Math 1450 – Fall 2022
Calculus 1

My Contact Information

Name:	Jay Pantone
Office:	Cudahy 307
Email:	jay.pantone@marquette.edu
	(please email me directly, not through D2L or Wiley Plus)
Website:	http://jaypantone.com/courses/fall22math1450
	(includes course calendar)
Lectures:	Cudahy 001
	MWF, 11:00am - 11:50am
Discussion Sections:	Tuesdays and Thursdays
	various times
Office Hours:	Tuesday, 12:30pm - 1:30pm
	Friday, 8:00am - 9:00am
	and by appointment (just email me!)
	these times are tentative and subject to change
Help Desk Hours:	See course website.

Teaching Assistants

Chloe Harris	chloe.harris@marquette.edu
Eric Redmon	eric.redmon@marquette.edu

Course Description

MATH 1450. Calculus 1. 4 semester hrs. Functions of one variable, limits, and continuity. The derivative and the definite integral with applications. Prerequisites: MATH 1101 or equiv. (3-4 years of college prep mathematics including topics listed for MATH 1101)

Course Structure

Lectures will be held in person in Cudahy 001 on Mondays, Wednesdays, and Fridays. Discussion sections will be held in person on Tuesdays and Thursdays with your teaching assistant. More information about discussion sections is below.

Attendance Policy

Attendance in lecture and discussion is required. I will take attendance at each lecture. It is Marquette policy that a student may be withdrawn from a course by the professor if they miss six or more class periods. If you have an excused absence, please let me know.

Communication Expectations

If something comes up that gets in the way of your classwork, or if you're falling behind and don't know what to do, the best thing you can do is to **get in touch with me as soon as possible**, and I will help however I can. Do not wait until weeks later to email me, because by then it may be too late to catch up.

I will send important class information to you via email throughout the semester, so I expect you to be checking your email regularly.

Calculus Help Desk

There is a *Calculus Help Desk* in Cudahy Hall that is staffed by TAs from different courses, open many hours per day for you to stop by for help. I will distribute the weekly schedule for the help desk when it's ready.

I will also hold weekly office hours in my office. The hours are listed at the top of this syllabus. **You do not need an appointment for office hours.** Just drop by any time! I'd really like to meet as many of you as possible. Please watch this instructional and informative video about office hours: https://vimeo.com/270014784.

Textbook

Calculus: Single & Multivariable, 8th Edition, by Hughes-Hallett, Gleason, McCallum, et al.
We will be using the Wiley Plus online homework system, so **you will need an access code**. This comes as part of the bundles posted on Book Marq. Please see the "FAQ" on our D2L page about Wiley Plus for any additional questions.

Calculator

We **will not use a graphing calculator** in this course. Some homework problems will require the use of a simple scientific calculator that can perform basic arithmetic (i.e., exponents, roots, logarithms). You may use such a calculator (or an online equivalent like Google or WolframAlpha) for homework problems. You will not need a calculator for any quizzes or exams, and thus use of a calculator on those will not be permitted.

Course Websites

Most important course information will be posted on our course website linked at the top of this syllabus. We will use D2L to keep track of grades. We will use Microsoft Teams if we need to hold a lecture virtually for any reason.

Discussion Sections

On Tuesdays and Thursdays, you will have discussion sections with your teaching assistant. These are opportunities to discuss the course materials and ask for help with homework questions. The entire Tuesday session and the most of the Thursday session will be used for this. You will take a quiz in the second half of most Thursday sections.

It is expected that you will attend all of the discussion sections and that you will **come prepared with questions to ask**.

How to Succeed in this Course

I have designed this course to help you stay on track with the material. Here are my recommendations for doing well in this course.

- Stay on schedule! The Wiley Plus assignments and quizzes are at regular intervals, and ensure you cannot fall too far behind. Try the Wiley Plus problems for an assignment the same day as the corresponding lecture; don't leave them all for the day it's due.

- Do the suggested written textbook problems, even though they won't be collected. The point of homework in this course is to make sure you get enough practice on each topic, and doing the Wiley Plus assignments alone will definitely NOT be enough practice. Do each of the textbook problems I suggest (using the method in the "Written Homework" section below). You are encouraged to work with classmates on these problems. Whenever you get stuck, bring these problems to your next Discussion Section to go over with your TA. If you still feel a little shaky on a topic, pick more textbook questions to do.

- Make use of office hours and the Calculus Help Desk as much as possible. They are great resources to help with homework problems, get advice, or just chat about the course or mathematics in general.

