

**MATH 192  
CALCULUS I  
Fall 2013**

**Class Location/Dates/Times:** Mondays and Wednesdays from 6:30 to 9:00 pm in room 2725

**CRN:** 10672

**Credit Hours:** 5 Lecture

**Instructor:** David Rosas

**Email:** [david.rosas@imperial.edu](mailto:david.rosas@imperial.edu)

**Prerequisites:** MATH 190 with a grade of "C" or better or appropriate placement.

**Office Hours:** None

**REQUIRED TEXTBOOKS AND ELECTRONIC RESOURCES**

Textbook: Calculus: Early Transcendentals, 7E by Stewart, Brooks/Cole Publisher.

A graphing calculator of some sort is a good resource; a scientific calculator will be enough.

**COURSE DESCRIPTION**

Concepts dealing with limits, continuity, differentiation and applications, integration and applications, exponential and logarithmic functions, and other transcendental functions will be covered.

**COURSE OBJECTIVES**

Through various activities and assessments:

1. The student will demonstrate skills in understanding the concept of limit and be knowledgeable in finding limits.
2. The student will demonstrate an understanding and a working knowledge of the derivative.
3. The student will demonstrate proficiency in problem solving when dealing with applications of differentiation.
4. The student will demonstrate knowledge in anti-differentiation.
5. The student will demonstrate an understanding and a working knowledge of the definite integral.
6. The student will demonstrate a thorough understanding of logarithmic and exponential functions, and their use in applications dealing primarily with growth and decay phenomena.
7. The students will demonstrate the ability to deal with trigonometric, inverse trigonometric and hyperbolic functions and many common applications thereof.

## STUDENT LEARNING OUTCOMES

By the end of this course, you will be able to:

1. Be able to use substitution to find the anti-derivative of a composite function. (ILO2)
2. Demonstrate ability to anti-differentiate simple functions (ILO2)
3. Be able to set up and solve optimization problems of a single variable. (ILO1, ILO2, ILO4)
4. Be able to compute limits for simple functions. (ILO2)
5. Be able to apply the chain rule for a function of a single variable. (ILO2)

## COURSE COMPONENTS

### ASSIGNMENTS AND LATE WORK POLICY

• There will be **practice exercises** assigned from every section we cover. These are not to be turned in, and will not count for points towards your grade. We will, however, devote some time during each week to answering questions regarding these exercises and I will quiz the key concepts. Some of the questions on tests and quizzes will come directly from these exercises; some will be variations of these exercises. It is in your best interest to work on these.

### TESTS

- There will be six (6) tests during the semester. Tests 1-5 will come at the end of those respective chapters (chapters 1-5) and will be worth 100 points each. Test 6 is the final exam and will be worth 200 points.
- **There will be no make-up exams.** If you miss an exam, the test will be recorded as a zero.

### *In-class group assignments*

- I will assign 10 sets of problems to be worked in groups and they will be due at the end of the class.

### GRADING POLICY

Your grade will be comprised of the following items:

10 In-class group assignments @ 10 points 100 points ~12.5%

5 tests @ 100 points each 500 points ~62.5%

1 final exam @ 200 points 200 points ~25.0%

*Total 800 points 100%*

Your final grade will be based on the following points and percentages:

90% to 100% 720-800 points A

## IVC POLICIES

80% to 89% 640-719 points B

70% to 79% 560-639 points C

60% to 69% 480-559 points D

Below 60% Below 480 points F

- Under IVC policy, students are expected to attend every session of class in which they are enrolled. If a student is unable to attend the course or must drop the course for any reason, it will be the responsibility of the student to withdraw from the course. I will not drop you from the course. If the student does not withdraw from the course and fails to complete the requirements of the course, the student will receive a failing grade.

- Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible.

The DSP&S office is located in Room 2117, in the Health Sciences Building.

Their phone number is (760) 355-6312.

- Student Responsibilities and Expectations: You are expected to attend class on a regular basis. Make sure you come to every class meeting. You will find it very hard to succeed in this class if you do not come to class regularly. Make sure that you read ahead in the textbook and that you work out the problems that I have assigned. Part of your work will be done in groups. You cannot learn mathematics without doing the problems. Math is like playing the piano; the more you practice, the better you get (as long as you're practicing correctly).

**TENTATIVE SCHEDULE**  
**WEEK DAY DATE SCHEDULE**

8-19 1.1	8-21 1.2 1.3
8-26 1.4 1.5	8-28 1.6 Recap on Chapter 1
9-2 Labor Day/No Classes	9-4 <b>Ch 1 Test</b>
9-9 2.1 2.2	9-11 2.3 2.4
9-16 2.5 2.6	9-18 2.7
9-23 2.8 Recap on Chapter 2	9-25 <b>Chapter 2 Test</b>

9-30 3.1 3.2	10-02 3.3 3.4
10-07 3.5 3.6	10-09 3.7 3.8
10-14 3.9 3.10	10-16 3.11 <i>Recap on Chapter 3</i>
10-21 <b>Chapter 3 Test</b>	10-23 4.1 4.2
10-28 4.3 4.4	10-30 4.5 4.6 4.7
11-04 4.7 4.8 4.9 Recap on Chapter 4	11-06 <b>Chapter 4 Test</b>
11-11 <b>Veteran's Day/ No Classes</b>	11-13 5.1 5.2
11-18 5.3 5.4	11-20 5.5 <i>Recap on Chapter 5</i>
11-25 <b>Chapter 5 Test</b>	11-27 <i>Catch up or review</i>
May 8  Review for Final Exam	May 10  <b>FINAL EXAM</b>