Math 236 – Multivariable Calculus – Course Policies

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OFFICE HOURS:	Posted on webpage **And by appointment** (Really!)
TEXT:	*Multivariable Calculus, Early Transcendental Functions, Third Edition* by Smith and Minton

Overview

This course is a continuation of the topics covered in Calculus I and Calculus II. As you may expect, in Multivariable Calculus we'll be studying functions of more than one variable which will allow us to model surfaces, curves, and situations in 3-space (and higher dimensions!) This will make our models not only much more realistic, but also more complicated, and much more interesting, at the same time. The specific topics we'll cover are listed on the syllabus on the course web page.

Course Goals and Expectations

Two of the goals of this course are that you learn to read a math text and that you learn to communicate mathematics with other students. Mathematics is a very personal discipline that is best learned by *doing* rather than by observing.

Therefore, the class will be structured with some lectures to emphasize particular topics, but much of the time will be spent on in-class work. You will have a reading assignment for nearly every class meeting, and it is **extremely** important that you complete the reading before the next class meeting! The class meetings are not intended to be a complete encapsulation of the course material, but instead will focus on the major concepts from the reading and clarifying the more subtle ideas in the course.

You should expect to put in approximately 3 hours outside of class for each hour in class. There will be some weeks where you spend more time (e.g. working on projects or preparing for exams), and there may be some weeks where you do not spend the full 9 hours.

Evaluation

Your final grade will be determined by

Two Exams	30%
Comprehensive Final Exam	15%
Three Major Projects	25%
Homework	25%
Reading Assignments	5%

The Honor Code

Remember that we are operating under the Honor Code for all of your academic work while you are at Wheaton, and I take this quite seriously. This carries freedoms and responsibilities for both you as students and me as the professor. The best approach is to avoid any situation where there is a temptation to violate the Honor Code. Or if you find yourself in such a position, you should remove yourself from it.

Remember that you should write out, and sign, the following statement on all course work:

"I have abided by the Wheaton College Honor Code in this work."

Working with Other Students

Many of the assignments this term will be group assignments where you will work in groups of two or three (of your choosing). Each assignment will receive a grade, and the group will determine how the points are allocated to each member. For example, if a group of three receives an 85 on an assignment, then the group will have $3 \times 85 = 255$ points to distribute among them. I will be available to mediate this process, if necessary.

Reading Assignments

I will put a copy of each reading assignment on the course homepage. Each assignment will have two or three questions that you should be able to answer after you have read the section. See the *Guidelines for Submitting Reading Assignments* and *Suggestions for Reading a Math Book* on the course web page for more information.

Projects

There will be two group projects and one individual project assigned during the semester. You will have one class period to work together on each group project, and your written report will be due a week or so later. See the syllabus on the course webpage for specific dates.

One of the main goals of the projects is that you learn to communicate mathematics *precisely*, both verbally with your group and in writing. The reports should be written in complete sentences explaining the results and major ideas involved. You may divide the writing of the report in whatever way is agreeable to the group, but everyone should completely understand the whole of the paper. Further, each member should proofread the entire paper for consistency and typos. I will give you a handout that explains my expectations for the written reports in more detail.

Exams

On each of the two exams, there will be an inclass portion worth 15–20% of the exam and a more substantial takehome part comprising the remainder. The Final Exam will be comprehensive and most likely will be entirely takehome. See the syllabus on the course web page for the dates of the exams.

Homework

Homework will be collected most Fridays. Each assignment will be divided into two groups: Basic Exercises and Focus Exercises. The Basic Exercises are ones that you should generally do first to make sure that you understand the techniques and concepts of the section. These exercises will generally be odd so that you can verify your answers. *I will not collect the Basic Exercises.* There will be four or five Focus Exercises in each assignment that I will collect and grade fairly strictly. Each problem will be receive a score between 0 and 5, and I will give you solutions to the entire assignment.

The homework assignments will vary between Individual assignments and Group assignments. For the Group assignments, each group will turn in one paper. For the Individual assignments, I encourage you to discuss the assignment with other students, but you must turn in a separate paper that represents your own work. If you do work with someone else on an assignment, you should indicate that in a note on the top of your paper.

I have very high expectations for the presentation of the Focus Exercises. **If you do not follow the following guidelines, I reserve the right to return your homework ungraded!** I am not being unnecessarily annoying about this. The process of carefully organizing your homework will help you better understand the course material.

- Do not turn in your first attempt at the exercises. Expect to recopy every Focus Exercise to organize your solution and clarify your thought process.

- Your writing must be clear and legible.

- Your homework should be well-written, using complete sentences to justify your results where necessary. *A list of answers without explanation is not acceptable.*

- Here is a good rule of thumb to follow when writing up your homework:

    Write your solutions so that you could hand them to another student in the class and she could understand your explanation.

- If you write in pen, there should be no scratch-outs.

- Do not turn in paper torn from a spiral notebook with ragged edges. Scissors are a mature technology that you can use to solve this problem.

- Clearly label each problem.

The assignments can be time-consuming, so you should definitely plan to start early and to take advantage of my office hours. The homework is due in my office by 1:30 on Friday. Be aware that

> **Late homework is not accepted!! No exceptions!!**

Class Attendance
Although class attendance is not a specified percentage of your grade, I will keep a class roll to help me determine borderline grades at the end of the semester. If you do miss class, you are responsible for the material that was covered.

Getting Help
Please come see me during my office hours! If you have a conflict and cannot make my office hours, please call or email me and we can set up an appointment for another time.