- Find a good study group early on in the course who you can work with and talk to if you get stuck on a problem.

- If something comes up that gets in the way of your academic work, reach out to me as early as possible so I can help!

UCCS Objectives

This course fulfills the 3-credit mathematical reasoning requirement of the University Core of Common Studies (UCCS). It is designed to help students achieve the UCCS generalized learning outcomes for the mathematical reasoning knowledge area. Specifically, at the completion of core studies students should be able to

1. Evaluate the effectiveness of the mathematical sciences in describing the world.

2. Analyze quantitative information symbolically, graphically, numerically, and verbally for the purpose of solving problems or drawing conclusions.

3. Construct logical arguments in support of mathematical assertions.

Marquette Core of Common Studies – Discovery Tier
"Expanding our Horizon"

A defining characteristic of human beings is our desire to ask questions and to explore the unknown. Calculus is both a language and a set of concepts created to probe the boundaries of the universe and investigate unsolved mysteries in numerous fields, such as biology, engineering, physics, economics, social sciences, etc. Calculus provides us with concepts and tools to express our innate desire to know and facilitates our pursuit of new technologies to better respond to our worlds immediate challenges. It aids us in providing insights into the unknown and in the creation sustainable solutions for the future. This course, and its supporting textbook and online homework system, will strive to challenge you to think beyond the current textbook section. You should expect that all problem sets to contain a problem, or a collection of problems, that will ask you to think far beyond a straightforward calculation.

Assessment

Your grades in this course will be based on three components, weighted as follows:

- Wiley Online Homework — 30%

- 12 Discussion Quizzes, 2 lowest dropped — 2% each, 20% total

- 3 Midterm Exams — 12% each, 36% total

- Final Exam — 14%

There will also be written homework from the textbook which will not be collected or graded, but which is **very important** for your success in the course!

Online Homework with Wiley Plus

Homework will be assigned through Wiley Plus. You will need an access code that will come with your textbook bundle. Your answers will be automatically graded by the system. This is usually pretty reliable, but it may take a little practice to learn how to properly format your answers.

There will be 14 Wiley Plus assignments, due mostly on Wednesdays (see the course calendar on the course website), starting Wednesday, September 4. Each assignment will be worth 12 points, plus there will be a 2 point practice assignment also due on Wednesday, September 4, for a total of 170 possible points. Your final Wiley Plus score will be calculated out of a total of 150 points, which means there are 20 points of "leeway" to account for technical issues, incorrectly entering answers, late assignments, etc. **Therefore, late assignments will not be graded and there will be no makeup Wiley Plus assignments.**

For example, if you earn 160 points total, your Wiley Plus percentage will be 100%. If you earn 129 points total, your Wiley Plus percentage will be $129/150 = 86\%$.

Some Wiley Plus tips:

- If Wiley Plus doesn't load, try a different browser or try clearing your browser cache.

- Be careful to pay attention to the notation you're using and the notation Wiley Plus is using. Some common errors include: using Π instead of π, using x when the variable is t, and misplacing parentheses.

- Unless the problem states otherwise, use exact answers (logs, fractions, etc.) instead of numerical approximations.

Please see the "FAQ" on our D2L page about Wiley Plus for any additional questions.

Tentative Wiley Plus Due Dates:

⋄ Wednesday, Sept 7 — Wiley Plus Practice HW #0
⋄ **Friday, Sept 9** – Wiley Plus HW #1
⋄ Wednesday, Sept 14 — Wiley Plus HW #2
⋄ Wednesday, Sept 21 — Wiley Plus HW #3
⋄ Wednesday, Sept 28 — Wiley Plus HW #4
⋄ Wednesday, Oct 5 — Wiley Plus HW #5
⋄ Wednesday, Oct 12 — Wiley Plus HW #6
⋄ Wednesday, Oct 19 — Wiley Plus HW #7
⋄ Wednesday, Oct 26 — Wiley Plus HW #8
⋄ Wednesday, Nov 2 — Wiley Plus HW #9
⋄ Wednesday, Nov 9 — Wiley Plus HW #10
⋄ Wednesday, Nov 16 — Wiley Plus HW #11
⋄ **Tuesday, Nov 22** — Wiley Plus HW #12
⋄ Wednesday, Nov 30 — Wiley Plus HW #13
⋄ Wednesday, Dec 7 — Wiley Plus HW #14

Quizzes

In most weeks there will be a short quiz in the Thursday discussion section that covers material from the previous week. The goal of these is to make sure that you are keeping up with the material, and as long as you are, they should not be too hard. **The quiz questions will come verbatim from the suggested textbook homework.**

