UCONN
UNIVERSITY OF CONNECTICUT

Math 1131Q-180
Calculus I
Fall 2025

Syllabus – Fall 2025

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: Calculus I
Credits: 4
Format: In-Person
Prerequisites: A qualifying score of 22 on the mathematics placement exam (MPE). Students who fail to achieve this minimum score are required to spend time on the preparatory and learning modules before re-taking the MPE, or to register for a lower-level Mathematics course. Not open for credit to students who have passed MATH 1132Q or 1152Q.
Course Communication: Much of the communication for this course will occur online, via HuskyCT and email. Please check course HuskyCT announcements, and your UConn email regularly for updates related to MATH 1131Q. However, you are also expected to be in class every lecture to receive important communications there. Please contact a classmate, your instructor, or your TA if you cannot attend a class to ensure you have not missed important course information. Our Contact Information is posted on HuskyCT, and we will respond to your email within 24 hours on weekdays.
Time Zone: *All times* for due dates, in-person classes, student hours, etc., in this course are given in **US Eastern Time.**

Instructor: Ningwei Jiang
Pronouns: He/him;
A message from Ningwei:

> *Hello! I'm a Visiting Assistant Professor in Mathematics, and my research focuses on probability. I'm excited to spend this fall semester with you as we explore the differential and integral Calculus together.*
>
> *The TAs, SI and I want to create a learning environment where you feel supported, challenged, and encouraged to grow—not just as a math student, but as a thinker and problem-solver. Whether math has always been your strength or you have sometimes felt a little unsure, you belong in this space. We will work together to help you succeed.*
>
> *Please do not hesitate to ask questions, share ideas, or reach out when you need help. I encourage you to make use of student hours and SI sessions—they are a great time to talk through course content, work on problems, or discuss any questions you have about the class. We are always happy to support your learning in whatever way I can.*

Student Hours: The TAs and I will hold student hours every week. You are welcome to stop by to ask questions or discuss course material without an appointment. If you are unavailable during these times (or they are too busy), feel free to reach out to us and we can schedule an appointment to meet at another time. You can locate them in the "Course Intro and Info" Module on HuskyCT.

Course Materials

Textbook: *Calculus Early Transcendentals, Single Variable by James Stewart (9th Edition), which is bundled with a WebAssign code for accessing practice problems.*

This course is part of the campus' course material delivery program. **If you did not opt out of the Husky**

Book Bundle, the digital required materials for this course have been integrated with Blackboard. Please sign into Blackboard to access your course and course materials.

If you opt out of the Husky Book Bundle, you only need to buy ONE of the three textbook/WebAssign bundles listed at the bookstore, OR a 1-term Cengage Unlimited Subscription; your choice will depend on what math classes you plan to take in the future.

NOTE: the least expensive way to get WebAssign ebook access for all courses (MATH 1131Q, 1132Q. 2110Q, and 2410Q) in the Calculus sequence is to purchase a $130, 1-term Cengage Unlimited subscription online, directly from WebAssign, at the start of the term. This will give you access to all four courses and corresponding eBooks whenever you take them, even after the 1-term subscription expires. This will also give you access for this term to any other Cengage-based materials.

Course Description

This course is an introduction to differential and integral calculus, which is the mathematical language used in any science concerned with dynamically changing quantities. The main topics it covers are limits, derivatives, integrals, the Fundamental Theorem of Calculus, and some basic applications of these ideas.

Course Objectives

Successful completion of this course will require you to learn to:

1. Apply fundamental algebra skills to calculus problems.
2. Use common techniques to evaluate limits, and connect limits to derivatives.
3. Interpret derivatives as rates of change.
4. Combine ideas from algebra and trigonometry with knowledge of limits and derivatives to recognize features of the graph of a function.
5. Use derivatives to describe the features of a function and its graph, including maximum and minimum values and where they occur.
6. Identify applications of differential and integral calculus, and explain how calculus can be used in these applications.
7. Apply the Fundamental Theorem of Calculus and the substitution rule to evaluate definite and indefinite integrals.
8. Demonstrate how integrals are connected to the area under the graph of a function.

