MATH 221: Calculus II
Fall 2010
Syllabus and Course Information

Meeting Time:	MWF 1:10 – 2:00, R 1:00 – 1:50, MRC 444		
Instructor:	Dr. Sheldon Lee	**Office**:	RC 213
Phone:	796-3658	**Email**:	SHLEE@viterbo.edu
Office hours:	**Mon** 10 – 11, 2 – 3, **Tues** 12 – 3, **Wed** 10 – 11, **Thurs** 2 – 4		

Catalog Course Description: The integral, Fundamental Theorem of Calculus, applications of integration, methods of integration. Parametric and polar functions. Area, volume, arc length, surface area. Prerequisite: C or higher in 220. G9

Text: *Calculus: Concepts and Contexts*, 4th Edition, by James Stewart.

Course Content
We will cover the following material from the text:

Chapter 5	Integrals
Chapter 6	Applications of Integration
Chapter 7	Differential Equations
Chapter 8	Infinite Sequences and Series

Graded item		**Grading**	
Participation and attendance	10%	90% and above	A,
Three midterm exams	45% total	80 – 89%	B
Assignments and quizzes	25% total	70 – 79%	C
Comprehensive Final Exam	20% (Friday 7:40 – 9:40)	60 – 69%	D

Quizzes and assignments
Quizzes will be held on a weekly basis. These are to be held at the beginning of class – they will typically be closed book, closed notes. Assignments consist of homework, group assignments, labs, writing assignments, and projects. Homework will be collected on a regular basis – generally every class period. It is rarely much of a problem at the level of a calculus course, but it remains important that students turn in work in a timely manner, so that they do not get behind. Consequently, LATE ASSIGNMENTS will be penalized 20% of the possible points for each class period late, up to a maximum of three periods. If you cannot be in class, you can place your solutions under my door before the time they are due. Of all the homework, quiz, and group assignment scores, the lowest three will be dropped. For this reason, no make-up quizzes or group assignments will be allowed even if you have a valid reason or let me know ahead of time. Labs and writing assignments will also be given throughout the semester. For these, you will typically be given one or two weeks to complete the assignment, and you will be able to work with another person. These assignments are worth more than the regular homework assignments and quizzes, and the grades cannot be dropped.

My teaching style includes discussion and question-answering. When we cover a section, the assignment will typically be due two class periods after the lecture. I plan to answer questions on the assignment on the day between the lecture and the due date.

As a rule of thumb, university students should expect to put in about TWO HOURS of study outside the classroom for every hour in the classroom. I know many students do not do this, but if you want to be successful here you should try to map out something like 8 (EIGHT) hours per week to study mathematics.

Exams
I will do my best to write tests to assess your understanding of the material covered. For some exams, I may curve the grade in your favor. A single side of a sheet of notes and a calculator are usually allowed for exams. The sheet of notes typically cannot include worked out example problems. All tests must be taken in the regular classroom at the scheduled times. I will replace your lowest test score with your final exam score if it is better. If your final exam score is lower than all four regular tests, then no adjustments will be made. The final exam will be held on Friday, December 17, from 7:40 – 9:40 a.m. This exam must be taken at this time unless approved in writing by the Dean.

Participation and attendance
I will count actively participating in class as 10% of your grade. During class I will often give problems for you to work on in groups. I may also at times ask students to present problems on the board to the class.

Cheating The first occurrence will result in a zero being recorded; the second will earn the student an F in the course.

Where to get help
Since this is mathematics, you will probably get stuck often. Don't panic, this is all part of the learning process. You will likely need a support group which may include other students or tutors. The Learning Center has tutors available and is located in MRC 332. I also encourage you to make use of my office hours – please feel free to stop by any time!

Course Goals and Objectives
Because this course may be taken as part of the General Education requirements, the specific General Education Core Abilities are listed:

(a) Thinking: Students engage in the process of inquiry and problem solving.
- Review differential Calculus.
- Understand the definite integral and the fundamental theorem of calculus.
- Understand indefinite and improper integrals.
- Apply techniques of integration to solve integrals.
- Use definite integrals to solve problems related to areas, volume, arc length, and miscellaneous problems in the sciences.
- Model phenomena in the sciences using differential equations.
- Solve basic differential equations numerically and algebraically.
- Understand sequences and series, and the concept of convergence.
- Learn the convergence tests for series.
- Explore the power series or Taylor series for a function, and their uses.

(b) Ethical Decision Making: Students respond to ethical issues, using informed value systems.
- Understand how academic honesty in mathematics requires deductive reasoning.
- Students honestly challenge themselves to understand the material.
- Practice academic honesty in mastering the material for the course on one's own without cheating.

(c) Communication: Students speak and write to suit varied purposes, audiences, disciplines, and contexts.
- Communicate solutions to problems in writing on assignments, quizzes, and exams, using appropriate mathematical language and format.
- Give oral presentations on mathematical concepts.
- Read text and reference materials outside of class.
- Actively listen and interact with the instructor and other students during course lectures.
- Use calculators to solve problems and communicate solutions.

Americans with Disabilities Act (ADA):
If you have a diagnosed disability and require services or accommodations for this class, please inform me and Jane Eddy, the disabilities (ADA) coordinator (MRC 332; 796-3194) within 10 days to discuss your needs