Math 235 Policy Information — Fall 2012

Instructor:	Dr. Laura Taalman	*Office:*	Roop 123, 568-3355	*Text:*	540-246-3185
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Logistics

Class Times: MWF 10:10-11:00 and Tues 9:30-10:45 in Roop 213

Office hours: MWF 1:30-3:00 (call 568-3355 first) or by appointment, Roop 123.

Textbook: *Taalman/Kohn Calculus*, 2012-13 Edition, at the JMU bookstore.

Quizzes will be on the following Fridays: 8/31, 9/7, 9/21, 10/5, 10/19, 11/2, 11/16, 11/30.

Midterm Exam: Friday, November 2.

Final Exam: Wednesday, December 12, 8:00-10:00 am.

Goals of the Course

To learn differential calculus and basic integral calculus from both calculational and theoretical perspectives. And more importantly, to learn how to understand formal systems, build a theory from the ground up, and solve problems in that universe.

Grades

Your grade for this course will be determined by (in order of importance):

- a 2-hour cumulative final exam;
- a midterm exam;
- six biweekly quizzes;
- daily reading quizzes;
- your participation in class; and
- extra credit from colloquia and SUMS writeups.

At the end of this course you will get the grade that you earn based on your level of performance and understanding. I do not use a predetermined scale. Your grades will not be on Blackboard and it will not be possible for you to approximate your grade numerically throughout the semester. I am happy to discuss your performance in the class with you at any time. Your final course grade will be determined from your performance levels, statistical methods, the class average, and historical class averages. I reserve the right to decide borderline grades based on factors such as participation, effort, and improvement.

Homework

The most important thing you can do to get a good grade in this course isn't on the list of things that numerically determines your grade: it is doing homework. Lots of it. Every day. I won't be collecting your homework, since you will be doing it for yourself, not for me. You will put all of your homework into a Notebook that you will be able to use on some quizzes and exams. You are responsible for all of the exercises in the textbook, except those that I announce as being "off the table." You should do as much or as little as you need to in order to understand the material and perform well on quizzes and tests, which will be largely based on homework exercises.

Why No Lectures?

This will be an active-learning class and I will do only a minimal amount of formal lecturing. A major goal of this class is for you to learn to communicate mathematics effectively and confidently,

and you will learn that best by doing it yourselves every day. Class will have a discussion-based atmosphere, sometimes within groups and sometimes as a whole class. My job is to help you learn how to learn mathematics yourselves.

Reading Before Class

You are expected to read each section before class, and come to class prepared to take a reading quiz and answer questions. Reading a math book is not like reading a novel; you may have to read some passages multiple times, take notes, and work carefully through examples. The reading quizzes add up over time and are a part of your final grade, so come prepared.

Working in Groups

I strongly encourage you to meet regularly with your groups and with other students outside of class. Students who attend regular study/homework groups tend to do better on quizzes and tests, and thus in the course as a whole. You will be independently deciding how much homework to put into your Notebooks, and a group atmosphere can motivate you to do more work than you might do if you attempted it stuck in your room by yourself. There is blackboard space in Roop 119 and Roop 103 and in many other places on campus, including study and group working spaces in the libraries. Discussing mathematics out loud will significantly increase your understanding. We will attempt to keep the same groups all semester. However, if you have a serious problem with your group then you should let me know.

Absences

You do not need to notify me about missing non-quiz class days. If you miss class it is your responsibility to get notes and announcements from your partner or another classmate. Daily quizzes cannot be made up, but missing one or two will not hurt your grade, as I will be dropping the lowest three daily quizzes. If you will be absent for a prolonged period of time then you should let me know, and provide documentation.

You must be in class each quiz day, beginning at the start of the class period. **I do not give make-up quizzes or tests but in some circumstances I may be able to "excuse" you from a quiz or a test.** If you have a problem with attending on a quiz or test day you must notify me in advance and request accommodation. If an emergency causes you to miss a quiz or an test, you should contact me and explain your situation. My sympathy with your plight will be partially determined by how much effort you put into quickly contacting me.

Technology

Calculators will not be allowed on any quizzes or exams. For work done outside of class I suggest that you check your answers with a graphing calculator or computer program. Any Texas Instruments graphing calculator is probably fine, as are many others. A better (and free!) alternative is the website `www.wolframalpha.com`, which is an online tool that can do much more than a standard graphing calculator, including symbolic differentiation and integration, with steps explained. Cell phones may not be used as calculators or clocks or in any capacity during tests or class.

Facebook

There is a Facebook group for this course called *Math 235 Fall 2012*. Membership in this group is optional and it is not required to be "Facebook friends" with me or anyone in the course in order to be part of this group. The purpose of this group is to provide a forum where you can set up study groups with other students, even those you do not currently know (examples: "I'll be at the library at 9pm studying trig if anyone wants to join me" or "help! trig is killing me! anyone else in the same boat want to meet at the Learning Center this afternoon?"). We will also use the Facebook group to post pictures of blackboard work from class, and I will post comments and answer questions about that work periodically.

Honor Code

I completely support and encourage working together in groups on homework assignments outside of class. Having said that, I take the Honor Code very seriously, so you should know the difference between collaboration and academic dishonesty. This is sometimes a subtle distinction and it can vary from classroom to classroom. For example, in my class it is *not* cheating to work together and each write up your own answers in your Notebooks. On the other hand, it *would* be considered cheating for you to copy problems into your Notebook from a friend the night before an exam, or to hide old exams or printouts in your Notebook without writing them in your own hand. In my class it would *not* be considered cheating to consult `www.wolframalpha.com` to help figure out how to solve a problem and to put that in your Notebook, because in my class homework is just a learning tool and is not collected for a grade. Of course, it *would* be considered cheating for one group to help another during a quiz, or for one group to eavesdrop on another during a quiz to get answers, or for a student to look at another student's test paper, or for a student to gain information about exam problems in advance. Any instances of suspected cheating or academic dishonesty will be referred to the JMU Honor Board for investigation.

Getting Help

The Science/Math Learning Center in Roop 200 is open 10–8 MTuWTh, 10–2 F, and 5–8 pm Sat. The SMLC should be your first line of defense when working out homework problems. Many students just choose to do their homework in the SMLC all the time, so that help is always available when they need it.

I also encourage you to ask me questions by instant message or email at any time, and to visit me during my office hours or by appointment. I can usually respond quickly to IM and email. I almost never check my office phone voicemail, but that phone number is a good tool to check if I am in my office if you are thinking of stopping by outside of my office hours.

Who am I?

I went to college at the University of Chicago, got my Ph.D. in mathematics at Duke University, and then came to JMU to work in 2000. For my research I've studied algebraic geometry, knot theory, and the mathematics of games and puzzles such as Sudoku. I'm married, have a 7-year-old son, love to play Minecraft, and can beat you at MarioKart Wii.

Who are you?

I have a problem recognizing people, especially when they are out of context (for example, if you switch seats in class, come to my office hours, or run into me at the grocery store). When you see me outside of the classroom, please remind me of your name and what class you are in. And please do not be insulted if it takes me a long time to be able to recognize you or remember your name! For more information see `www.geekhaus.com/faceblind`.

Official JMU Syllabus Information

This course covers differential and integral calculus of functions of one variable. The goals of the course include developing an understanding of limits, continuity, differentiation, derivative applications, and integration, from both theoretical and calculational perspectives. For additional information, please see `www.jmu.edu/syllabus`.