Class Times
Section 1: MWF 10:30–11:20am synchronous on zoom
Section 2: MWF 1:00-1:50pm synchronous on zoom

Office Hours
MW 11:30am-12:30pm, Fri 2:00-3:00pm or by appointment. I am not available on Thursday afternoons.

Textbook
*Calculus I with Integrated Precalculus*, Laura Taalman, ©2014 by W.H.Freeman and Company. We will not be using WebAssign, so a physical or eBook copy of the text is enough.

Goals for the course
There are two main goals for this course. The first is to expand on the topics you learned in 231 (limits and derivatives) to more general classes of functions like exponential/logarithmic functions and trigonometric functions. The other goal is to introduce the culminating idea of calculus, where all of what you’ve learned so far builds to, the idea of an integral and the Fundamental Theorem of Calculus! Our plan this semester is to start by reviewing some important topics from 231 like functions and graphs and techniques for graphing functions as well as the definition and idea of a derivative and the Chain Rule. From there, we will introduce exponential and logarithmic functions (Chapter 5), trigonometric functions (Chapter 6) and integration (Chapter 7). We will end with a useful technique for computing integrals (and an introduction to Calculus II) integration by substitution (Section 8.1).

There are two general reasons that you may be taking this course. The first is as a requirement for a math or science major and the second is as a gen-ed requirement.

If you are a math or science major, the goals for this course are very explicit. As a scientist, you will need to be able to think, reason, and communicate using very precise language and terminology, and mathematics is part of that terminology. In addition, your science professors will assume that you know the specific content of this course (derivatives and integrals).

If you are taking this course as part of your cluster 3 gen-ed requirements, the goals are intellectual. The specific content (derivatives and integrals) is really just an excuse to teach you to think and reason mathematically. It’s quite a good excuse because we spend a whole year building up a single idea (integrals) so you will see the foundations, and then the development and applications of this idea. For gen-ed students, understanding why things work the way they do is much more crucial to the Learning Objectives than the mechanics of how things work.

Logistics
This is an online course that will be meeting synchronously on zoom three times a week on the schedule listed above. A dependable computer with a reliable, high speed internet connection is required to complete this course. See JMU’s [Online Technology Requirements](https://canvas.jmu.edu/courses/1776886). You will also need a web cam that you will be expected to keep on during class. Before every Monday or Wednesday class, you are expected to read (and take notes on) the section of the textbook listed and watch any supplementary videos linked off of Canvas. Before any Friday class, you are expected to have made a good attempt at the homework problems listed for the sections covered that week. You will need to start the homework ASAP, not on Thursday evening! Homework will be “collected” and “graded” via a series of online Mastery Quizzes based on the homework (roughly two each week) which are due on Fridays at midnight.

Piazza
Each section has its own Piazza discussion forum. The system is highly catered to getting you help fast and efficiently from classmates and myself. Rather than emailing questions, post them on Piazza!
Grades

There will be two contributions to your grade for the semester. The majority of points for the semester will be in the form of twenty four Mastery Quizzes, roughly one per section of the book covered, roughly two due per week (see the class CALENDAR for more details on which quizzes are due when, see below for more detail on what constitutes a mastery quiz). Each quiz is worth 9 points, so there are 216 point total from quizzes. The rest of your grade comes from your weekly Piazza posts which are 1 point each over 38 expected posts, roughly three per week. See below for more detail on what is expected for each post. There will be a total of 254 points possible for the semester.
As a rough guideline, if you earn 90% of the points for the term, you will get some sort of A, 80-89% will give you at least a B, etc.. I reserve the right to decide borderline grades based on participation, effort, and improvement. I also reserve the right to fail any student who attends fewer than 50% of classes.

Mastery Quizzes

Each quiz has three content questions and is worth 9 points. You will be allowed to take each quiz twice in the week it is assigned (I keep only the higher of your two grades). Note that your second version of the quiz will have similar but not identical problems to the first version you take. The quizzes will be administered through canvas and are based on the HOMEWORK. You can take the quizzes anytime in the assigned week, between Saturday morning and the following Friday at 11:59pm. There is a 15 minute time limit for each quiz and no partial credit will be given. In terms of the Honor Code, they are open book and open notebook, but you may not consult with either another person or the internet. Quiz questions cover conceptual, computational, and applied aspects of the reading. While the questions are not carbon copies of the homework assignments, the homework reading and homework questions are your best preparation for success on the quizzes. You will only be able to see one question at a time, and you will only be able to see your responses immediately after you take the quiz. I strongly suggest you wait at least 24 hours and review the reading and homework assignments before taking the quiz a second time. At the end of the semester, you will be allowed to choose up to eight of the twenty four quizzes to retake as your final exam. This final will take place Saturday, May 30 from 10:30am-12:30pm.

