

## MA 121-001: Elements of Calculus

### Summer 2 2021

**Instructor:** Jai Aslam

**Email:** [jkaslam@ncsu.edu](mailto:jkaslam@ncsu.edu)

**Class:** 8 - 9:30am M-F. Lectures are held live over Zoom and recorded. You may attend the lectures live or watch the recorded videos which will be posted to Moodle. Attendance over Zoom is mandatory on the 3 in-class exam dates below, as well as the final exam.

**Office Hours:** My scheduled office hours are 10-11am Monday, Wednesday and Thursday. If these times are inconvenient for you I can make other times work. Just send me an e-mail to set up a Zoom meeting. If you have questions, I encourage you to attend office hours frequently. It's much easier for me to address small questions multiple times throughout the week, than it is for me to attempt to explain an entire week's worth of material right before an exam.

**Prerequisites:** MA 107 or 111 with a C- or better, or 480 on the SAT Subject Test in Mathematics Level 2 or the NCSU Math Skills Test, or 2 or better on an AP Calculus exam.

**Content:** For students who require only a single semester of calculus. Emphasis on concepts and applications of calculus, along with basic skills. Algebra review, functions, graphs, limits, derivatives, integrals, logarithmic and exponential functions, functions of several variables, applications in management, applications in biological and social sciences.

**Textbook:** Bittinger, M. L. Calculus and its Applications (11th edition). The textbook is optional, but it could be helpful. You can buy it through the bookstore [here](#) for \$40.25 or you may be able to get a used copy at some online retailer. Note: The textbook is separate from Webassign.

**Course Grade:** Your final grade will be assigned using the plus/minus grading system

<b>A+:</b> 98-100	<b>A:</b> 93-97.99	<b>A-:</b> 90-92.99
<b>B+:</b> 88-89.99	<b>B:</b> 83-87.99	<b>B-:</b> 80-82.99
<b>C+:</b> 78-79.99	<b>C:</b> 73-77.99	<b>C-:</b> 70-72.99
<b>D+:</b> 68-69.99	<b>D:</b> 63-67.99	<b>D-:</b> 60-62.99

**Grade Calculation:** Your final grade in this course will be determined by marks earned on the online homework assignments, three tests and one cumulative final exam. The components of your grade are weighted as follows:

WebAssign	15%
-----------	-----

Tests	60%
Final Exam	25%

**WebAssign (15%):** Due dates, other than the introductory assignments, are set for the last day of class (*Friday, July 30th, 2021*). I encourage students to collaborate on homework, but you are expected to maintain academic integrity by adhering to the NCSU Code of Student Conduct. While I have set the due dates for the end of the semester, I recommend working through the problems on the week the relevant topics are covered in the lectures.

*Note:* The setup for WebAssign has changed from previous semesters. Please click [here](#) for instructions on how to set up your WebAssign account and add yourself to my roster. My class key is: **ncsu 2247 6015** which is case sensitive and includes spaces.

**Three Tests (60%):** These tests will take place on *Tuesday, July 6th, Wednesday, July 14th and Friday, July 23rd*. These exams will be held synchronously over Zoom with web cameras on and volume muted. These tests will be open-book and open-notes. All use of other online resources is **prohibited**. Collaboration of any kind with anyone is **prohibited**. A scientific calculator is permitted, but not required. Graphing calculators are **not** allowed. If it improves your overall grade, then I will replace your lowest test score with your final exam score.

Test questions will become available at 8am on the testing day on Moodle. I will write the tests to last approximately 1 hour, but you will have the entire class period (1.5 hours) to solve the problems and upload your solutions to Moodle. This extra half hour should give you ample time to scan your work and upload it. You will also need a way to combine all your scans/pictures into a single PDF. Possible options include phone apps, Adobe, or a website like [combinepdf.com](https://combinepdf.com). Please figure out your method before the first exam in order to save time.

*Note:* If you think there was a grading error on your test please send me an email explaining in detail what you think the error was, within one week after the test is returned. Grade changes will not occur outside of this timeframe.

**Final Exam (30%):** The final exam is mandatory and cumulative. It will be held on Tuesday, August 3rd, 2021 from 8:30-11:00am. Just like the other exams it will be held synchronously through Zoom with web cameras on and volume muted. The questions will be available through Moodle. I will write the final exam to last approximately 2 hours, but you'll have the entire time (2.5 hours) to finish. This extra half hour should give you ample time to scan your work and upload it.

**Attendance:** This class is entirely online and there will be no attendance recorded. I will be holding the lectures live 8-9:30 am daily. These lectures will be recorded and later posted to Moodle. You are welcome to attend the lectures live or view the recordings later, whichever is more convenient for you. The lecture videos are available online for access at any time.

**Electronically-hosted Components:** Please be advised this course is being recorded for current and potential future educational purposes. By your continued participation in this recorded course, you are providing your permission to be recorded.

**Make-up Test Policy:** All anticipated absences must be excused in advance of the test date and a make-up test scheduled in advance of the absence. Excused emergency absences must be reported within 2 days of returning to class and must be appropriately documented. All make-up exams for students with excused absences are given within 3 days of returning to class.

**Academic Integrity:** I assume that anything turned in with your name on it is your own work. Each time you submit a test or WebAssign you affirm the honor pledge: "I have neither received nor given unauthorized aid on this assignment." The minimum penalty for cheating is a grade of zero on the assignment; violators will be reported to the Academic Integrity Review Board, which can impose additional sanctions. The code of student conduct can be found at <http://studentconduct.dasa.ncsu.edu/code/>

**Disability Services:** 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: <https://dro.dasa.ncsu.edu/enrolled-students/>

**Non-Discrimination Policy:** NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or [http://www.ncsu.edu/equal\\_op/](http://www.ncsu.edu/equal_op/). Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

### **MA 121 Tentative Schedule**

This schedule is subject to necessary change.

June 28th - Monday	§R.1, R.2, R.3
June 29th - Tuesday	§R.4, R.5, 1.1
June 30th - Wednesday	§1.2, 1.3
July 1st - Thursday	§1.4, 1.5

July 2nd - Friday	§Review, 1.6
<b>July 5th - Monday</b>	<b>No class.</b>
<b>July 6th - Tuesday</b>	<b>Exam 1</b>
July 7th - Wednesday	§1.6, 1.7
July 8th - Thursday	§1.8, 2.1
July 9th - Friday	§2.2, 2.3
July 12th - Monday	§2.4, 2.5, 3.1
July 13th - Tuesday	§Review, 3.2
<b>July 14th - Wednesday</b>	<b>Exam 2</b>
July 15th - Thursday	§3.3, 3.4
July 16th - Friday	§3.5, 4.1, 4.2
July 19th - Monday	§4.3, 4.4
July 20th - Tuesday	§4.5, 4.6
July 21st - Wednesday	§5.1, 5.2
July 22nd - Thursday	§5.3, Review
<b>July 23rd - Friday</b>	<b>Exam 3</b>
July 26th - Monday	§5.6, 5.7
July 27th - Tuesday	§6.1, 6.2
July 28th - Wednesday	§6.3, 6.4
July 29th - Thursday	6.5, 6.6
July 30th - Friday	Review
<b>August 3rd - Tuesday</b>	<b>Final Exam</b>