Math 194-Calculus II-Fall 2013

General Information

Name	Dr. Voldman	Textbook/Author	Calculus 7th edition by Stewart
Office	Room 2764	Chapters Covered	6,7, 8,9,10, and 11
Phone	355-6299	**Office Hours: MW 7:45-8:15, 10:00-10:30, TTH 9:00-10:00**	**Credit Units**: 5 Time: MWF 13:30-15:05 **CRN**: 10673
E-mail	alex.voldman@imperial.edu	IVC Prerequisite with C or b	Calculus I-Math 192

Grading Scale

90-100%	A	80-89%	B	70-79%	C	60-69%	D	0-59%	F

Grade Distribution

Homework	Project	Exams	Final
100 points	100 points	400 points	200 points

Project	**20%**
Homework	**10%**
Exams	**50%**
Final	**20%**

General Guidelines

1. Late work (homework, projects, etc) is not accepted	5. Bring your book, ruler to class every day
2. School policy: No food or beverages are allowed in the classroom	6. It is your responsibility to drop before the W deadline
3. Missed assignments are recorded as zeros	7. It is your responsibility to keep notes, syllabus, handouts
4. School policy: No children are allowed in the classroom	

Course Description:

Concepts dealing with integration applications, methods of integration, infinite series, plane analytic geometry, parametric equations and polar coordinates.

Course Objectives:

1. The student will demonstrate the ability to solve many problems in diverse areas, in a step-by-step manner, when dealing with applications of integration.
2. The student will demonstrate knowledge and understanding of various methods used in mathematical integrations.
3. The student will be introduced to various indeterminate forms and be able to evaluate improper integrals.
4. The student will recognize infinite sequences and infinite series and will apply various tests for convergence determination.
5. The student will demonstrate knowledge in series expansion and the concept of power series.
6. The student will learn and distinguish the various types of conic sections.
7. The student will demonstrate knowledge of the polar system of coordinates and its use in applications.

Student Learning Outcomes:
Demonstrate understanding of various techniques of integration
Demonstrate ability to solve applications of integration.
Demonstrate ability to apply various tests for convergence determination.
Distinguish the various types of conic sections
Use parametric equations and polar coordinates.

Attendance and Absences:
If you are 5 minutes late you will be marked absent. Do not make doctor, counseling, or any appointments during class time. Leaving during lecture will be considered an unexcused absence. If you have to leave anytime during class, other than established break times, you must inform your instructor. After the third unexcused absence, you will be dropped from the class. In other cases, it is your responsibility to drop yourself before the withdrawal deadline. Disruptive and inconsiderate behavior will not be tolerated! Roll will be taken at the beginning/ end of the class.

Cheating and Plagiarism
Dishonesty in the classroom is considered a very serious offense. Any form of cheating, turning in work which is not one's own (plagiarism), is grounds for disciplinary action. The consequences of these actions are severe and may include the possibility of expulsion.

Silence pagers and cell phones. Use of cell phones in the class room will not be permitted; you should not bring one into the classroom unless the ringer is turned OFF.

Project
Purpose: To introduce technology (MATLAB)
Place to work on the project: MATHLAB (Building 2500)
No late project will be accepted!

Midterms
Purpose: To evaluate your understanding of the material covered in the course.

Final Exam (comprehensive)

Learning Resources
1. Me: Office Hours, just walk-in and get help. Appointment hours; you must give at least one day advance notice
2. Tutorial services: Library, Vocational Education Building Room 1701
3. Study Guides: The bookstore has textbooks for sale
 Any student with a documented disability who may need educational accommodations should notify the instructor or DSPS office as soon as possible (DSP&S, Room 2117, Health Sciences Building, (760) 355-6312

Schedule

Week 1
Area between curves (6.1)
Computing Volume of a Solid (Disk Method without Cavities) (6.2)
Week 2
Computing Volume of a Solid (Disk Method with Cavities) (6.2)
Computing Volume of a Solid (Method of Cylindrical Shells) (6.3)
Week 3
Monday-Holiday

Computing Volume of a Solid (Method of Cylindrical Shells) (6.3)
Applications of Integration: Work (6.4)
Exam I-Friday
Week 4
Review of integration techniques and integration by parts (7.1)
Trigonometric techniques of integration (7.2)
Week 5
Trigonometric techniques of integration (7.3)
Integration of rational functions using partial fractions (7.4-7.5)
Week 6
Improper integrals (7.8)
Exam II-Friday
Week 7
Sequences of real numbers (11.1)
Infinite series (11.2)
Week 8
The Integral Test and Comparison Tests (11.3-11.4)
Week 9
Alternating series and Ratio Test (11.5-11.7)
Week 10
Power series and representations of functions as power series (11.8-11.9)
Week 11
Taylor and Maclaurin series (11.10)
Exam III-Friday
Week 12
Plane curves and parametric equations (10.1)
Calculus with parametric curves (10.2)
Week 13
Monday-Holiday
Polar coordinates (10.3)
Week 14
 Calculus of polar coordinates (10.4)
Week 15
Conic sections in rectangular and polar coordinates (10.5-10.6)
Exam IV-Friday
Week 16
Final

Note: I reserve the right to change this schedule with notification to students