Piazza Posts

Each person is asked to be a good Piazza “class citizen in each one week window by posting three substantial and constructive contributions. Such a post may consist of one of the following: 1. the complete solution (as an image) to at least one even-numbered problem that has not already been provided (you will need to check this before you post!). 2. proffering a true and relevant correction to someone else’s posted question, or asking a question yourself. A simple I’m stuck on... does not count as a contribution: you will need to offer more detail on exactly what you have tried, what examples you looked at, and where you got stuck. These questions can be about the homework, the reading, or the videos. 3. sharing your progress on someone else’s question, even if your solution is not complete. Each Piazza post is worth one point towards you grade for a total of 38 points. A perfect score on your Piazza contributions is achievable by anyone, so should be your goal. You will be asked to document your weekly Piazza posts on Fridays via Canvas.

Homework

Homework will not be collected in this class. Instead, your mastery of the homework problems will be assessed using the Mastery Quizzes. You will need to do a lot of homework to succeed in this course. The list of homework problems for the semester is available HOMEWORK. You can find which homework problems you will need to do for that week by looking at the CALENDAR to see which Mastery Quizzes are due on Friday. Your work on your homework will also be reflected in your Piazza contributions.

Attendance

Attending class sessions on time is well below minimum responsibility for passing this class. You are expected to take responsibility for active participation, asking questions, and contributing your thoughts related to the course content. You should attend all synchronous online classes and be ready and willing to participate in the class activities. If you do miss class it is your responsibility to get notes and announcements either from a classmate or by watching the class video. I do not give make-up quizzes, but I can easily extend deadlines for you if you need it. You do not need to tell me why you need a deadline extended or provide proof, just a request is enough. If you are struggling in any way, please do reach out to me, I might be able to help!
Calculators
A graphing calculator or use of a computer graphing utility can be helpful for this course (all the computing facilities on campus should have one installed and there are good graphing apps for smartphones). However, calculators will not be allowed on quizzes. Cell phones may not be used as calculators or in any capacity during quizzes or class unless otherwise specified.

Getting Help
In addition to me and your fellow students, the Science and Math Learning Center is also there to help. They have two ways of getting help this semester, synchronous and asynchronous. Find more at [SMLC]. I also recommend working as much as possible with other people when doing homework. Discussing mathematics out loud will significantly increase your understanding. I also encourage you to ask me questions by email or text at any time. The phone number at the top of the page is my cell phone number, please don’t abuse it!

Academic Integrity
I encourage you to work together in groups on homework assignments outside of class, but any work you hand in (Mastery Quizzes or Piazza posts) must be done independently in your own words. THE JMU HONOR CODE [https://www.jmu.edu/honorcode/code.shtml] Students shall observe complete honesty in all academic matters. Violations of the Honor Code include, but are not limited to, taking or attempting to take any of the following actions: Using unauthorized materials or receiving unauthorized assistance during an examination or in connection with any work done for academic credit. Unauthorized materials may include but are not limited to notes, textbooks, previous examinations, exhibits, experiments, papers or other supplementary items. Giving false or misleading information regarding an academic matter. Copying information from another student during an examination. Rendering unauthorized assistance to another student by knowingly permitting him/her to see or copy all or a portion of an examination or any work to be submitted for academic credit. Obtaining prior knowledge of examination materials (including by using copies of previously given examinations obtained from files maintained by various groups and organizations) in an unauthorized manner. Selling or giving unauthorized copies of any portion of an examination to another student. Using a commercially prepared paper or research project or submitting for academic credit any work completed by someone else. Falsifying or attempting to falsify class attendance records for oneself, or for someone else, or having another falsify attendance records on your behalf. Falsifying material relating to course registration or grades, either for oneself or for someone else. Falsifying reasons why a student did not attend a required class or take a scheduled examination. Taking an examination in the place of another student. Making unauthorized changes in any reported grade or on an official academic report form. Falsifying scientific or other data submitted for academic credit. Collaborating in an unauthorized manner with one or more other students on an examination or any work submitted for academic credit. I take the honor code very seriously, and so should you. Any instances of suspected cheating or academic dishonesty will be referred to the JMU Honor Board for investigation.

Inclusivity commitment
Everyone is welcome in this class and everyone can do mathematics. YOU are personally welcome in this class, and YOU can do mathematics. I believe that learning environments should support and are improved by a diversity of thoughts, perspectives, experiences, and identities. I will treat each of you with respect and kindness, and I expect each of you to do the same for each other. I will respect your pronouns and names and I expect each of you to do the same for each other. Part of treating each other with respect includes not using microaggressions. The first step in addressing microaggressions is to know what they are. A list of microaggression examples can be found at this link: [UC Santa Cruz Microaggressions Reference], which defines microaggressions as the everyday verbal, nonverbal, and environmental slights, snubs, or insults, whether intentional or unintentional, that communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership. As part of my commitment to being inclusive and providing an inclusive environment in my classroom, I welcome and ask that you bring any instances of non-inclusivity to my attention. If you would prefer to provide feedback anonymously, please use this link: [Say something to Dr. Field anonymously].

JMU Syllabus
For Attendance, Academic Honesty, Adding/Dropping Courses, Disability Accommodations, Disruptive Behavior, Inclement Weather, Religious Accommodations see https://www.jmu.edu/syllabus/