Fall 2011 Math 273
Multi-variable Calculus 2
8:00 - 8:50 M-F in Bouillon 102
occasional Tuesdays in Bouillon 103

Instructor: Dr. Jim Bisgard
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Office Hours: MTThF 10:00 - 10:50, W 9:00 - 10:00 and by appointment.

Course Goals: Math 273 is a second course in multi-variable calculus, and the main object of study is multi-variable integration. You will learn how to set up and evaluate double and triple integrals in various coordinate systems (rectangular, polar, cylindrical and spherical), as well as how to use analogues of the fundamental theorem of calculus (Stokes' theorem and the divergence theorem) to calculate such integrals. In addition, you will learn about some applications of double and triple integrals, such as center of mass, moments of inertia and flux. In terms of book chapters, we will "only" be covering Chapters 15 and 16. If time permits, we may also spend some time on proofs.

Occasionally, we will be using the computer lab in Bouillon 103. I will announce these lab days ahead of time, and I'll try to put a note up on the regular class door to remind you if you forget.

Required Text: Thomas' Calculus: Early Transcendentals 11^{th} ed.; Addison Wesley

1 Grades/Exams/Homework

Grades

Grades will be calculated using the following weighting system: Quizzes: 40%; Homework: 5%; Exams: 55% total, broken up as follows: 15% for each mid-term and 25% for the final and the following scale:

	$87-89.9: B+$	$77-79.9: C+$	$67-69.9: D+$	below $60: F$
$93-100: A$	$83-86.9: B$	$73-76.9: C$	$63-66.9: D$	
$90-92.9: A-$	$80-82.9: B-$	$70-72.9: C-$	$60-62.9: D-$	

Quizzes

We will have a take-home quiz every week, except for those weeks when we have an exam. **Each quiz will be due at noon two days after being handed out**. (So, a quiz you get on Tuesday will be due at noon on Thursday). I encourage you to work with other students, but you should write up your solutions in your own words.

Homework

Almost every day in class, you will receive a few homework problems. Problems assigned on a Wednesday or later will be due on the Friday of the following week **at noon**. (For example, the problems from September 21, 22, 23, 26 and 27 will all be due on Friday September 30.) I will be assigning odd problems from the book and will grade on completion only. This means I'll be most interested in the work you've done - if you just write down an answer, you won't receive any points. It is a good idea to work with other students from class. We won't have time to do every homework problem in class, so please feel free to ask during office hours. However, don't put off asking about homework until the day before it's due!

Late and Make-up Policy for Homework and Quizzes

I will accept **TWO** late homeworks **OR** quizzes (but not both!) for full credit. However, this homework or quiz must be turned in within two class days of the due date. After that, I will not accept any late work.

Exams

There will be three exams: two mid-terms and a final. The first mid-term will be on Wednesday, October 12, the second mid-term will be Wednesday, November 2 and the Final Exam will be on Friday, December 9. The Final Exam will be cumulative, and **CANNOT** be taken early! **DO NOT plan on taking your final early**. If you miss an exam, you can take a make-up, but only if you have proof of a compelling reason for having missed the exam and notify me before (if possible) or within 24 hours after an exam to get a make-up. I will not give make-ups for circumstances you know about ahead of time! When a make-up exam cannot be taken before I return the corrected exam, I reserve the right to instead replace that portion of your course grade with your final exam grade.

Expectation for Quizzes and Exams

Your quizzes and exams should be written up neatly and legibly, using complete sentences where appropriate. (For example, I don't expect you to write $(a+b)^2 = a^2 + 2ab + b^2$ using complete sentences!) In addition, you should always try and describe what you are doing. For example, if you are calculating a flux, you might first write: "we first parametrize the curve by [mathematical formulas] . . . "

We have a great deal of material to cover in a quarter. As a result, the pace of the class will be very fast, and it may not always be possible to answer every question in class. If you have a question that we weren't able to get to in class, please come by office hours or email me to set up an appointment if you can't make office hours. Please remember: when you come to office hours, **bring your notes**.

2 Important Dates

September 27 - Last Day for Add/Drop
October 12 - first mid-term exam
November 2 - second mid-term exam
November 4 - uncontested withdrawal deadline
December 9 - final exam (8:00 - 10:00 a.m.)

3 Legalese/Fine Print

Students with disabilities who wish to set up academic adjustments in this class should give me a copy of their "Confirmation of Eligibility for Academic Adjustments" from the Disability Support Services Office as soon as possible so we can discuss how the approved adjustments will be implemented in this class. Students without this form should contact the Disability Support Services Office, Bouillon 205 or dssrecept@cwu.edu or 963-2171.