Harper College

1200 West Algonquin Road
Palatine, Illinois 60067-7398

College Mission: *Harper College enriches its diverse communities by providing quality, affordable, and accessible education. Harper College, in collaboration with its partners, inspires the transformation of individual lives, the workforce, and society.*

Math 200-001 Calculus I
Spring 2025 Course Syllabus

General Course Information

Credit Hours: 5

Class Dates: MTWTH

Meeting Times: MW: 8:00AM-8:50AM

TTH: 8:00AM-9:15AM

Meeting Location(s): D254

Modality: Face to Face

Last Day to Drop for 100% Refund: 1/21/2025.

Last Day to Withdraw: 4/21/2025.

Instructor Information

Name: Carter Chen

Email: cc24348@harpercollege.edu

Office Hours: TBA

Preferred Method of Communication: Email is the best way to contact me with any questions.

Course Description

Course Description: Studies limits, continuity, derivatives, antiderivatives, and definite integrals as they relate to algebraic, trigonometric, inverse trigonometric, logarithmic and exponential functions. Includes applications to geometry, science, and engineering. IAI M1 900-1, IAI MTH 901

Prerequisites: MTH 140 (Precalculus) with a grade of C or better, or other placement options. http://goforward.harpercollege.edu/registration/testing/pdf/Math_Placement_Grid_17_18.pdf

STUDENT OUTCOMES: The student should (1) be able to use algebraic techniques for evaluating limits. (2) know the definition and geometric interpretation of the derivative and be able to differentiate algebraic functions. (3) know the definition and geometric interpretation of the definite integral and be able to use basic techniques for integrating algebraic functions. (4) be able to apply the derivative and the definite integral to limited situations in geometry, physics and engineering..

Course Assessments

Assessment Overview

Grading Criteria:

Grading Categories	Percentage
1. Tests	50%
2. Homework Quizzes	30%
3. Final Exam	20%
Total	**100%**

Grading Scale [REQUIRED]:

Final Grade	Percentage
A	90% – 100%
B	80% – 89.99%
C	70% – 79.99%
D	60% – 69.99%
F	<60%

Category Descriptions

Homework: There will be homework assignments for each section, they are all optional homework and will not be collected. However, you may use the homework on the quiz, that means if you do not complete the homework by the quiz day, you will have a difficult time for the quiz. Therefore, homework is still the most important aspect of the course.

REQUIRED MATERIALS: • Text book: Calculus Volume 1, by OpenStax College, Rice University. ISBN-10: 193816802X ISBN-13: 978-1-938168-02-4 This text book is a free OER, and can be downloaded for free at: https://openstaxcollege.org/textbooks/calculus-volume-1 It is also on Blackboard under Course Materials. Physical copies of the book are available for purchase at the bookstore or online. • Graphing Calculator. I will use the TI-84 for demonstrations. Any graphing calculator is okay, so long as it is not CAS equipped (such as the TI-89, the TI-nSpire CAS, or the Casio Classpad). Phones, tablets, and CAS calculators will not be allowed on tests or quizzes.

Quiz: There will be Weekly homework quizzes throughout the semester. They are meant to prepare you for Exams, and help you see where you are in the class. You may use your homework for the quiz and all the quiz questions will correspond to the homework assignments. If a student is absent the day of a quiz, a score of 0 will be recorded. Only your highest 10 quiz scores will be recorded, i.e., I will drop your lowest quiz score(s). Therefore, **no make-up quizzes** will be given throughout the semester since I will drop you lowest quiz(es). If you miss a quiz, you may use that quiz as your lowest dropped quiz. If something comes up, or you do have to miss a quiz day, please inform me.

Exams and Final: There will be **Four** Chapter Exam and a **FINAL** throughout the semester. These exams are very important because they count for a major part of your final grade. All the exams will contain free-response questions and will be very similar to homework problems. I will drop one of your lowest test at the end of the semester.
There will **NOT** be make up exam unless it is prearranged with me, i.e. You must contact me at least 24 hours prior to the exam either by phone, email, or in person so I can arrange it for you.

Assessment Policies

Late Work Policy: since homework is optional there is no late homework policy, but there will not be late quizzes will be given. If you run into some extenuating circumstances, please contact me. We can work something out together.

Attendance: It is the student's responsibility to attend each class. Students are responsible for knowing what goes on in every class, including announcements, schedule changes, etc. It is the student's responsibility to find out what was missing if he or she cannot attend class for any reason.

