MA 131 - Calculus for Life and Management Sciences A

1 Course Information

MA 131 - Section 601, Fall 2021 (3 credit hours)

- Instructor: Kylan Schatz (they/them)

- Email: kaschatz@ncsu.edu

- Office Hours: MW 9-10 or by appointment on Zoom

The easiest way to contact me is to 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 pre-recorded and accessed on Panopto through the course Moodle page. Homework will be completed on WebAssign. Exams will be proctored by DELTA. Students are responsible to schedule their own exam time. Office hours are hosted on Zoom during scheduled times or by appointment. An optional problem session is hosted on Friday during the office hour time, and will be recorded for student reference.

5 Grading

Students' grades consist of three components: homework, exams, and the final exam. There will be no extra credit. If necessary, there may be a curve on final course grades.

Item	Weight
Homework	40
Exams	45 (3 x 15)
Final	15

Homework is graded for accuracy (by WebAssign); students' grades will be entered as shown on WebAssign. Exams will be a mix of (possibly) definitions, multiple choice, true/false, short answer, and word problems. **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. Students who complete all semester exams will have their lowest test grade replaced by their final exam grade (if higher).

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
B	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
Last day to add a course	August 20
Census date	August 27
Exam 1	September 20-24
Drop/revision date	October 13
Exam 2	October 18-22
Exam 3	November 15-23
Final	December 2-6
Grades due	December 10

7 Expenses

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

8   Attendance / Late Assignments

Course lectures are asynchronous, and attendance is not taken for optional course components (including office hours or the Friday problem sessions). Students are expected to schedule and complete their exams during the designated time period with DELTA or another proctor. **Extensions to semester exams will be granted only in extreme circumstances, with proper documentation.** For regulations associated with attendence and absence verification, please refer to Attendence Regulations (NCSU REG 02.20.03) or Academic Absence Verification

You are allowed two week-long self-extensions on WebAssign. You may only request an extension within the week after the original deadline. Each self-extension deducts 15% unearned points. I may grant additional extensions past the number automatically granted based on outstanding student circumstances. Please refer to the following WebAssign FAQ page for more information on self extensions (Get an Automatic Extension). It is unlikely that I will grant any WebAssign extensions past the start of the associated exam period. The following details what "unearned points" means:

	Grade Before Extension	Maximum Grade After Extension
First Extension	**20/30**	$20/30 + [(30 - 20) * (1 - 0.15)]/30 = \mathbf{28.5/30}$
Second Extension	**24/30**	$25/30 + [(30 - 24) * (1 - 0.30)]/30 = \mathbf{28.2/30}$

9   Digital Course Components

This course uses Moodle, Mediasite, Panopto, and Zoom for its digital components. Friday problem sections will be recorded, possibly capturing students' voices. I wil try to ask before every session if students consent to being recorded. 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   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 17, 2021