Tentative Quiz Dates:

⋄ Thursday, Sept 8 — Quiz 1
⋄ Thursday, Sept 15 — Quiz 2
⋄ Thursday, Sept 22 — Quiz 3
⋄ Thursday, Sept 29 — Quiz 4
⋄ Thursday, Oct 6 — Quiz 5
⋄ Thursday, Oct 13 — Quiz 6
⋄ Thursday, Oct 27 — Quiz 7
⋄ Thursday, Nov 3 — Quiz 8
⋄ Thursday, Nov 10 — Quiz 9
⋄ Thursday, Nov 17 — Quiz 10
⋄ Thursday, Dec 1 — Quiz 11
⋄ Thursday, Dec 8 — Quiz 12

Midterm Exams

This course has three midterm exams that are roughly equally spaced out. They will take place in class during the normal lecture period. Dates can be found on the course website.
Tentative Midterm Exam Dates:

⋄ Wednesday, Sept 28 — Exam 1
⋄ Wednesday, Oct 26 — Exam 2
⋄ Wednesday, Nov 30 — Exam 3

Final Exam

The final exam will be cumulative.

Final Exam Date:

⋄ Monday, Dec 12, 1:00pm–3:00pm

Suggested Written Homework

For each section, I will assign a handful of textbook problems for you to use to practice the material until you've mastered it. I recommend the following practice regimen. For each problem, try to solve it without the book or your notes. If you can't figure it out, look at your notes or the book or the solution (if it's in the back of the book). Here's the key: if you couldn't solve it, make a note of the problem so you can come back to it a day later after you've forgotten the answer. Then repeat the process until you can do the problems without assistance. You should keep your solved problems in a notebook to help you study for the mini-exams and the final exam.

Grade Computation

The total number of points in the course is 500: 150 from Wiley Plus, 100 from quizzes (in total), 60 from each midterm exam, and 70 from the final exam. The correspondence between points and final grades is in the table below:

points	percentage	grade
465 - 500	93% - 100%	A
450 - 464.99	90% - 92.99%	A-
435 - 449.99	87% - 89.99%	B+
415 - 434.99	83% - 86.99%	B
400 - 414.99	80% - 82.99%	B-
385 - 399.99	77% - 79.99%	C+
365 - 384.99	73% - 76.99%	C
350 - 364.99	70% - 72.99%	C-
335 - 349.99	67% - 69.99%	D+
300 - 334.99	60% - 66.99%	D
0 - 299.99	0% - 59.99%	F

Other Classroom Policies

Grading Disputes

If you believe that there has been an error in scoring an assignment, you must bring it to the attention of your TA within one week of the graded paper being returned. Your TA will carefully reread, and if necessary rescore, the assignment.

Classroom Conduct

The classroom is an interactive learning environment in which everyone should feel valued and comfortable. I strongly encourage you to ask questions and give answers throughout the term, even if (particularly if!) you're not sure that your answers are correct. This is an important part of the learning process.

Students in past courses have often told me that they might peek at their phone, or get otherwise distracted, when they see something in the lecture that they already know. Then, they look up a few minutes later and realize that they're already lost and because math lectures build on themselves, they tend to stay lost for the rest of the class period. To prevent this, and in order to not distract your classmates, I ask that you keep your phones away.

Returned Papers

You must retain all returned papers in case of any discrepancy with the recorded grades on D2L. I cannot correct any mistakes in grading or recording of scores without the original document. All concerns regarding grades on assignments must be brought to me within one week of the return of the paper.

Homework Collaboration Policy

It can be very helpful to study and work with a group. This type of cooperative learning is encouraged; however, be sure that you have a thorough understanding of the concepts as well as the mathematical steps used to solve an exercise. You must be able to work through the exercises on your own.

Accommodations and Special Needs

If you have a disability and require accommodations, please contact your instructor during the first week of class so that your learning needs may be appropriately met. You will need to provide documentation of your disability to the Office of Disability Services. If you are unsure of what you need to qualify for services, visit the Office of Disability Services' website at http://www.marquette.edu/disability-services or contact their office by phone at (414) 288-1645.

Excused Absences

Students with absences due to legal obligations, religious observances, or participation in Division 1 athletics and other university sanctioned events will be given an opportunity to make up examinations

or other graded assignments, if a request is made to the instructor prior to the absence. After all absences, excused or unexcused, you are responsible for contacting your classmates to obtain lecture note and any other missed materials.