Math 194-Calculus II-Spring 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 7:00-7:30, TTH 2:00-3:30**	**Credit Units**: 5 Time: MW 12:55-3:25 **CRN**: 20242
E-mail	alex.voldman@imperial.edu	IVC Prerequisite with C or better	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**	**200 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.

SLO:

Demonstrate understanding of various techniques of integration
Demonstrate ability to solve applications of integrations
Demonstrate ability to apply various tests for convergence determination
Be able to distinguish the various types of conic sections
Demonstrate knowledge of the polar system of 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!

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 and Class work

Purpose: To introduce technology (MATLAB)
Place to work on the project: MATHLAB (Building 2500)

-No late project or class work 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-Spring 2013

Week 1
Area between curves
Computing Volume of a Solid (Disk Method without Cavities)
Week 2
Holiday-Monday
Computing Volume of a Solid (Disk Method with Cavities)
Week 3
Computing Volume of a Solid (Method of Cylindrical Shells)
Applications of Integration: Work
Week 4
Review of integration techniques and integration by parts
Trigonometric techniques of integration
Week 5
Integration of rational functions using partial fractions
Improper integrals
Week 6
Holiday-Monday
Sequences of real numbers
Week 7
Infinite series
Exam I-Wednesday
Week 8
The Integral Test and Comparison Tests
Alternating series and Ratio Test
Week 9
Power series and representations of functions as power series
Taylor and Maclaurin series
Week 10
Modeling with differential equations, direction fields
Separable equations
Models for population growth
Week 11

Linear equations
Predator-Prey Systems
Week 12
Plane curves and parametric equations
Calculus with parametric curves
Week 13
Polar coordinates
Calculus of polar coordinates
Week 14
Conic sections in rectangular and polar coordinates
Exam II-Wednesday
Week 15
Review
Week 16
Final