

**Math 121-001 Elements of Calculus**  
**Fall 2020**  
**3 Credit Hours**

**Instructor:** Ainur Akchambayeva  
**Office:** SAS 3232  
**Email Address:** [aakcham@ncsu.edu](mailto:aakcham@ncsu.edu)  
**Zoom Office Hours:** Thursday 1:00 PM – 2:30 PM (see the link in the Moodle) or by appointments  
**Textbook:** Bittinger, M. L., Calculus and its Applications (11th ed.).  
You can find the link on the Moodle page.  
End of chapters contain many exercises.

**Course Meeting Time:** *Tu-Th - 11:45 am to 1:00 pm via Zoom*

**TA:** Yvonne Niyonzima ([ynyonz@ncsu.edu](mailto:ynyonz@ncsu.edu))  
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**Prerequisite:** *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.*

**Course Description:** 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. Credit is not allowed in more than one of MA 121, 131, 141. MA 121 may not be substituted for MA 131 or MA 141 as a curricular requirement.

This class is taking part in NC State's All-In program. Course materials are delivered electronically on my Moodle site (see below). You have free access to materials through the drop/add date. You must purchase access during that time using the link on my Moodle page to the bookstore's website.

### **Course Website**

We will be using the Moodle learning management system (<http://wolfware.ncsu.edu>) for this course. You will login using your Unity ID and password. After the beginning of the semester, you will see a link to our course site. Students need to be familiar with their Unity ID and password to login to the Moodle course site or to access lecture recordings and other university-provided resources. Refer to online information at: <http://oit.ncsu.edu/unityid> or contact the NCSU HELP desk at (919) 515-HELP or [HELP@ncsu.edu](mailto:HELP@ncsu.edu) for assistance.

Lecture videos and slides will be posted on Moodle page for each week.  
We will also have weekly problem solving sessions.  
Recordings of problem solving sessions will be uploaded to Moodle.

**Learning Objectives/Outcomes:** At the end of course, students should demonstrate the ability to:

- Differentiate simple and more complex functions
- Apply rules of differentiation
- Maximize and minimize functions of single and multiple variables
- Integrate functions and apply several techniques of integration
- Perform complex analysis of functions
- Apply calculus methods to basic real-world problems

*Homework* will be done through WebAssign (webassign.ncsu.edu). To use WebAssign, you will need to purchase an access code online.

*Practice sets* for tests and final exam posted on Webassign. They are also graded. Actual questions on tests will not be necessarily the same as practice sets questions.

*Tests from previous years* are posted on Webassign.

*Study guide* will be posted for you to prepare for each test and final exam on the Moodle.

**Final Grade Calculation:**

There are 3 components to this course: homework, 3 in-class tests, and one 2.5-hour final exam. They are weighted as follows.

- |   |             |
|---|-------------|
| 1. Homework Assignments                           | 20%         |
| 2. Three tests ( <b>lowest score is dropped</b> ) | 50% = 2x25% |
| Thur Sep 3  |             |
| Thur Oct 1  |             |
| Thur Oct 29                                       |             |
| 3. Final Exam                                     | 30%         |
| Thur, Nov 19, 12:00-2.30 pm.                      |             |

**Grading Scale:**

$97 \leq A+ \leq 100$	$93 \leq A < 97$	$90 \leq A- < 93$
$87 \leq B+ < 90$	$83 \leq B < 87$	$80 \leq B- < 83$
$77 \leq C+ < 80$	$73 \leq C < 77$	$70 \leq C- < 73$
$67 \leq D+ < 70$	$63 \leq D < 67$	$60 \leq D- < 63$
	$0 \leq F < 60$	

**Requirements for Credit-Only (S/U) Grading:** In order to receive a grade of S, students are required to take all exams and quizzes, complete all assignments, and earn a grade of C- or better. Conversion from letter grading to credit only (S/U) grading is subject to university deadlines. Refer to the Registration and Records calendar for deadlines related to grading. For more details refer to <https://policies.ncsu.edu/regulation/reg-02-20-15/>.

It is important that you consult with your advisor to see if the course will count towards your graduation requirements before taking this course as credit-only.

**Incomplete Grades:** Incomplete grades will be handled on an individual basis. Note, however, that if an extended deadline is not authorized by an instructor or department, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as attempted courses on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <https://policies.ncsu.edu/regulation/reg-02-50-03/>.

**Webassign:** you will have 11 homeworks and some practice tests posted on Webassign. No late submission is accepted, no exceptions. There are 10 attempts for each item so that you can master the material. You can work together on these assignments, but each of you must submit your own answers. There is a fee for using Webassign.

