









Calculus and Analytic Geometry I

Math 111





Instructor Info —

-  Subhadip Chowdhury
-  Office Hrs: See Moodle
-  Taylor 307
-  [subhadipchowdhury.github.io](https://github.com/subhadipchowdhury)
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Course Info —

-  **Section 3:** MWF 10:30a - 11:20a, T 2p-3:20p
-  **Section 4:** MWF 11:45a - 12:35a, T 3:45p - 5:05p
-  Taylor 207 + MS Teams

ZI Info —

-  Molly Hutter (Sec 3)
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-  Caitlin Strassburg (Sec 4)
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Course Goals

Math 111 Specific Goals: The overall goal of the course is for you to develop an appreciation of calculus as a coherent body of knowledge and as a human accomplishment. Together we will

- Goal 1.** Learn how to work with functions represented in a variety of ways: graphical, numerical, analytical, or verbal; and understand the connections among these representations.
- Goal 2.** Understand the meaning of the derivative in terms of rate of change and local linear approximation.
- Goal 3.** Understand the meaning of the definite integral both as a limit of Riemann sums and as the net accumulation of a rate of change.
- Goal 4.** Understand the relationship between the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus.

The focus of the course is neither manipulation nor memorization of an extensive taxonomy of functions, curves, theorems, or problem types. Thus, although facility with symbolic manipulation and computational competence are important outcomes, they are not the core of the course.

Putting it all together:

- Learn how to model a written description of a physical situation with a function, a differential equation, or an integral
- Identify the correct tool to analyze, experiment, and verify conclusions.
- Be able to determine the reasonableness of solutions, including sign, size, relative accuracy, and units of measurement; and interpret the result in the context of real world phenomena.

Life long Skills: Your abilities of general problem solving skills, self learning, self evaluation and how to formulate, communicate and present ideas, both orally and in well-written sentences, will be refined throughout the course. This means problems appearing on homework or tests will not be “just like” problems you have seen before. You will be asked to explore new topics yourself before I cover them in class.

Pre-Requisites

No prior knowledge of Calculus is needed but a solid understanding of algebra, geometry, trigonometry, coordinate geometry, and elementary functions is necessary for success in Calculus. These functions include those that are linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise defined. In particular, you should be familiar with the properties of functions, the algebra of functions, and the graphs of functions. You should also understand the language of functions (domain and range, odd and even, periodic, symmetry, zeros, intercepts, and so on) and know the values of the trigonometric functions of angles such as 0 , $\frac{\pi}{6}$, $\frac{\pi}{4}$, $\frac{\pi}{3}$, and $\frac{\pi}{2}$. We will spend the first couple of lectures giving a very rapid review of these topics. If you have any concerns regarding your preparedness level for this course, please do not hesitate to speak with me.

Required Materials

- **Textbook:** *Calculus - Volume 1* by OpenStax. The book is available for free online. You can view a pdf or interactive E-Book here: <https://openstax.org/details/books/calculus-volume-1>.
- **Edfinity:** Your homework assignments will be done via the online HW system called Edfinity. Do not create an account on the website in advance. To learn how to register for this particular course on Edfinity, see Moodle.

FAQs

? What is the late submission policy for take-home quizzes and exams?

! In general, late submission (even 15 mins late) will NOT be accepted and will result in a grade of zero for the test. I will drop three of your lowest daily homework scores, no-questions-asked.

You can replace up to two quiz grades by attending a Mathematics or related talk on campus/virtually, and turning in a 1 – 2 page summary of the talk. Talks from other departments with a math flavor to them can also count. (eg: biology, chemistry, computer science, digital and computational studies, earth and oceanographic science, economics, education, environmental studies, neuroscience and physics are all good places to look).

Missed exams can only be made up at my discretion, and are subject to a lost fraction of the grade.

? Do I have to attend all classes synchronously?

! You are expected to attend the lectures synchronously if you are on-campus. If you are in a different time-zone, you can be asynchronous, but please stick to the daily schedule and you *must check-in with me over MS Teams at least once a week.*

- **Graphing Utilities:** An ability to graph, via some electronic device, is *highly recommended* for this course. Although one can certainly do all of Calculus without a graphing device, it saves a lot of time to have one, and makes certain concepts easier to understand. I will often utilize the free website and app called [Desmos](#) in class, and I encourage you to download the app on a phone or tablet device for your own use. Alternately, any graphing calculator is also acceptable. If you have a calculator that can perform Calculus operations such as computing limits or derivatives, then keep in mind that you must always *show work* to receive credit on tests. Hence, having a device that can always give you the answer is meaningless if you can't provide reasoning for the solution.

Grading Scheme

Daily Homework	10%
Projects & Participation	20%
Quizzes	25%
Midterms	35%
Final Exam	20%

The midterms are not weighted equally. The exam that you score the higher will receive 15% weight and the lower one will receive 10% weight. Scores will NOT be curved. The weights are tentative and subject to change on an individual basis. Grades will be assigned according to the the grading scale given below.

A	≥ 93	B+	87-89	C+	77-79	D	60-69	F	< 60
A-	90-92	B	83-86	C	73-76				
		B-	80-82	C-	70-72				

Structure of the Course

We will have a Hybrid Classroom style instruction for the Fall 2020 semester.

Student Groups	What Instructor Sees		
	Monday	Wednesday	Friday
Group A			
Group B			
Group C			
Students who are Remote			

- **Attendance and Teams (See details here):** Each student will be assigned to one of three groups. Only one group will attend each lecture in-person at-a-time with the remaining two online. You will be teamed up with one member from each of the other groups into a Team of three, and while in-class, you will be connected with them via MS Teams. A tablet/laptop and headphones will be needed every day in class so you can connect with your teammates and work on the day's activities. During our scheduled lecture time, we will hold live-streamed sessions (details below) that will be recorded and available to stream.
- **Technology & Communication (See details here):**
 - *Moodle* will be the central organizational focal point for the course. There will be links in the “Weekly Content” section to Teams meetings and links to Teams recorded videos. Homework and Quizzes and Exams are here.
 - *Microsoft Teams* will be meeting place for live-streamed lectures and office hours. You will need to [install Teams](#) on your computers or other devices. Email me or EdTech with any technical issues, and we will try to help.
- **Empathy (See details here):** This has been a tough few months for many of us, for many different reasons. There is still a lot of uncertainty ahead. Let's all practice kindness and understanding, towards each other and ourselves.

Attendance and Teams

- Each student will also be assigned a Team, which will consist of one Group A member, one Group B member, one Group C member, and occasionally a student who is taking the class remotely.
- On days you attend class in-person, it is your responsibility to: connect with your teammates, work through the day's activities with them via MS Teams, and summarize any in-class discussion or lecture that they are unable to participate in. You will need a laptop/tablet to work during class and headphones/earbuds to talk with your teammates.
- If you know ahead of time that you will be absent from a class, you should arrange with your teammate to switch days with them.
- While there is no mandatory attendance policy, obsessive absences will factor into the participation portion of your grade. Your participation in class is vital to both your own learning, and the learning of others. If you are struggling with homework/project problems, then class time is the perfect place to ask questions! If you are not struggling, but understand everything perfectly, then class time is the perfect place for you to help your peers! Remember that your teammates are counting on your attendance!
- At the end, you are the one responsible for missed material. You can still submit (and receive credit for) the homeworks even if you do not attend class. If you miss a class, get notes from a classmate, and review the day's activity (on Moodle) before contacting me for help.
- Be courteous when using mobile devices. Make sure your cell phone is turned fully off, or silent during class. If you must make or receive a call, please go outside the classroom (or mute yourself if you are online).
- Participate fully in each class by being mentally focused, asking and responding to questions, and completing in-class activities.
- Be respectful in the classroom. I am happy to take any questions in class, no matter how trivial they may seem.

