein