

Syllabus, Math 118, Spring 2025

Sections 39422, 39426

Instructor: Michael A. Hall, hallma@usc.edu

Lectures: Section 39422: MWF 12:00-12:50, SOS B44
Section 39426: MWF 1:00-1:50, SOS B44

Office Hours: TBA

Prerequisites: Math 108 or Math 117

Teaching Assistants (TA's) / Discussion Sections:

Section 39422	Section 39426
Zile Jiang (zilejian@usc.edu)	Ruoyu Zeng (ruoyuzen@usc.edu)
Thursday 2:00-2:50	Tuesday 10:00-10:50
Thursday 3:00-3:50 KAP 147	Tuesday 11:00-11:50 THH B10

Math Center / TA Office Hours:

The Math Center (<https://dornsife.usc.edu/mathcenter/>) is located in KAP 263. In the first or second week of classes, all TA's will announce their office hours, which they will hold in the Math Center and will also be posted at the link below. Note that you may go to the Math Center at other times and ask for help from the TA's on duty.

Consulting Hours: <https://dornsife.usc.edu/mathcenter/consulting-hours/>

Textbook: Hughes-Hallett et al, *Applied Calculus*, 7th Edition.

Note: You will need an access code for WileyPLUS to complete the online homework. This will also provide you with access to an electronic version of the textbook, along with some additional learning resources. If you buy a copy from the USC bookstore, it should come with an access code.

Course Content / Learning Outcomes

We will cover most of Chapters 1, 2, 3, 4, 5, 6, and 8 of the textbook, including derivatives, integrals, extreme values and business and economics applications for functions of one or several variables. By the end of the course, students will be able to build mathematical models combining power functions, exponentials, and logarithms into functions of one or several variables. They will be able to analyze such models using derivatives and integrals, and apply them to real-world scenarios.

A more detailed list of learning outcomes has been compiled here:

<https://dornsife.usc.edu/mathematics/math-118-fundamental-principles-of-the-calculus/>

Tech Platforms

Brightspace (<https://brightspace.usc.edu>)

Brightspace will be the main hub for the course. You will find announcements, handouts, assignments, and the course gradebook, as well as links to other platforms below.

Gradescope (<https://www.gradescope.com>)

We will use Gradescope for written assignment / exam submissions. All submissions should be in PDF format, and you must complete the “page-matching” step to indicate where your solutions are.

Piazza (<https://www.piazza.com>)

A message board for questions and class discussion.

Zoom (<https://www.zoom.com>)

While not anticipated, it may happen that class is temporarily moved online (e.g. due to a positive COVID test). Recordings of the lectures will be automatically posted to Blackboard once they are processed, which usually takes a few hours.

Additional resources

Desmos graphing calculator (<https://www.desmos.com/calculator>)

An online graphing calculator with many features for manipulating visualizations.

Wolfram Alpha (<https://www.wolframalpha.com>)

A powerful calculational engine capable of performing many procedures in calculus.

Grading

An overall percentage score will be calculated according to the following breakdown:

15% Classwork 15% Homework 45% Midterm Exams 25% Final

Your overall percentage will be used to determine your final grade. Individual assignments and exams will typically not be curved, but the distribution of overall percentage scores will be used to curve the final grades. It is typically not possible to estimate the curve before the final exam is graded, but it will always be in your favor versus the standard 10-point increments e.g. 90% will guarantee at least an A-, 80% at least a B-, etc.

Note: Grading issues should be raised at most one week after the assignment is graded.

Homework

There will be weekly homework will be assigned via WileyPLUS. It may be submitted after the official deadline, but with a 50% penalty. It is recommended that you keep a notebook with your solutions to the homework problems to help you study, but this will not be collected or graded.

Classwork

Each week, there will be a worksheet given in TA section containing midterm style practice problems. You will have some time to work in groups during discussion section, and will turn it in via Gradescope.

Examinations

There will be three midterm exams, held during lecture:

Midterm 1: February 14th

Midterm 2: March 14th

Midterm 3: April 18th

Midterm exams may not be rescheduled except in cases of emergency, or with the instructor's approval two weeks in advance and with supporting documentation. You should notify me as soon as you know about a potential conflict.

Final Exam: Wednesday, May 14th, 8:00 - 10:00 am, Location TBA

The final is common to all sections of Math 118. You must take the final to pass the course.

Learning Environment

Students should strive to create a friendly, academic atmosphere. Disruptive behavior will not be tolerated, nor disparaging or hostile comments toward other students.

Accessibility Services

Accessibility Services: If you are registered with accessibility services, I would be happy to discuss this at the beginning of the course. Any student requesting accommodations based on a disability is required to register with Accessibility Services (OSAS) each semester. A letter of verification for approved accommodations can be obtained from OSAS. Please be sure the letter is delivered to me as early in the semester as possible. OSAS is located in 301 STU and is open 8:30am-5:00pm, Monday through Friday.

	213-740-0776 (phone)	
https://osas.usc.edu/	213-740-6948 (TDD only)	OSASFrontDesk@usc.edu
	213-740-8216 (fax)	

Statement on Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable.

Support Systems:

Student Counseling Services (SCS) (213) 740-7711
<http://sites.usc.edu/counselingandmentalhealth>

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline 988, on call 24/7
<http://www.988lifeline.org>

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) (213) 740-9335 (WELL)
on call 24/7
<https://sites.usc.edu/clientsservices/>

Office of Equity and Diversity / Title IX Compliance (213) 740-5086
<http://eeotix.usc.edu>

Bias Assessment Response and Support
<http://studentaffairs.usc.edu/bias-assessment-response-support>

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response.

Student Support and Advocacy (213) 821-4710
<http://studentaffairs.usc.edu/ssa>

Assists students and families in resolving complex issues adversely affecting their success as a student, e.g. personal, financial, and academic.

Diversity at USC
<http://diversity.usc.edu>

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students.

USC Emergency Information
<http://www.usc.edu/emergency>

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety UPC: (213) 740-4321
<http://dps.usc.edu> HSC: (323) 442-1000

Provides overall safety to USC community. 24-hour emergency or to report a crime.

Updated course schedule small (still approximate)

(Holidays in boxes)

Week	Month	Dates	Material
1	Jan	13, 15, 17	1.1 - 1.5
2	Jan	20 , 22, 24	1.6
3	Jan	27, 29, 31	1.7 - 1.9
4	Feb	3, 5, 7	2.1 - 2.5
5	Feb	10, 12, 14	3.1 - 3.4
6	Feb	17 , 19, 21	Midterm 1
7	Feb	24, 26, 28	4.1 - 4.3
8	Mar	3, 5, 7	4.4 - 4.6
9	Mar	10, 12, 14	8.1 - 8.5
	Mar	17, 19, 21	Spring Break
10	Mar	24, 26, 28	Midterm 2
11	Apr	31, 2, 4	5.1 - 5.6
12	Apr	7, 9, 11	6.1 - 6.7
13	Apr	14, 16, 18	Review
14	Apr	21, 23, 25	Midterm 3
15	Apr/May	28, 30, 2	Review

Drop Deadlines

February 28th
Drop without a W

April 11th
Drop with a W

Exam Dates

February 21st
Midterm 1

March 28th
Midterm 2

April 25th
Midterm 3

May 14th
Final Exam, 8-10am