

# Math 31A (Section 1), Fall 2019: Differential and Integral Calculus

Mon, Wed, Fri 8-8:50am  
Math. Sciences Building 4000A

## Instructor

Chi-Yun Hsu  
Office: MS 5242  
Email: cyhsu at math.ucla.edu

## Office Hours:

Sundays 5-6pm at the tables south of Math.  
Sciences Building breezeway  
Tuesdays 5-6pm at MS 5242  
Thursdays 5-6pm at MS 5242

## Teaching Assistants

TBD

## Textbook

Rogawski, Single Variable Calculus, 4th Edition

## Grade

Homework	30%	The lowest homework score will be dropped. This is the higher of
Midterms	40%	- 40% Midterm 1 + 60% Midterm 2 - 60% Midterm 1 + 40% Midterm 2, or 80% Midterm if you miss another one.
Final Exam	30%	

## Homework

Homework will be posted the night before each class, and is due at the beginning of the the next class. If you miss a class, you are still responsible for handing in the homework on time, either by asking a classmate to hand it in for you, or by sending an email to the grader (cc'ing me) with a clear photo or scan of your assignment. To be fair to other students and to graders, late homework will NOT be accepted. The lowest homework score will be dropped.

You are encouraged to discuss the problems with other students. However, you must write up the solutions on your own, as writing helps you probe and deepen your understanding. Apart from help from me or the TAs, you must acknowledge any collaborators or cite references at the top of your assignment.

## Exams

Midterm 1	Oct. 25 (Fri.)	8-8:50am	MS 4000A
Midterm 2	Nov. 18 (Mon.)	8-8:50am	MS 4000A
Final Exam	Dec. 10 (Tues.)	8-11am	TBD

## Disabilities Requiring Accommodation

If you are already registered with the Center for Accessible Education (CAE), please request your Letter of Accommodation on the Student Portal. If you are seeking registration with the CAE, please submit your request for accommodations via the CAE website. Please note that the CAE does not send accommodations letters to instructors – you must request that I view the letter in the online Faculty Portal. Once you have requested your accommodations via the Student Portal, please notify me immediately so I can view your letter.

Students with disabilities requiring academic accommodations should submit their request for accommodations as soon as possible, as it may take up to two weeks to review the request. For more information, please visit the CAE.

Center for Accessible Education (CAE)  
A255 Murphy Hall  
www.cae.ucla.edu  
(310) 825-1501

### **Statement on Sexual Misconduct**

Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at

CARE Advocacy Office for Sexual and Gender-Based Violence  
1st Floor Wooden Center West  
CAREadvocate@careprogram.ucla.edu  
(310) 206-2465

In addition, Counseling and Psychological Services (CAPS) provides confidential counseling to all students and can be reached 24/7 at (310) 825-0768. You can also report sexual violence or sexual harassment directly to

University's Title IX Coordinator  
2241 Murphy Hall  
titleix@conet.ucla.edu  
(310) 206-3417

Reports to law enforcement can be made to UCPD at (310) 825-1491.

Faculty and TAs are required under the UC Policy on Sexual Violence and Sexual Harassment to inform the Title IX Coordinator should they become aware that you or any other student has experienced sexual violence or sexual harassment.

## Calendar

	Monday	Wednesday	Friday
Week 0 (9/23-9/27)			1. Introduction
Week 1 (9/30-10/4)	2. Limit Laws, Limits and Continuity	3. Evaluating Limits Algebraically	4. Trigonometric Limits, Limits at Infinity
Week 2 (10/7-10/11)	5. Intermediate Value Theorem	6. Definition of the Derivative	7. The Derivative as a Function
Week 3 (10/14-10/18)	8. Product and Quotient Rules	9. Higher Derivatives, Trig Functions	10. The Chain Rule
Week 4 (10/21-10/25)	11. Implicit Differentiation	12. Related Rates	13. Midterm 1
Week 5 (10/28-11/1)	14. Linear Approximation, Extreme Values	15. Extreme Values continued	16. Mean Value Theorem
Week 6 (11/4-11/8)	17. The Shape of a Graph	18. Graph Sketching	19. Applied Optimization
Week 7 (11/11-11/15)	No class (Veteran's Day)	20. Newton's Method, Area	21. The Definite Integral
Week 8 (11/18-11/22)	22. Midterm 2	23. The Indefinite Integral	24. Fundamental Theorem I
Week 9 (11/25-11/29)	25. Fundamental Theorem II	26. The Substitution Method	No class (Thanksgiving)
Week 10 (12/2-12/6)	27. Areas Between Curves, Average Value	28. Volumes of Revolution	29. Method of Cylindrical Shells