Discussion

Discussion sessions will be offered during your scheduled Discussion Section time. Pending University guidance, these will be in-person on the Storrs UConn campus. Active participation in these sessions is designed to help you with the course material, Worksheets, Quizzes, and Exams. These sessions are also where you will take your Quizzes and Exams, so please plan to attend and participate regularly.

NOTE: It is important for you to stay home if you are feeling ill. Please contact your TA AND instructor ASAP via email if you need to miss a discussion section due to illness or other personal reasons.

Course Outline (Tentative)

Week	Dates	Section	Topic and Course Activity
1	8/25-8/31		**Monday: Algebra/Precalculus Practice during Discussion**

Week	Dates	Section	Topic and Course Activity
			Course Orientation;
		2.1	The Tangent and Velocity Problems
		2.2	The Limit of a Function
2	9/1-9/7		**Monday: No Discussion/No Quiz**
		2.3	Calculating Limits Using the Limit Laws
		2.5	Continuity
		2.6	Limits at Infinity; Horizontal Asymptotes
3	9/8-9/14		**Monday: Quiz 1 (2.3, 2.5-2.6) during Discussion**
		2.7	Derivatives and Rates of Change
		2.8	The Derivative as a Function
		2.4	The Precise Definition of a Limit (Not Required, Videos available in HuskyCT)
4	9/15-9/21		**Monday: Quiz 2 (2.7-2.8) during Discussion**
		3.1	Derivatives of Polynomials and Exponential Functions
		3.2	The Product and Quotient Rules
5	9/22-9/28	**Exam 1**	**Monday, September 22 in Discussion, covering sections 2.1-2.8**
		3.3	Derivatives of Trigonometric Functions
		3.4	The Chain Rule
		3.5	Implicit Differentiation
6	9/29-10/5		**Monday: Quiz 3 (3.3-3.5) during Discussion**
		3.6	Derivatives of Logarithmic and Inverse Trig Functions
		3.8	Exponential Growth and Decay
7	10/6-10/12		**Monday: Quiz 4 (3.6, 3.8) during Discussion**
		3.9	Related Rates

Week	Dates	Section	Topic and Course Activity
		3.10	Linear Approximations and Differentials
8	10/13-10/19		**Monday: Quiz 5 (3.9-3.10) during Discussion**
		4.1	Maximum and Minimum Values
		4.2	Mean Value Theorem
9	10/20-10/26	**Exam 2**	**Monday, October 20 in discussion, covering sections 3.1-3.6, 3.8-3.10**
		4.3	What Derivatives Tell Us About the Shape of a Graph
		4.4	Indeterminate Forms and l'Hospital's Rule
10	10/27-11/2		**Monday: Quiz 6 (4.3-4.4) during Discussion**
		4.7	Optimization Problems
		4.8	Newton's Method
11	11/3-11/9		**Monday: Quiz 7 (4.7-4.8) during Discussion**
		4.9	Antiderivatives
		5.1	Areas and Distances
		5.2	The Definite Integral
12	11/10-11/16		**Monday: Quiz 8 (4.9, 5.1-5.2) during Discussion**
		5.3	The Fundamental Theorem of Calculus
		5.4	Indefinite Integrals and the Net Change Theorem
13	11/17-11/23	**Exam 3**	**Monday, November 17 in discussion, covering sections 4.1-4.4, 4.7-4.9, 5.1-5.2**
		5.5	The Substitution Rule
		6.1	Areas Between Curves
Fall Break	**11/24-11/30**	**No Class**	**Thanksgiving Break**
14	12/1-12/7		**Monday: Quiz 9 (5.5, 6.1) during Discussion**

Week	Dates	Section	Topic and Course Activity
		6.2	Volumes
Finals Week	**Dec 8-14**	**Final Exam**	**Final Exam during University-scheduled time (TBA) – cumulative**

Note: This schedule is subject to change as needed according to content coverage and unforeseen events. You are expected to work through the course content for the sections listed above during the weeks listed.