**Tests:** There are three tests. They will be on Moodle in form of quizzes. **No assistance can be taken from other people.** Cheating will be dealt in accordance with University policy and may result in failure of the course. It is my understanding and expectation that your signature on any test or exam means that you have neither given nor received any unauthorized aid. Students are required to comply with the university policy on academic integrity/honesty found in the Code of Student Conduct (<https://policies.ncsu.edu/policy/pol-11-35-01/>).

**Make-up Test:** The tests and final exam cannot be rescheduled. In the event that you are faced with unforeseeable and unavoidable circumstances that will cause you to miss test or exam, you must contact me prior to test or exam and be ready to provide documentation after the exam.

Should you need to miss an in-class test, a cumulative make up test will be given during class time in the last week of the semester. Everyone will take the same make up exam, regardless of which test you missed. The grade for the make up exam will be used in place of the grade for the test you missed. Details about the make up test will be sent to students eligible to take it later in the semester. Only students who missed a test are eligible to take the make up exam. If you miss two tests during the semester, only one test can be made up, second test will get zero score and automatically dropped as the lowest one.

**Final exam:** 30% weight of your grade and will be during final exam week on Moodle in form of quiz. It will be cumulative exam for the whole course.

**Classroom Behavior/Attendance Policy:** Attendance is required according to University policy. For complete attendance and excused absence policies, please see <https://policies.ncsu.edu/regulation/reg-02-20-03-attendance-regulations/>.

**Academic Integrity/Honesty:** It is my understanding and expectation that your signature on any test or exam means that you have neither given nor received any unauthorized aid. Students are required to comply with the university policy on academic integrity/honesty found in the Code of Student Conduct (<https://policies.ncsu.edu/policy/pol-11-35-01/>).

**Accommodations for 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 \(REG02.20.01\)](#).

**Non-Discrimination Policy:** NC State prohibits discrimination, harassment, and retaliation 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). If you feel that you have been the subject of prohibited discrimination, harassment, or retaliation, you should contact the Office for Institutional Equity and Diversity (OIED) at 919-515-3148.

Diversity and inclusivity are important to the success of our students at NC State. Everyone who comes to NC State enriches us through their varied perspectives, knowledge, and backgrounds. Our classroom is one in which every student is respected and feels heard.

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://oied.ncsu.edu/divweb>.

**Trans-Inclusive Statement:** In an effort to affirm and respect the identities of transgender students in the classroom and beyond, please contact me if you wish to be referred to using a name and/or pronouns other than those listed in the student directory.

**List of Policies:** Students are responsible for reviewing the NC State University PRRs (policies, rules and regulations) that pertain to their course rights and responsibilities:

- Equal Opportunity and Non-Discrimination Policy Statement <https://policies.ncsu.edu/policy/pol-04-25-05/> with additional references at <https://oied.ncsu.edu/equity/policies/>
- Code of Student Conduct <https://policies.ncsu.edu/policy/pol-11-35-01/>
- Grades and Grade Point Average <https://policies.ncsu.edu/regulation/reg-02-50-03/>
- Credit-Only Courses <https://policies.ncsu.edu/regulation/reg-02-20-15/>
- Audits <https://policies.ncsu.edu/regulation/reg-02-20-04/>

### **Copyrighted Materials**

The course website contains copyrighted materials and was developed for instructional purposes to be used by students at North Carolina State University. Students currently registered in this course are permitted to print or make copies of parts of this site for their own personal use in conjunction with completing the course. Text, audio files, images or design of this website may not otherwise be distributed or modified in any manner without the prior written permission of the instructor.

### **COVID-19 Related Issues:**

Due to the Coronavirus pandemic, public health measures have been implemented across campus. Students should stay current with these practices and expectations through the

[Protect the Pack](https://www.ncsu.edu/coronavirus/) website (<https://www.ncsu.edu/coronavirus/>). The sections below provide expectations and conduct related to COVID-19 issues.

### **Health and Participation in Class**

We are most concerned about your health and the health of your classmates and instructors/TAs.

- If you test positive for COVID-19, or are told by a healthcare provider that you are presumed positive for the virus, please work with your instructor on health accommodations and follow other university guidelines, including self-reporting ([Coronavirus Self Reporting](#)): Self-reporting is not only to help provide support to you, but also to assist in contact tracing for containing the spread of the virus.
- If you feel unwell, even if you have not been knowingly exposed to COVID-19, please do not come to class.
- If you are in quarantine, have been notified that you may have been exposed to COVID-19, or have a personal or family situation related to COVID-19 that prevents you from attending this course in person (or synchronously), please connect with your instructor to discuss the situation and make alternative plans, as necessary.
- If you need to make a request for an academic consideration related to COVID-19, such as a discussion about possible options for remote learning, please talk with your instructor for the appropriate process to make a COVID-19 request (a university-level form can be found [here](#)).

