

## Calculus With Functions II

MATH 232

### Location.

**Section 01.** MWF 9:05 am - 9:55 am in 213 Roop and Th 9:30 am - 10:45 am in 033 Burruss.

**Section 02.** MWF 12:20 pm - 1:10 pm in 105 Roop and Th 12:30 pm - 1:45 pm in 033 Burruss.

**Professor.** Leonard Van Wyk (rhymes with "bike"), 124 Roop Hall, ×8-2514, [vanwykla@jmu.edu](mailto:vanwykla@jmu.edu).

**Text.** *Integrated Calculus*, by Laura Taalman.

**Office Hours.** MWF 10:10 am - 11:00 am, Th 2:00 pm - 3:15 pm, and by appointment.

**Course Web Page.** [www.math.jmu.edu/~vanwyk/courses/232/](http://www.math.jmu.edu/~vanwyk/courses/232/) contains announcements, sections covered to date, homework assigned, etc.

**Material.** We will cover most of Chapters 7–15. This book was written in a readable fashion, and I expect you to read it. In particular, *do not assume that exams will only consist of things I talked about in class*. There may be some things in the book that I did not have time to cover during class that I will expect you to know.

**Goals and Objectives.** Through the study of the topics above, students will

- Develop a basic understanding of both the logical structure and the style of mathematics.
- Develop problem-solving techniques.
- Develop an ability to transfer their knowledge to analogous situations.
- Develop computational skills, including both standard precalculus and first-semester calculus skills.
- Develop an understanding of the theory of calculus.
- Develop theorem-proving techniques.

**Homework.** Selected homework problems will be assigned during each class. These will not be collected, but are designed to help you study for the exams and written quizzes. I will answer questions on these problems in class. The purpose of the homework is to give you chosen problems on which you can test your understanding of the material. Many of these problems will reappear on exams, so it is definitely in your best interest to do them when they are assigned.

**Quizzes.** There will be a quiz given at the *beginning* of most Friday classes except on exam days. Each quiz will be graded out of 10 points. The purpose of the written quizzes is to give you an incentive to work on the homework problems when they are assigned.

**Exams.** There will be three exams: September 18, October 16, and November 13 (all Fridays). Each exam will be graded out of 100 points. DO NOT MISS AN EXAMINATION. (See “make-up policy” below.) Most of the exam questions will be similar to assigned homework problems.

**Final Exam.** The final exam is cumulative and will be graded out of 200 points. The final exam will be

**Section 01.** Monday, December 7, 8:00 am - 10:00 am in 213 Roop.

**Section 02.** Wednesday, December 9, 8:00 am - 10:00 am in 105 Roop.

**Cards and Attendance.** I keep a stack of index cards with your names on them, and use these to ask a *lot* of questions during class. Aside from keeping the class more interesting for you, using these cards allows me to better evaluate your understanding of the material; this could influence your grade by a third of a letter or so (for example, C+  $\leftrightarrow$  B-). I also use these cards to keep track of your attendance; this also impacts your grade. *You are responsible for the material covered in my class, whether or not you attend.*

**Grading.** At the end of the semester, I will total everyone’s points from quizzes, exams, and the final, plot them on a graph, and determine the grades from that distribution. I try to write my exams so that there shouldn’t be any great surprises about the grades (e.g., 90’s is some kind of A, 80’s is some kind of B, etc.). The reason I plot out the totals is to look for “gaps” in the grades to help me determine where the cutoffs are for A’s, B’s, C’s, etc. I also reserve the right to make minor adjustments in grades based on attendance, class performance, etc. I will try to keep you abreast on your standing in the class. For example, after each exam, I will provide you with a distribution containing all the exam grades.

**Make-up Policy.** DO NOT ASSUME YOU WILL BE GIVEN A MAKE-UP EXAM/QUIZ JUST BECAUSE YOU MISSED CLASS. With the exception of extraordinary situations, anything you miss counts as a 0. If you are unsure about whether or not your situation falls under the “extraordinary” category, talk to me. I am more likely to be understanding if you talk to me *before* the fact than after the fact.

**Cheating.** JMU has an honor code, and you should abide by it. If I catch you cheating, I will hand over supporting evidence to the administration and let them deal with you as with you as they see fit.

**What is to come.** MATH 231–232 is a combination of all of the topics in MATH 235 (Calculus I) together with a variety of precalculus topics. The student who completes this sequence will be prepared to enter MATH 236 (Calculus II). While MATH 231 focused on algebraic functions, MATH 232 contains the study of many transcendental functions (trigonometric functions, exponential functions, logarithmic functions, etc.).

**Advice.** It is one thing to watch me do problems on the board, and quite another to do them yourself under exam conditions, so DO YOUR HOMEWORK THE DAY IT IS ASSIGNED. *When (and whether or not) you do your homework will have the greatest impact on your grade, without a doubt.* Be sure to budget time for this class in your schedule starting *now*; it’s much harder to find time once the semester gets busy. It’s also a good idea to use the Science and Mathematics Learning Center in 200 Roop Hall.