Course Requirements and Grading

Category	Overview	Points
Weekly Worksheet	Due Friday on HuskyCT	5
Weekly Learning Reflection	Due Friday on HuskyCT	5
Discussion Practice	Practice in Discussion on Mondays	5
Quizzes	Take in Discussion on Mondays	20
Exam 1: Monday, Week 5	Discussion, 50 mins	15
Exam 2: Monday, Week 9	Discussion, 50 mins	15
Exam 3: Monday, Week 13	Discussion, 50 mins	15
Final Exam: Week of December 8-14	See Student Admin for date, time, and location information	20
WebAssign	Online Practice, due Dec 5th	10
Total Available Points		110

Note that we will use the point system for the course grade. The total number of available points is 110, but your course grade will be calculated out of 100, i.e., you can earn up to 110/100=110%.

Learning Reflection

Each week, you will be invited to complete a short reflection to share your understanding and difficulty with the material. These reflections are not graded for right or wrong answers—they are an opportunity for you to think critically about what you have learned, where you are confident, and where you are struggling so we will explore together during the student hours or discussion session. Full credit is given for honest, thoughtful effort and completion.

Weekly Worksheets

There are weekly worksheets that cover the materials from each week of the course posted on HuskyCT. **It must be submitted on HuskyCT by Friday night of the week after the material is covered.** You will receive full points for completing these problems and submitting them. You are welcome to print out the worksheet and do your work on there, but using your own lined paper and submitting a picture or scan of your work is perfectly fine! Note: “complete” means that all parts of the problem are finished and that an earnest attempt was made at solving the problem. Simply writing something down or doing a step or two do not constitute a full, good-faith solution attempt and will not receive completion credit. The answer keys will be provided to help you validate your work. If you have any questions about these problems, please seek help from your peers, your TA or instructor via student hours, the Q-Center, or a tutor.

Discussion Practice

Each discussion session will have a short worksheet designed to reinforce the understanding of the materials from the lecture. You will first work on these problems individually or in small groups, followed by a guided discussion led by the TA. Your effort and engagement are what matter most, so you will receive full credit for being in class and working with others.

There are no makeups for this in-class activity. If you miss a discussion session, your score for that week's discussion practice will automatically match your score on that week's quiz. This policy also applies if you only show up to take the quiz in the discussion.

In-class Quizzes

There will be a closed-book quiz each week, aside from Week 1- 2 and Exam weeks, in your Monday discussion class. You will have 10 minutes for each quiz. Each quiz will test students on material that was taught in the previous week. They are graded on correctness, and will be returned online prior to Monday the following week. **I will drop two lowest quiz scores from your final grade.**

Students with CSD accommodations who wish to use them for quizzes should email their instructor and contact CSD to arrange accommodations at least a week in advance.

Calculators: The use of calculators is **NOT allowed** on quizzes.

WebAssign Online Practice

There are WebAssign online practice for each covered section of the text. You will need to access WebAssign via the link in your HuskyCT lecture section. The due date for these practice problems is the last day of class instruction; however, we suggest attempting these problems for the learned sections each week.

You will get ten attempts for each question that is not multiple choice; the exact number of attempts for multiple choice questions will depend on the number of choices. This means True/False questions and questions with two answer choices have only one attempt – choose carefully! After each attempt, you will be told whether your answer is correct or not. If you are not able to get the correct answer after your initial attempts, we recommend that you seek help from your peers, your TA or instructor via student hours, the Q-Center, or the Supplemental Instruction sessions before attempting to answer the problem again.

Warning: When accessing the WebAssign, use **Firefox or Chrome as your browser**; there are problems that can occur if you use Internet Explorer or Safari. **Please use the WebAssign Tips.pdf document on HuskyCT for help with accessing WebAssign and entering your answers correctly.**

Exams

There will be three in-class Exams and a Final Exam. Exams 1-3 will be administered during your scheduled discussion section time on Monday of the 5th, 9th, and 13th weeks of the semester. Please put these dates in your calendar – you are expected to be in attendance. Students with CSD accommodations who wish to use them for exams should email their instructor and contact CSD to arrange accommodations at least 7 business days in advance.