Course Surveys: Near the end of this course, you will be invited to participate in a survey. The feedback you provide is valuable to me, as your instructor, as well as Harper College. The comments you share are completely anonymous and the compiled confidential results will not be released until after final grades have been posted for the entire semester. You may access the survey through a link you will receive in your Harper College Gmail account or directly via Blackboard. Surveys are *usually* available three weeks before the last day of class. *Note: Course surveys are administered in Fall and Spring semesters only.*

Course and College Policies

Academic Dishonesty: The College reserves the right to set and communicate reasonable standards of behavior. Students are expected to uphold college standards related to academic honesty. The following behaviors, as outlined in the Student Code of Conduct, are considered academic dishonesty and are prohibited. Examples are provided to illustrate the specific prohibition and are not intended to be all-inclusive.

- Cheating (accessing or using unauthorized materials, information, or technology, including artificial intelligence/chatbots/etc.)

- Plagiarism (reproducing someone else's words or ideas without accurate acknowledgment)
- Falsifying information (providing untrue information)
- Unauthorized collaboration (getting assistance or sharing work without permission, including sharing of course materials through a 3rd party means without instructor approval)
- Facilitating academic dishonesty (participating in an act that creates an unearned advantage for someone)

Equal Educational Opportunity Statement: In providing educational programs and opportunities, the College will not discriminate against any individual on the basis of race, color, religion, sex, national origin, ancestry, age, marital status, sexual orientation, gender-related identity, disability, unfavorable discharge from military service, or any other legally protected category. It is the intent of the Board of Trustees to comply with all applicable local, state, and federal statutes, regulations and ordinances prohibiting such discrimination.
If you believe you have experienced discrimination or harassment (whether on or off campus) that affects your ability to participate in class or any of Harper College's programs, please seek assistance from any of the following resources:

- For gender-based or sexual misconduct (including sexual assault and sexual harassment) by any person, visit the Harper College Title IX resource page to learn more about your support and reporting options.
- For any other harassment/discrimination by an employee, contact the College's Chief Human Resources Officer at 847-925-6216.

Please be advised that faculty members are required to report to the College if they learn that a crime, harassment, or discrimination may have occurred.

Student Conduct: All participants in this course are expected to follow the Student Code of Conduct and other applicable College policies. All are expected to contribute to an environment that maximizes students' ability to learn and the instructor's ability to teach. The Student Code of Conduct and related information at the Harper Student Conduct resource page outlines these expectations and provides resources and reporting options for students.

Open discussion and disagreement are encouraged when done respectfully and in the spirit of academic discourse. There are a variety of behaviors that, while not against a specific College rule, may create disruption in this course. Students whose behavior is disruptive or who fail to comply with the instructor may be dismissed from the class for the remainder of the class period and may be required to meet with the instructor or Dean prior to returning to the next class period. If necessary, referrals may also be made to the Student Conduct process for violations of the Student Code of Conduct.

Dispute Resolution: All Harper students have the right to express their concerns regarding their experience in the classroom, including the assessment of their performance or difficulties with other students. Students should first contact their instructors with any questions or concerns. If students

and instructors cannot resolve concerns together, students should follow the Student Academic Complaint Process outlined in the Student Handbook.

Student E-mail Notifications & Privacy: All notifications related to student registration or other business activities are sent to students via their Harper College email account (XXXX@mail.harpercollege.edu) that is assigned to students upon registration. Students access this account via an icon in the student portal (where you registered for classes). Please check this e-mail frequently. To forward e-mails from this account to a personal email account please follow these instructions.

Please be advised that your education records are subject to a federal privacy law called the Family Education Rights and Privacy Act (FERPA). As a result, please be aware that you (not your parent(s), spouse, or other such person) will generally need to be the one to ask questions, file complaints, or otherwise interact with the College and faculty about your academic performance in this class.

Blackboard Privacy and Accessibility Statements: Blackboard is the learning management system used at Harper College. It provides a secure Web space for delivery of instructional course materials. Blackboard's privacy statement and accessibility statement are available for review.

Alternative Formats for Course Content in Blackboard: Harper College courses use the Blackboard Ally tool, which offers students alternative format options for course content. When available, indicated by an "A" icon to the right of an item in Blackboard, you can click on the icon to download course content in formats that work best for you. Need help? Check out the Ally Help for Students or contact the Service Desk with questions about downloading alternative file formats.

Copyright Statement: The materials on this course website are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated. For more information, please visit the Harper College Copyright/Fair Use resource page.

Student Support Resources

Tutoring Center: There is free tutoring available for this class in room F110 on campus. Call 847.925.6539 for hours and availability. **You will need your Harper ID to check in**.