In-class Activities

In-class activities make up most of class time and are the main vehicle by which you learn the material in a no-stakes environment. Consistent and honest participation and engagement with these activities is absolutely imperative for your learning, which is why they account for a relatively large portion of your course grade.

Reading Guides

To aid you in reading your textbook, there will be *Reading Guides* made for each section of the text that we cover. You should look over each reading guide as you read through assigned sections in the textbook. Important information will be stressed and the not-so-important will be highlighted as well. There will also be thoughtful questions that should aid in your reading/understanding of the material.

Homework Policies

Daily homework will be administered via Edfinity. I will post links to assignments after every lecture that can be completed fully online. Wednesday, Friday, and Monday's homework will be collectively due on Friday.

Projects Policies

- There will be multiple longer **projects** built around more challenging questions from the exercises, to showcase interesting applications of the study materials.
- You will be working with your team during designated class days, usually Tuesdays, to create a project report. *One submission for your entire team will suffice.* You can also work asynchronously if your entire team agrees on a time.
- In your report you should include pictures and graphs of solutions *as appropriate*. Draw the pictures by hand, not using a computer or calculator, unless otherwise specified.
- Final submissions must include a **Project Report Cover Sheet** (downloadable from Moodle) on which names of all participants must appear along with *brief but substantive* discussions of any issues confronted at your meetings. If any group member did not participate in an important aspect of the assignment, this must be stated in the Report.

Quizzes and Midterms

- All quizzes and midterms will be take-home tests. They will be available for 48 hours. The tests are timed, open-note/open-book. You may NOT post problems on the Internet or discuss problem specifics with others. Please email me to ask whether a particular resource is allowed or not.
- Take-home tests will be administered via Moodle. Computational skills, conceptual understanding, and the ability to apply

ideas to unfamiliar problems are all important.

- You will be occasionally required to write the solution on paper and upload a scan/picture in pdf format via Moodle. More details on this will be given in class.
- Each quiz will cover material from roughly a week worth of related material, to give you a further chance at mastering that material before an exam. I want to provide you with an opportunity to test yourself in a timed situation, to better prepare you for the midterm exams. Having our quizzes cover material that is several days old also gives you more time to synthesize and process the material. We will likely have about 10 quizzes over the course of the semester.
- As you are solving problems, remember that getting the “answer” is only one of the steps. Don’t think of what you write as just showing your instructor that you have completed the work, write as if you were explaining what you are doing to one of your classmates who missed that day of class! Think of writing as part of the process of learning. The more carefully and clearly you write your mathematics, the more likely it is to be correct, and the more likely you will be to remember it. *Correct answers without explanation will not reap full credit, but clear explanations with an incorrect answer can certainly earn partial credit.*

Technology & Communication

- All course materials will be posted to the course Moodle page. Check Moodle and your email daily.
- During class, you’ll need to connect with your teammates via MS Teams. You can do this via laptop, tablet, or phone. You’ll also need to work with them on the day’s activities, which will sometime use Desmos. You can do this via laptop or tablet. Thus, you need to bring a computer/tablet and earbuds/headphones to class every day.
- Proper maintenance of computer accounts, files, etc. is your responsibility.
- For students joining online during class, you do not have to join with your video or audio if you don’t want to. You can unmute yourself when asking a question and otherwise use the chat feature.
- In the class team folder, you will see separate channels for general discussions, class meetings, and for office hour. Class meetings will be recorded and posted immediately. Office Hour meetings will not be recorded.
- To address privacy concerns, you will only be able to stream recorded sessions online, you will not be able to download it.
- I will help you create your own private team channels that no other student will have access to. You will use these for group discussions during Projects.
- The best way to contact me outside of class is by email or via chat in MS Teams or by coming to my office hours. If I ever need to contact everyone outside of class, I will use email. You are welcome to email me any time of the day or night. You should allow 24 hours response time for any emails – I usually respond faster than that, but you should not count on it. Please keep this in mind, especially when emailing me late at night or over the weekend.
- I would like to stress that communication is key to success! This will hold true throughout your college career, work career, and really your entire life. I implore you to contact me as soon as possible if you are struggling with material or if a conflict arises (see [below](#)).
- For any private communication regarding this course, please email me from your wooster.edu email address. This is mainly for identity verification purposes.

Humanizing the Classroom

- **COVID-19 Statement:**
 - Nobody signed up for this.
 - * Not for the sickness, not for the social distancing, not for the sudden end of our collective lives together on campus (in March) or this new patchwork system.
 - * Not for an online class, not for teaching remotely, not for learning from home, not for mastering new technologies, not for varied access to learning materials.
 - The humane option is the best option.
 - * We are going to prioritize supporting each other as humans.
 - * We are going to prioritize simple solutions that make sense for the most.
 - * We are going to prioritize sharing resources and communicating clearly.
 - * We are going to practice empathy: towards ourselves and everyone else in the class community.
 - We will remain flexible and adjust to the situation.
 - * Nobody knows where this is going, what we’ll need to adapt, or how we’ll need to adapt.
 - * This situation – including the learning environment – is as new to me as it is to you. I have done my best to structure the course according to “best practices” and my own expertise. I have also done my best to make course policies fair, equitable, and humane. We may need to make adjustments as the semester progresses. Please bear with me.
 - * Everybody needs support and understanding in this unprecedented moment: me, you, all of us.
 - We will follow the rules put down by the College and public health officials.
 - * This will be hard. Social distancing is counter to human nature. Wearing a mask all the time is annoying. Not seeing off-campus friends or family for a semester will feel isolating. But these are the (small) sacrifices that we must make if we want our community stay healthy, and together.

- **Freedom to Make Choices:**

You don't need my *permission* to turn in tests late, to miss class, or to make decisions in your life. The point of the syllabus is not to say you "cannot" do something, but rather to establish strong practices for learning and, to the best of my ability, a fair and equitable environment for that learning. But *strong learning practices* will look differently for individual students, and what is *equitable* depends on circumstances.

So, the best advice I can give you is this: be aware of the consequences of your choices, make the best choices you can in a given situation, and graciously accept the consequences of your actions if they are fair. If you think the consequences are unfair, let's chat about it.

- **Productive Struggle:**

"You have to be confused before you can reach a new level of understanding."

–Dudley Herschbach, Nobel Prize winner (Chemistry)

Everyone makes mistakes. Trial and error is how we learn. So, you'll gain greater understanding if you struggle through concepts or tasks before you ask for help. This is why the course is set up with so many layers of scaffolding before the *testing* phase: you will struggle on activities and homework. This is the purpose of activities and homework! Learn from that struggle!

However, struggling with a difficult new idea is different than struggling with learning conditions – I would never ask you to struggle when (reasonable) accommodations could improve your learning. Furthermore, your Team is there to struggle with you and support you, as you support them. I am also here to support you! I just ask that you put in an honest effort, and rather than asking me to "solve the problem", you see me as a guide towards a clearer understanding of how you might solve it. Working together, teaching each other, and learning from each other is the basis of intellectual growth and a foundational principle of The College of Wooster.

Here's another way to think of it (from Harvard Prof. Michael Sandel): "I could give [students] detailed instructions, never letting them hold a bat until they had heard several lectures... Or, I could give them a bat and allow them to take a few swings, after which I might find one thing that the kid is doing, which if adjusted, would make [them] a better hitter." When you try something out first it allows me to make corrections specific to your learning needs.

Diversity and Inclusion

I consider our classroom to be a place where you will be treated with respect, and I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability - and other visible and non-visible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class.

Your success in this course is important to me. If there are circumstances that may affect your academic performance or impact your learning in particular portions of the class, please let me know as soon as possible. You do not need to share specifics, but together we can develop strategies to meet both your needs and the requirements of the course.

I encourage you to visit the [Learning Center](#) to determine how you could improve your learning as well. If you need official accommodations, you have a right to have these met. There are also a range of resources on campus, including the [Writing Center](#), [Math Center](#), [STEM Success Initiative](#), and [APEX for Academic & Career Support](#).

No student is required to take an examination or fulfill other scheduled course requirements on recognized [religious holidays](#). Please declare your intention to observe these holidays at the beginning of the semester.

Names, Pronouns & Pronunciation

All people have the right to be addressed and referred to as they prefer. I will do my best to address and refer to all students by the names and pronouns that they share in class, regardless of what is listed on the roster, and I support classmates in doing so as well. I would like for you to refer to me as *Professor/Dr. Chowdhury*. I use he/him/his pronouns. Please share the name you prefer to be called and pronouns you wish to use in this class with me via the Moodle survey.

If you are interested in changing your chosen name and/or including your pronoun(s) in The College of Wooster system, [you can find additional information here](#). What appears in The College of Wooster system is what will display in all platforms across Microsoft Teams and Zoom. There is no alternative way to change your name or to add pronouns in Teams, but you can add a background that includes these to both Teams and Zoom. For instructions on designing a personalized background, see [here](#).

I encourage everyone in this classroom to create a space of mutual respect and support by also giving each other some grace around pronouns, pronunciation of names, etc., if or when we make mistakes. This is not at all to absolve anyone of responsibility for using correct pronouns, names, and pronunciations. But I find it useful to acknowledge that even with the best of intentions, sometimes we can all still make mistakes.

Honesty & Academic Integrity

The academic program at the College seeks to promote the intellectual development of each student and the realization of that individual's potential for creative thinking, learning, and understanding. In achieving this, each student must learn to act rigorously, independently, and imaginatively.

The College's understanding and expectations in regard to issues of academic honesty are fully articulated in the Code of Academic Integrity as published in [The Scot's Key](#) and form an essential part of the implicit contract between the student and the College. The Code provides framework at Wooster to help students develop and exhibit honesty in their academic work. You are expected to know and abide by these rules.

Dishonesty in any of your academic work is a serious breach of the Code of Academic Integrity and is ground for serious penalties. Such violations include turning in another person's work as your own, copying from any source without proper citation, violating expectations for a group project, submitting an assignment produced for a course to a second course without the authorization of all the instructors, and dishonesty in connection with your academic work. You will be held responsible for your actions. Particular attention should be directed to the appropriate use of materials available online. Whether intentional or not, improper use of materials is a violation of academic honesty. If you are unsure as to what is permissible, please contact me.

Privacy Policies regarding Course Materials & Recordings

The materials on this course shared on Moodle and Teams are only for the use of students enrolled in this course, for purposes associated with this course, and may not be further distributed. All class recordings will be posted only on password-protected websites (such as Moodle, Teams or Stream) that are only available to course participants and for the duration of the course. These are to be used for educational purposes only; no one should distribute recordings, screenshots, or other class material beyond class without the express permission of all involved in the recording. College classrooms are places to test out new ideas, challenge assumptions, and engage timely and sometimes sensitive issues. Students who enter this space should be able to do so with the assurance that their comments will not be shared beyond the classroom.

College policy states that no *student* may record or tape or photograph any classroom activity without the express written consent of the faculty member. If you need to record/tape a class, then you need to contact the Office of the Secretary for permission.

Pass/Fail & Course Drop Options (for Fall 2020)

Pass-Fail Policy: The College is temporarily broadening the policies on electing a pass-fail grading structure:

- Students may elect a Pass-Fail grading option for any course (including those in a major/minor)
- Special note on transcript noting unique policy changes specific to Fall Semester 2020 regarding pass-fail counting toward the major.
- Students may elect as many courses as they wish on a Pass-Fail grading structure. Courses elected as Pass-Fail for Fall Semester 2020 will not count toward the maximum number of Pass-Fail courses that a student may take at Wooster.

The deadline for electing a Pass-Fail grading option is Friday, December 18, 12:00PM.

Course drop policy: The College is temporarily extending the deadline for dropping a course. For Fall Semester 2020: Students may drop any course by Tuesday, November 24, 4:00PM. The minimum enrollment of 3.0 credits remains in effect. Requests to drop enrollment below 3.0 credits will require additional documentation via "Other academic petitions."

College Policy on Final Exams

No final examinations are to be given during the last week of classes or on reading days. Students who wish to reschedule a final exam must petition the Dean for Curriculum and Academic Engagement in writing in advance of the examination. The student must confer with the instructor before submitting a petition, and the instructor should indicate to the Dean if they supports the petition. *Normally, such petitions are granted only for health reasons. If other reasons necessitate a request for a change in a final exam, the request must be submitted three weeks in advance of the examination.*

Conflicts with Academic Responsibilities

The College of Wooster is an academic institution and its fundamental purpose is to stimulate its students to reach the highest standard of intellectual achievement. As an academic institution with this purpose, the College expects students to give the highest priority to their academic responsibilities. When conflicts arise between academic commitments and complementary

programs (including athletic, cultural, educational, and volunteer activities), students, faculty, staff, and administrators all share the responsibility of minimizing and resolving them.

As a student you have the responsibility to inform the faculty member of potential conflicts as soon as you are aware of them, and to discuss and work with the faculty member to identify alternative ways to fulfill your academic commitments without sacrificing the academic integrity and rigor of the course.

Zone Interns

During most non-exam Tuesday classes, zone interns from both sections will be available online via MS Teams. They will assist with projects and other assignments much in the same way as me: by answering questions and providing guidance. The main role of a zone intern is to be a peer-tutor and mentor to help strengthen your understanding of the course material. Your zone intern will hold their own office hours within the math center (see below). Your section's ZI and contact info is listed in the first page. Their office hours in the Math Center will be posted on Moodle.

The Math Center

Free help in this course is offered via the [Math Center](#). It is located on Microsoft Teams for the Fall 2020 semester. You may not need assistance all the time, but when you do, a helpful tutor can assist you and help you get unstuck!

- **Math Center Hours** (beginning August 23rd): Sunday 6:00-10:00 PM, MTWF 1:00 – 10:00 PM
- Students can leave questions in the Math Center Team to be answered later during off hours or they can meet face to face with Professor Kirsch or a student tutor during open hours.

Writing Center

Effective written communication is a cornerstone of the Wooster curriculum, from First-Year Seminar through Senior Independent Study. To assist students in growing as writers, the Writing Center offers a range of services at no cost, through professional staff and peer tutors. More information is on the [Writing Center website](#), and appointments are available at writing_center@wooster.edu, or ext. 2205.

The Learning Center: Academic Support and Disabilities

The Learning Center, which is in APEX (Gault library) offers a variety of academic support services, programs and 1:1 meetings available to all students. Popular areas of support include time management techniques, class preparation tips and test taking strategies. In addition, the Learning Center coordinates peer-tutoring for several academic departments. Students are encouraged to schedule an appointment.

An additional support that the Learning Center offers is English Language Learning. Students can receive instruction or support with English grammar, sentence structure, writing, reading comprehension, reading speed, vocabulary, listening comprehension, speaking fluency, pronunciation, and American culture through 1:1 meetings with the Learning Center staff, ELL Peer Tutoring, ELL Writing Studio courses, and other programming offered throughout the year.

The Learning Center also coordinates accommodations for students with diagnosed disabilities. At the beginning of the semester, students should contact the Learning Center to make arrangements for securing appropriate accommodations. Although the Learning Center will notify professors of students with documented disabilities and the approved accommodations, students are encouraged to speak with professors during the first week of each semester. If a student does not request accommodations or does not provide documentation to the Learning Center, faculty are under no obligation to provide accommodations.

The College Libraries and the Research Help Desk

Your librarian for this course is [Zachary Sharrow](#). You can ask your librarian for help with research in this class and can make an appointment with them using the research consultation form for help with your research and information needs, including finding and using items we have in the Libraries; learning expert tips to refine your search for articles in magazines, journals, and newspapers; making an appointment with a librarian for help on a project; and learning how to evaluate the information you discover.

Well-being at Wooster

The College of Wooster is committed to supporting the well-being of our students. During the course of their academic careers, students experience challenges that contribute to barriers in learning and can interfere with daily life, including but not

limited to: strained relationships, adjusting to a new environment, chronic worrying, persistent sadness or loss of interest in enjoyable activities, family conflict, grief and loss, domestic violence, unwanted sexual experiences, difficulty concentrating, drug/alcohol problems, significant changes in eating and sleeping patterns, microaggressions, challenges with organization, procrastination and/or lack of motivation. Counseling Services at the Longbrake Student Wellness Center is a free and confidential resource providing short-term counseling and connections to community agencies for students needing longer term or specialized resources. You can make an appointment by calling 330.263.2319 between 8:30am-4:30pm during weekdays or by emailing Lori Stine (lstine@wooster.edu). You can also find helpful resources on the Counseling Services website at <https://www.wooster.edu/offices/health/counseling/>.

If you or a friend is in crisis, please call Security and Protective Services at 330-287-3333 or the National Suicide Prevention Lifeline (1-800-273-TALK) or connect with the Crisis Text Line by Texting "4HOPE" to 741-741.

For financial concerns: Dean of Students Office, dos@wooster.edu (330) 263-2545, [DoS website](#)

For safety concerns: Campus Security and Protective Services (330)263-2590 or cw-security@wooster.edu, [SPS website](#). **In the care of an emergency, call: 330-287-3333.**

Title IX Reporting Policy

The College of Wooster is committed to fostering a campus community based on respect and nonviolence. To this end, we recognize that all Wooster community members are responsible for ensuring that our community is free from discrimination, gender bias, sexual harassment, and sexual assault. In accordance with Title IX, Wooster is legally obligated to investigate incidents of sexual harassment and sexual assault that occur on our campus. Faculty who become aware of an incident of sexual violence, including harassment, rape, sexual assault, relationship violence, or stalking, are mandated reporters at the College and are required to notify Wooster's Title IX Coordinator. The purpose of this disclosure is to ensure that students are made aware of their reporting options and resources for support. For more information about your rights and reporting options at Wooster, including confidential and anonymous reporting options, please visit <http://www.wooster.edu/offices/title-ix/>.

Discriminatory or Bias-Related Harassment Reporting Policy

The College of Wooster is committed to promoting its mission of inclusivity and equity in all aspects of the educational enterprise. This commitment extends to all rights, privileges, programs and activities, including housing, employment, admissions, financial assistance, and educational and athletic programs at the College. The College's Bias Incident Reporting Process is designed to effectively respond to bias concerns raised by faculty, students, staff, alumni and visitors to the College. If you or someone you know are the victims of bias, you can:

- [File a report online](#) (where you may choose to identify yourself or not)
- Contact Security and Protective Services: 2590 (from campus phone) or 330-263-2590
- Call the Anonymous Tip Line: 2337 (from campus phone) or 330-263-2337
- Contact the Dean of Students Office: 2545 (from a campus phone) or 330-263-2545
- Contact the Chief Diversity, Equity, and Inclusion Officer, Dr. Ivonne M. García, 2167 (from campus phone) or 330-263-2167 or email at igarcia@wooster.edu.

Syllabus Changes

I reserve the right to make changes to this syllabus, if needed. Any changes will be announced to the class in a timely manner. You can find a preliminary outline of the topics that we hope to cover in this course in the next page. This is an idealized plan, and it *may be adjusted as the semester progresses*.