The Final Exam will be during the week of December 8-14, during your scheduled Final Exam period; the exact date and time will be scheduled by the University and will be shared once it is known.

Each of Exams 1-3 will primarily cover materials from the 3-4 weeks prior to the exam; the Final Exam will be cumulative.

Check HuskyCT and emails regularly for announcements and updates to exam dates, locations, content coverage, and review materials.

Calculators: The use of calculators is **NOT allowed** on quizzes or exams.

Grading Scale

Points Earn	Letter Grade	GPA
93-100	A	4.0
90-92.9	A-	3.7
87-89.9	B+	3.3
83-86.9	B	3.0
80-82.9	B-	2.7
77-79.9	C+	2.3
73-76.9	C	2.0
70-72.9	C-	1.7
67-69.9	D+	1.3
63-66.9	D	1.0
60-62.9	D-	0.7
<60	F	0.0

Make-Up Policy

It is important for you to stay home if you are feeling ill. Please contact your TA and instructor ASAP via email if you need to miss a discussion section due to illness or other personal reasons. If you are missing a quiz or exam due to illness or other personal reasons, please include in your email your available times for a make-up quiz or exam over the next few days.

A student is allowed to make up a Quiz or Exam only if there is a personal/family/medical emergency. You must contact your TA and lecture instructor ASAP if you know that you will miss a Quiz or Exam. **You will not be able to make up a missed Quiz or Exam if you do not contact your instructor within 24 hours after returning to classes at UConn following your illness or emergency.** Athletes who travel on behalf of the university must provide a letter/email from their athletic advisor in order to be allowed to take a make-up Quiz or Exam.

In case of a missed quiz, or exam please make every effort to contact your instructor as soon as you know you will miss it, and no later than 24 hours after the missed assessment or due date.

Per University policy, all requests to reschedule or make up the Final Exam must be submitted to the Dean of Students for approval. Please note that vacations, previously purchased tickets or reservations, social events, misreading the exam schedule and over-sleeping are not viable excuses for missing a final exam. If you think that your situation warrants permission to reschedule, please contact the Dean of Students Office with any questions. Thank you in advance for your cooperation.

Academic Integrity

Learning math is a process, and it is okay if that process includes challenges. The best way to grow as a learner is to work through problems on your own and take ownership of your understanding—even when it's hard. In our class, you are expected to follow the university's academic honesty policies, but also to take pride in your own progress. That means:

- Doing your own work and showing your own reasoning.
- Citing any sources you use, including explanations from websites, textbooks, or other people.
- Using tools like calculators, online resources, or AI (such as ChatGPT) **only in ways that support your learning**—not as a substitute for doing the work yourself.

If you're ever unsure about what's allowed—or if you're feeling stuck—please reach out and utilize the student hours. You don't have to go through it alone. I'm here to help, and there are also great campus and online resources. It's always better to ask for help than to risk your integrity.

This is a space where effort and honesty matter more than perfection.

How to Succeed in this Course

1. Participate regularly for understanding and practice, not just for credit.
2. Schedule your study time each week! You are expected to **spend a minimum of 12 hours per week** working for a 4-credit course. This expectation is based on the various course activities, assignments, and assessments and the University of Connecticut's policy regarding credit hours. (More information related to hours per week per credit can be accessed at the Online Student website).
3. Follow all the instructions provided in the learning modules on HuskyCT.
4. Review the lecture slides, read the explanations and examples in the textbook.
5. Do WebAssign Practice, quizzes, and worksheets on time.

Throughout the semester, it is normal to run into challenges in this course. These might be compounded by outside stressors. It is sometimes difficult to find the balance between using challenges as an opportunity to push yourself and knowing when to take a step back for your personal health and well-being. Reach out! I am here to help you navigate the challenges in the course. You may also consider reaching out to the various support offices on campus, listed below.