Note: During the semester, tutoring is available in person and online. Please see this website for details about online tutoring: https://www.harpercollege.edu/academic-support/index.php

Student Success Resources at Harper College: There are several academic support areas and services to help ensure your success at Harper College, including Access and Disability Services,

Academic Advising, Center for Student Veterans and Military Connected Students, One Stop, Library, Academic Support Center, Computer Labs, Job Placement Resource Center and more. Information about all student support resources can be found on the Student Support Resources page.

Safety and Wellness Resources at Harper College: Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, mental health, alcohol or other drugs, identities, finances, etc. If you are experiencing concerns, seeking help is a courageous thing to do for yourself and those who care about you. Please reach out for support. Safety and wellness resources at Harper College include Hawks Care, Counseling Services, Harper Wellness, Community Resources, Harper Early Alert Team, and Harper College Police. Information about all student safety and wellness resources can be found on the Student Support Resources page.

Access and Disability Services [REQUIRED]: Harper College strives to make all learning experiences as accessible and inclusive as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let Access and Disability Services (ADS) know immediately at 847.925.6266. ADS will privately discuss the options you have, including possible accommodations. You are encouraged to register with ADS by filling out the online application that can be found on the ADS website. Once approved by ADS, please make arrangements with your instructor as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. In-person and virtual appointments are available.

- Phone: 847.925.6266
- Email: ads@harpercollege.edu
- To learn more visit: Access and Disability Services

Harper College

Math-200-001 Calculus I
Spring 2025 Course Schedule

Week	Topics	Class Activities
Week 1 1/13-1/16	Chapter 1: Review	**Quiz 0 (1/16)**
Week 2 1/20-1/23	Section 2.1: A Preview of Calculus Section 2.2: The Limit of a Function Section 2.3: The Limit Laws	**Quiz 1 (1/23)** **1/20 MLK day No Class**
Week 3 1/27-1/30	Section 2.4: Continuity Section 2.5: The Precise Definition of a Limit	**Quiz 2 (1/28)** **Review For Chapter 2 Exam**
Week 4 2/3-2/6	Section 3.1: Defining the Derivative Section 3.2: The Derivative as a Function	**Chapter 2 Exam (2/4)**
Week 5 2/10-2/13	Section 3.3: Differentiation Rules Section 3.4: Derivatives as Rates of Change Section 3.5: Derivatives of Trigonometric Functions	**Quiz 3 (2/13)** **2/12 Lincoln's Day No Class**
Week 6 2/17-2/20	Section 3.6: Motion in Space Section 3.7: Derivatives of Inverse Functions	**Quiz 4 (2/20)**
Week 7 2/24-2/27	Section 3.8: Implicit Differentiation Section 3.9: Derivatives of Exponential and Logarithmic Functions	**Review for Chapter 3 Exam** **Quiz 5(2/27)**
Week 8 3/3-3/6	Section 4.1: Related Rates Section 4.2: Linear Approximations and Differentials	**Chapter 3 Exam (3/3)**
Week 9 3/10-3/13	Section 4.3: Maxima and Minima Section 4.4: The Mean Value Theorem	**Quiz 6 (3/13)**

Week	Topics	Class Activities
Week 10 3/17-3/20	Section 4.5: Derivatives and the Shape of a Graph Section 4.6: Limits at Infinity and Asymptotes Section 4.7: Applied Optimization Problems	**Quiz 7 (3/20)**
Week 11 3/24-3/27	Spring Break No Class	Spring Break No Class
Week 12 3/31-4/3	Section 4.7: Applied Optimization Problems continued Section 4.8: L'Hopital's Rule	**Quiz 8 (3/31)**
Week 13 4/7-4/10	Section 4.9: Newton's Method Section 4.10: Antiderivatives	**Quiz 9 (4/10)** **Review Chapter 4 Exam**
Week 14 4/14-4/17	Section 5.1: Approximating Areas Section 5.2: The Definite Integral Section 5.3: The Fundamental Theorem of Calculus	**Chapter 4 Exam (4/16)** **4/17 Professional Development Day**
Week 15 4/21-4/24	Section 5.4: Integration Formulas and the Net Change Theorem Section 5.5: Substitution	**Quiz 10 (4/24)**
Week 16 4/28-5/1	Section 5.6: Integrals Involving Exponential and Logarithmic Functions Section 5.7: Integrals Resulting in Inverse Trigonometric Functions	**Quiz 11 (5/1)** **Review Chapter 5 Exam**
Week 17 5/5-5/8		**Chapter 5 Exam (5/7)** **Quiz 12 (5/7)** **Review for Final Exam**
Finals Week 5/12-5/15	Review Final Final Exam	**Final Exam Monday.** **9:55 AM-11：40AM**