### **Health and Well-Being Resources**

These are difficult times, and academic and personal stress are natural results. Everyone is encouraged to [take care of themselves](#) and their peers. If you need additional support, there are many resources on campus to help you:

- Counseling Center ([NCSU Counseling Center](#))
- Health Center ([Health Services | Student](#))
- If the personal behavior of a classmate concerns or worries you, either for the classmate's well-being or yours, we encourage you to report this behavior to the NC State CARES team: ([Share a Concern](#)).
- If you or someone you know are experiencing food, housing or financial insecurity, please see the Pack Essentials Program ([Pack Essentials](#)).

### **Community Standards related to COVID-19**

We are all responsible for protecting ourselves and our community. Please see the [community standards](#) (released on 7/28/2020) and Rule 04.21.01 regarding Personal Safety Requirements Related to COVID-19 [RUL 04.21.01 – Personal Safety Requirements Related to COVID-19 – Policies, Regulations & Rules](#).

### **Course Expectations Related to COVID-19:**

- **Face Coverings:** All members of the NC State academic community are required to follow all university guidelines for personal safety with face coverings, physical

distancing, and sanitation. Face coverings are required in class and in all NC State buildings. Face coverings should be worn to cover the nose and mouth and be close fitting to the face with minimal gaps on the sides. In addition, students are responsible for keeping their course/work area clean. Please follow the cleaning guidelines described by the university.

- **Course Attendance:** NC State attendance policies can be found at: [REG 02.20.03 – Attendance Regulations – Policies, Regulations & Rules](#) . Please refer to the course’s attendance, absence, and deadline policies for additional details. If you are quarantined or otherwise need to miss class because you have been advised that you may have been exposed to COVID-19, you should not be penalized regarding attendance or class participation. However, you will be expected to develop a plan to keep up with your coursework during any such absences. If you become ill with COVID-19, you should follow the steps outlined in the health and participation section above. COVID 19-related absences will be considered excused; documentation need only involve communication with your instructor.
- **Course Meeting Schedule:** Your course might not have a traditional meeting schedule in Fall 2020. Be sure to pay attention to any updates to the course schedule as the information in this syllabus may have changed. Please discuss any questions you have with the instructor.
- **Classroom Seating:** To support efficient, effective contact tracing, please sit in the same seat when possible and take note of who is sitting around you; instructors may also assign seats for this purpose.
- **Technology Requirements:** This course may require particular technologies to complete coursework. Be sure to review the syllabus for these expectations, and see the [syllabus technology requirements](#) for your course. If you need access to additional technological support, please contact the Libraries’ Technology Lending Service: ([Technology Lending](#)).
- **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.

### **Course Delivery Changes Related to COVID-19**

Please be aware that the situation regarding COVID-19 is frequently changing, and the delivery mode of this course may need to change accordingly, including from in-person to online. Regardless of the delivery method, we will strive to provide a high-quality learning experience.

### **Grading/Scheduling Changing Options Related to COVID-19**

If the delivery mode has a negative impact on your academic performance in this course, the university has provided tools to potentially reduce the impact:

- **Enhanced S/U Grading Option:** [Enhanced Satisfactory/ Unsatisfactory Grading Option](#)
- **Late Drop:** [Enhanced Late Drop Option](#)

In some cases, another option may be to request an incomplete in the course. Before using any of these tools, discuss the options with your instructor and your academic advisor. Be aware that if you use the enhanced S/U, you will still need to complete the course and receive at least a C- to pass the course.

### **Other Important Resources**

- **Keep Learning:** [Keep Learning](#)
- **Protect the Pack FAQs:** [Frequently Asked Questions | Protect the Pack](#)
- **NC State Protect the Pack Resources for Students:** [Resources for Students | Protect the Pack](#)
- **NC State Keep Learning, tips for students opting to take courses remotely:** [Keep Learning Tips for Remote Learning](#)
- **Introduction to Zoom for students:** <https://youtu.be/5LbPzzPbYEw>
- **Learning with Moodle, a student's guide to using Moodle:** <https://moodle-projects.wolfware.ncsu.edu/course/view.php?id=226>
- **NC State Libraries** [Technology Lending Program](#)