MA 131 - Calculus for Life and Management Sciences A

1 Course Information

MA 131 - Section 003, Fall 2022 (3 credit hours)

• Instructor: Kylan Schatz (they/them)

Email: kaschatz@ncsu.edu, Office: SAS 3217

• Meeting Time: MWF 1:55-2:45pm in Williams 2215

• Office Hours: MTh 10-11am on Zoom, or in person by appointment

• Textbook: Calculus and Its Applications, 14th Edition. Goldstein, Lay, Schneider, Asmar. ISBN 9780134507132

The easiest way to contact me is to come to class, visit office hours, or to email me during business hours. If you email me after business hours or over the weekend, I may not respond until the next business day.

2 Course Description

First order finite difference models; derivatives - limits, power rule, graphing, and optimization; exponential and logarithmic functions - growth and decay models; integrals - computation, area, total change; applications in life, management, and social sciences.

3 Learning Outcomes

Gain insight to useful topics in calculus including graphs, limits, derivatives, and integrals. Use calculus as a tool for solving problems in life and management sciences. Develop mathematical thinking and problem solving skills. Show integrity in the classroom and affiliated spaces, including Moodle forums. Practice time management skills and professional communication.

4 Course Structure

Course lectures are synchronous, in-person on MWF in Williams hall. Lectures are to be recorded and posted to Panopto, accessible through WolfWare. It is **strongly encouraged** that students attend every in-person lecture to better facilitate learning and provide space to ask questions.

In addition to lecture, students will participate in a one-hour problem session / recitation once every week. There is a separate Moodle page for each section of recitation.

Homework will be completed on WebAssign, due the night before the exam. Exams will be proctored during recitation / problem session. Office hours are hosted on Zoom during scheduled times, or in person by appointment.

5 Grading

Students' grades consist of three components: homework, exams, and the final exam.

Item	Weight
Homework	40
Exams	$45 (3 \times 15)$
Final	15

Homework is graded for accuracy (by WebAssign); students' grades will be entered as shown on WebAssign. Exams will consist of some subset of: definitions, short answer, word problems, and possibly multiple choice and true/false. You must justify your answers and show full working out on exams for full credit. The final exam will be cumulative, the same format, and approximately 1.5x the length of a semester exam.

This course uses the standard NCSU grading scale. Course grades will not be rounded. Please view Grades and Grade Point Average (NCSU REG 02.50.03) if you have any questions about grading at NCSU.

Lower bound for grade				
Letter	-		+	
A	90	93	97	
В	80	83	87	
C	70	73	77	
D	60	63	67	
F	*	0	*	

Students seeking credit only (S/U) must receive a C- to obtain a Satisfactory grade. Please view Credit-Only Courses (NCSU REG 02.20.15) if you have any questions about this option.

Students wishing to audit this course, coordinate with your advisor beforehand. Please view Audits (NCSU REG 02.20.04) if you have any questions about this option.

6 Course Schedule

A comprehensive schedule for lectures and topics may be found on the course Moodle page.

Item	Date
First day of class	Aug 22
Last day to add a course	Aug 26
Census Date	Sep 2
Labor Day (No Class)	Sep 5
Exam 1 (In recitation)	Sep 22
Fall Break (No Class)	Oct 10-11
Drop/Revision Deadline	Oct 19
Exam 2 (In recitation)	Oct 20
Exam 3 (In recitation)	Nov 17
Thanksgiving (No Class)	Nov 23-25
Last day of class	Dec 2
Optional Make-up Exam	Dec 5
Final (12pm-2:30pm)	Dec 14
Grades Due	Dec 16

7 Expenses

Students must purchase access to WebAssign to complete the course homework. The cost of WebAssign access is \$32.95. Students must also purchase the course textbook, *Calculus and Its Applications*, ISBN 9780134507132 which is \$29.99 for All-In access. Talk to me if either of these options are cost prohibitive.

Students are expected to purchase Blue Books at the start of the semester, for use with their semester exams. The price of five 8.5×11 in Blue Books is \$3.00.

8 Attendance / Late Assignments

I will mark students who are present in-person using Moodle attendance codes. Attendance is not part of the course grade. Please talk to me if you plan to be absent for a long period of time, due to illness etc.

Pursuant to Attendence Regulations (NCSU REG 02.20.03.3.4), I will offer one cumulative makeup test during the last week of class. This exam will be offered to all students, but may only be used as a make-up exam grade for an excused absence, with proper documentation. For information on verifying an excused absence, view Academic Absence Verification.

You are allowed one week-long self-extensions on WebAssign. You may only request an extension within the week following the original deadline. Each self-extension deducts 15% unearned points. I may grant additional extensions based on outstanding student circumstances. Please refer to the following WebAssign FAQ (Get an Automatic Extension) for more information on self extensions. I will not grant additional attempts on Webassign questions for which you have already used all attempts.

The following details what "unearned points" means:

Grade Before Extension	Maximum Grade After Extension
20/30	20/30 + [(30-20)*(1-0.15)]/30 = 28.5/30

9 Digital Course Components

This course uses Moodle, Panopto, and Zoom for its digital components. Lecture will be recorded, possibly capturing students' voices. These videos will not be distributed to anyone other than your classmates for this semester. Please view Online Course Material Host Requirements (NCSU REG 08.00.11) if you have any concerns.

Students may be required to disclose personally identifiable information to other students in the course, via digital tools, such as email or web-postings, where relevant to the course. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

10 Academic Integrity Statement

The work any student submits should reflect their own understanding of the material. Students may not collaborate or use any outside resource (such as cheat sheets, Wolfram Alpha, or other students) while completing exams. Students found to be in violation of this policy may receive a 0 grade on the associated assignment.

Students are encouraged to review the NC State Code of Student Conduct (NCSU POL 11.35.01) and Pack Pledge. Violations of academic integrity will be handled in accordance with the Student Discipline Procedures (NCSU REG 11.35.02).

11 Non-Discrimination Statement

NC State provides equal opportunity and affirmative action efforts, and prohibits all forms of unlawful discrimination, harassment, and retaliation ("Prohibited Conduct") that are based upon a person's race, color, religion, sex (including pregnancy), national origin, age (40 or older), disability, gender identity, genetic information, sexual orientation, or veteran status (individually and collectively, "Protected Status"). Additional information as to each Protected Status is included in Discrimination, Harassment and Retaliation Complaint Procedure (NCSU REG 04.25.02).

NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at Equal Opportunity, Non-Discrimination and Affirmative Action Policy (NCSU POL 04.25.05) or https://oied.ncsu.edu/divweb/. Any person who feels that they have been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

12 Students With Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Resource Office at Holmes Hall, Suite 304, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (NCSU REG 02.20.01).

13 Trans / Non-binary / GNC Students Addendum

I pull student preferred named and pronouns from MyPack. Unless otherwise specified, this is how I will refer to you. If you use a different name or pronouns than are listed in the NC State system, please let me know in class or by email.

14 Additional Rules and Regulations

Students are responsible for reviewing the NC State University Policies, Rules, and Regulations (PRRs) which pertain to their course rights and responsibilities, including those referenced both below and above in this syllabus:

- Equal Opportunity and Non-Discrimination Policy Statement (NCSU POL 04.25.05) with additional references at https://oied.ncsu.edu/divweb/policies/
- Code of Student Conduct (NCSU POL 11.35.01).

Last updated: September 14, 2022