Week	Monday	Tuesday	Wednesday	Friday
1			19-Aug Syllabus overview + Functions Review I (Domain, Range, Odd, Even, Inc., Dec., Piecewise)	21-Aug Functions Review II (Polynomial, Rational, Trig, Inverse)
2	24-Aug Functions Review III (Exp, Log)	25-Aug Transformation and Composition Using Desmos + Project 1	26-Aug Calculus Preview + An Informal Introduction to Limits	28-Aug 2.2 Limits (Evaluating Graphically and Numerically), One-sided Limits
3	31-Aug 2.3 Evaluating Limits Analytically + Quiz 1 (Ch 1)	1-Sep Limits Worksheet	2-Sep 2.4 Continuity	4-Sep 2.4 <i>IVT</i> , Fixing Discontinuity
4	7-Sep Continuity Worksheet + Quiz 2 (2.2, 2.3, 2.4)	8-Sep 3.1 Average vs. Instantaneous Velocity + Project 2	9-Sep 3.2 Derivative - Limit Definition and Differentiability	11-Sep Graph Matching Worksheet
5	14-Sep Review and Practice	15-Sep Midterm 1	16-Sep 3.3,3.5 Basic Differentiation Rules (Constant, Power, Sum, Diff, Trig)	18-Sep 3.3 Product and Quotient Rule
6	21-Sep 3.4 Interpretation of Derivative as Rate of Change	22-Sep Differentiation Worksheet + Quiz 3 (3.3,3.5)	23-Sep 3.6 Chain Rule	25-Sep Differentiation Worksheet
7	28-Sep 3.7 Derivative of Inverse Function - Inverse Trig + Quiz 4 (3.4,3.6)	29-Sep Differentiation Worksheet	30-Sep 3.9 More Differentiation Rules (Exp, Log)	2-Oct 3.8 Implicit Differentiation
8	5-Oct 4.1 Application of Derivative I - Related Rates + Quiz 5 (3.7, 3.8, 3.9)	6-Oct Differentiation Worksheet + Project 3	7-Oct Fall Break	9-Oct 4.3 Application of Derivative II - Maxima, Minima and <i>EVT</i>
9	12-Oct 4.4 Rolle's Theorem and <i>MVT</i>	13-Oct <i>MVT</i> Worksheet + Quiz 6 (4.3, 4.4)	14-Oct 4.5 Application of Derivative III - Shape of a Graph (<i>FDT</i>)	16-Oct 4.5 contd. - Shape of a Graph (<i>SDT</i> , Concavity, Inflection Point)
10	19-Oct Local and Global Optimization Problems (Couch around a Corner)	20-Oct Project 4	21-Oct 4.6 Asymptotes, End Behavior + Curve Sketching Practice	23-Oct Families of Functions and Modeling + Quiz 7 (4.5, 4.6)
11	26-Oct Review and Practice	27-Oct Midterm 2	28-Oct 4.2 Application of Derivative IV - Linear Approximation and Error Estimation	30-Oct Application of Derivative V - L'Hôpital's Rule, Growth, and Dominance
12	2-Nov 5.1 Area under a curve, The Sigma Notation	3-Nov Project 5	4-Nov 5.2 Riemann Sum and the Definite Integral	6-Nov Riemann Sum Practice
13	9-Nov Properties of Definite Integral	10-Nov Definite Integral Practice + Quiz 8 (5.1, 5.2)	11-Nov 5.3 <i>The Fundamental Theorem of Calculus I</i>	13-Nov <i>The Fundamental Theorem of Calculus II</i> , Applications of FTC
14	16-Nov 5.4 Antiderivative, Basic Integration Formulae + Quiz 9 (5.3)	17-Nov Slope Field + Project 6	18-Nov 5.5 Integration by Substitution	20-Nov 5.5 More Integration by Substitution
15	23-Nov 5.6 Integrals with exp and log + Quiz 10 (5.5)	24-Nov Final Review		