

# MATH 214 - 04

## Calculus of Several Variables

### Syllabus - Winter 2007

**Professor:** Michael Dorff

**Office:** 281 TMCB

**Office Phone:** 422-1752

**Email:** mdorff@math.byu.edu

**Office Hours:** MWF 1:30-2:00pm; TTh 2:30-3:00pm

**Text:** *Calculus*, 4th ed., by Garner

**Course Meeting:** MWF 2:00-2:50pm in 116 TMCB

**Course Objective:** In this course, you will learn how to generalize the techniques and ideas of Calculus I and II to functions of more than one variable.

**Homework:** Homework will be assigned every day the class meets. I encourage you to work with other students in the class by discussing these problems. However, the assignment that you hand in should be your own work; i.e., when you write up a problem you should not look at anyone else's work (copying does constitute cheating!). These assignments are due the day of the next class meeting by 6 pm. No late work will be accepted. Please place completed homework in the manilla folder titled "Math 214 Homework" by my office door. Homework will be scaled to be worth a total of 150 points.

**Exams:** There will be 3 exams, each worth 100 points, and the final exam, which is worth 150 points. These exams will consist of both skill problems and concept problems.

Wed-Fri Feb 7 - 9	Exam 1 in the testing center
Wed-Fri Mar 7 - 9	Exam 2 in the testing center
Wed-Fri Apr 4 - 6	Exam 3 in the testing center
Tue Apr 24 11am-2pm	Final Exam in 116 TMCB

**Grading:** Letter grades will be assigned as follows:

	B+	= 89-87%,	C+	= 79-77%,	D+	= 69-67%,		
A	= 100-93%	B	= 86-83%,	C	= 76-73%,	D	= 66-63%,	E = 59-0%.
A-	= 92-90%	B-	= 82-80%,	C-	= 72-70%,	D-	= 62-60%,	

#### Miscellaneous:

**Preventing Sexual Harassment:** BYU's policy against sexual harassment extends not only to employees of the university but to students as well. If you encounter sexual harassment, gender-based discrimination, or other inappropriate behavior, please talk to your professor, contact the Equal Employment Office at 378-5895, or contact the Honor Code Office at 378-2847.

**Students with Disabilities:** BYU is committed to providing reasonable accommodation to qualified persons with disabilities. If you have any disability that may adversely affect your success in this course, please contact the Services for Students with Disabilities Office at 378-2767. Services deemed appropriate will be coordinated with the student and instructor by that office.

## Differences Between High School Learning and University Learning: <sup>1</sup>

1. You are no longer in high school. The great majority of you, not having done so already, will have to discard high school notions of teaching and learning and replace them by university-level notions. This may be difficult, but it must happen sooner or later, so sooner is better. **Our goal is more than just getting you to reproduce what was told to you in the classroom.**
2. Expect to have material covered at *two to three* times the pace of high school. Above that, we aim for greater command of the material, especially **the ability to apply what you have learned to new situations.**
3. Lecture time is at a premium, so it must be used efficiently. You cannot be “taught” everything in the classroom. **It is your responsibility to learn the material.** Most of this learning must take place *outside* the classroom. You should be willing to put in two hours outside the classroom for each hour of class.
4. **The instructor’s primary job is primarily . . . to guide you** in doing your learning of the concepts and methods that comprise the material of the course. It is not to “program” you with isolated facts and problem types nor to monitor your progress.
5. You are expected to read the textbook for comprehension. It gives the detailed account of the material of the course. It also contains many examples of problems worked out, and these should be used to supplement those you see in the lecture. The textbook is not a novel, so the reading must often be slow-going and careful. However, there is a clear advantage that you can read it at your own pace. use pencil and paper to work through the material and to fill in omitted steps. **Read for the first time the appropriate section(s) of the book before the material is presented in lecture.** That is, come prepared for class. Then the faster-paced college-style lecture will make more sense.

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<sup>1</sup>The following is quoted word-for-word from an article, *Teaching at the University Level*, by Steven Zucker in the Notices of the American Mathematical Society, August 1996, pp. 863-865.