Dean of Students Office, Academic Achievement Center, Writing Center, Quantitative Learning Center, Center for Students with Disabilities, Title IX Office, Student Health and Wellness -- Mental Health

Importance of Inclusivity

Throughout this course, you will be asked to interact with me, TAs, SI, and your classmates in different ways. Through these interactions, it is important to be mindful of the diversity of background and experience each of us brings to the class. I will do my best to ensure each student in the class has equitable access to the course material as well as to opportunities to earn credit. I ask when you are working with other students you create a good environment for your classmates. This might take the form of using someone's preferred pronouns, acknowledging differences in learning styles or background knowledge, or respecting someone's choice to maintain physical distance in the classroom space. If at any time you feel that you or someone around is not being treated respectfully, please do not hesitate to let me know.

Resources for Students Experiencing Distress

The University of Connecticut is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement.

Students who feel they may benefit from speaking with a mental health professional can find support and resources through the **Student Health and Wellness-Mental Health** (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern.

Mental health services are included as part of the university's student health insurance plan and also partially funded through university fees. If you do not have UConn's student health insurance plan, most major insurance plans are also accepted. Students can visit the **Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor,** or contact the office at **(860) 486-4705, or https://studenthealth.uconn.edu/** for services or questions**.**

Accommodations for Illness or Extended Absences

Please stay home if you are feeling ill and please go home if you are in class and start to feel ill. If illness prevents you from attending class, it is your responsibility to notify me as soon as possible. You do not need to disclose the nature of your illness, however, you will need to work with me to determine how you will complete coursework during your absence.

If life circumstances are affecting your ability to focus on courses and your UConn experience, students can email the Dean of Students at dos@uconn.edu to request support. Regional campus students should email the Student Services staff at their home campus to request support and faculty notification.

COVID-19 Specific Information: People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness. These symptoms may appear 2-14 days after exposure to the virus and can include:

- Fever,
- Cough,
- Shortness of breath or difficulty breathing
- Chills
- Repeated shaking with chills
- Muscle pain
- Headache
- Sore throat
- New loss of taste or smell

Additional information including what to do if you test positive or you are informed through contract tracing that you were in contact with someone who tested positive, and answers to other important questions can be found here: https://studenthealth.uconn.edu/updates-events/coronavirus/

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
    - Academic Integrity
    - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or http://csd.uconn.edu/.

To provide students with disabilities the appropriate accommodations, CSD must send an official letter to your instructor. If your accommodations require you to take quizzes and/or exams in a separate space, it is your responsibility to schedule an appointment with CSD's testing center through MyAccess at least one week before each quiz/exam date.

Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include:

- Equipment Recommendations (https://remotework.uconn.edu/equipment-recommendations/)
- HuskyCT/Blackboard (HuskyCT/ Blackboard Accessibility Statement, HuskyCT/ Blackboard Privacy Policy)
- Adobe Acrobat Reader (Adobe Reader Accessibility Statement, Adobe Reader Privacy Policy)
- Google Apps (Google Apps Accessibility, Google for Education Privacy Policy)
- Microsoft Office (free to UConn students through uconn.onthehub.com) (Microsoft Accessibility Statement, Microsoft Privacy Statement)
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- WebCam

Privacy Statement: For information on managing your privacy at the University of Connecticut, visit the University's Privacy page. NOTE: This course has NOT been designed for use with mobile devices.

Help

Technical and Academic Help provides a guide to technical and academic assistance.

This course uses the learning management platform, HuskyCT. If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the Help Center. You also have 24x7 Course Support including access to live chat, phone, and support documents.

Student Technology Training

Student technology training is now available in a new HuskyCT short course created by students for students. It will prepare you to use the IT systems and services that you will use throughout your time at UConn, whether learning online or on-campus. It is available at https://lms.uconn.edu/ultra/courses/_80016_1/cl/outline .

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

Evaluation of Course Experience

Students will be given an opportunity to provide feedback on their course experience and instruction using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).

The University of Connecticut is dedicated to supporting and enhancing teaching effectiveness and student learning using a variety of methods. The Student Evaluation of Teaching (SET) is just one tool used to help faculty enhance their teaching. The SET is used for both formative (self-improvement) and summative (evaluation) purposes.

Additional informal formative surveys and other feedback instruments may be administered within the course.