

MA 241 (004): Calculus II

Fall 2026

Section 004, MWF 11:45-12:35pm, Broughton 2211

Instructor: Leslie Kurtz (lakurtz@ncsu.edu)

Office: SAS Hall, Room 3240

Office Hours: Mondays 8-9am, Wednesdays and Fridays 12:50-1:50pm

Recitation Leader: Ryan Rinaudo (rcrinaud@ncsu.edu)

Class Web Page: <https://kurtz.wordpress.ncsu.edu> This is the place to find old tests, helpful worksheets, and complete test solutions

Moodle Page: <https://wolfware.ncsu.edu/courses/my-wolfware/> This is the place to check your attendance, get class notes, and homework hints.

Prerequisites: C- or better in MA 141 or placement via AP or IB exams. Mastery of algebra, trigonometry and derivatives is essential for success in MA 241

Content: 4 credit hours. Second of three semesters in a calculus sequence for science and engineering majors. Techniques and applications of integration, elementary differential equations, sequences, series, power series, and Taylor's Theorem. Use of computational tools.

Textbook: Calculus II for Engineers and Scientists (Franke, Griggs, Norris). This ebook is accessible via WebAssign. WebAssign is included in the NCSU Course Ready program.

Grade Calculation:

WebAssign/Quizzes	15%
Tests	55%
Final Exam	30%

WebAssign: Graded homework is assigned via WebAssign:

<https://www.webassign.net>

You will need our class key to self-enroll: [ncsu 2464 2652](#)

Any webassign enrollment questions should be answered in this FAQ:

<https://docs.google.com/document/d/1J0bSkhmH-odVskB1XbkhudT7SjK0C0O5kDMcJJzWEbg/edit?usp=sharing>

Tests: There are 4 scheduled tests during the semester. Calculators of any kind are

not permitted on tests or the final exam.

Test 1: Sept 10
Test 2: Oct 1
Test 3: Oct 29
Test 4: Nov 17

Please note: After the tests are returned electronically, you have 3 days to look them over and compare them to the solutions online. If you believe there is an error in the grading of your test, you need to notify me within these 3 days. Grade changes will not occur outside of this timeframe.

Final: The final will be given on Wednesday Dec 9 Final Exam 12-2:30pm, Broughton 2211.

Make-Up Test Policy: All anticipated absences must be excused **in advance of the test date** and a make-up test scheduled if possible in advance of the absence. These include University duties or trips (certified by an appropriate faculty or staff member), required court attendance (certified by the Clerk of Court), or religious observances (certified by the Department of Student Development: 515-2441). Emergency absences must be reported within one week of returning to class and must be appropriately documented (illness by an attending physician or family emergencies by Student Development). No other make-ups will be given. It is not wise to miss a test.

Attendance: Attendance will be recorded daily in both class and recitation. You are expected to arrive on time to class. Any student who is not an active class participant the full class period (e.g., doing other work in class, socializing, sleeping, text messaging, leaving early) is recorded as absent. If you miss no more than 4 days AND attend every test, I will replace your lowest test grade with your final exam grade (assuming it is higher).

If you miss class or are late, you are still responsible for all material covered and assignments due.

Additional online lectures are also available for free. You can find them in webassign under resources.

Academic Integrity: I assume that anything turned in with your name on it is your own work. Each time you submit a test, WebAssign, or quiz, you affirm the honor pledge, "I have neither received unauthorized aid nor given 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 <https://studentconduct.dasa.ncsu.edu/code/>

Nondiscrimination Policy: NC State prohibits discrimination, harassment, and retaliation that are based upon a person's race, color, religion, sex, national origin, age, disability, gender identity, sexual orientation, or veteran status. 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.

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>.

Disability Services: Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at <https://dro.dasa.ncsu.edu/enrolled-students/>.

Health and Well-Being Resources:

These are difficult times, and academic and personal stress are natural results. If you need additional support, there are many resources on campus to help you:

- **Counseling Center:**

- <https://counseling.dasa.ncsu.edu>

- **Health Center:**

- <https://healthypack.dasa.ncsu.edu>

- 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:

- https://cm.maxient.com/reportingform.php?NCStateUniv&layout_id=2

- If you or someone you know are experiencing food, housing or financial insecurity, please see the **Pack Essentials Program:**

- <https://dasa.ncsu.edu/support-and-advocacy/pack-essentials/>

Tentative Class Schedule

Dates	Section & Topics
Aug 17-21	Chapter 0 (Review of Derivatives) Chapter 0 (Review of Substitution)

	Chapter 0 (Review of Integration by Parts) 1.1 Arc Length
Aug 24-28	1.2 Average Value 1.3 Work (springs) 1.3 Work (emptying a tank) 1.3 Work (lifting chains, etc)
Aug 31-Sept 4	1.3 Hydrostatic Force 1.3 Moments and Centers of Mass 2.1 Trig Integrals
Sept 7 Sept 8-11	Labor Day: No Class 2.1 Trig Integrals cont. 2.2 Trig Substitution Thursday Sept 10: Test 1 (held during recitation) 2.3 Partial Fractions
Sept 14-18	2.5 Numerical Integration (Trapezoidal & Simpson's) 2.6 Improper Integrals
Sept 21-25	3.1 Introduction to Differential Equations 3.1 Slope Fields 3.1 Euler's Method
Sept 28 Sept 29 Sept 30 Oct 1 Oct 2	3.2 Separable Equations Wellness Day (No class) 3.2 Orthogonal Trajectories Thursday Oct 1: Test 2 (held during recitation) 3.3 Applications of D.E.: Newton's Law of Cooling
Oct 5-9	3.3 Applications of D.E.: Tank Problems 3.3: Applications of D.E.: Compound Interest 3.3 Applications of D.E: Logistic Growth
Oct 12-16	3.4 2 nd Order Differential Equations: Homogeneous 3.5 2 nd Order Differential Equations: Nonhomogeneous
Oct 19-20 Oct 21-23	Fall Break (No class) 3.6 2 nd Order Differential Equations: Applications 4.1 Sequences

Oct 26-28	4.2 Series, Geometric Series, Telescoping
Oct 29	4.3 Convergence Tests: p-series, Integral Test
Oct 30	Thursday Oct 29: Test 3 (held during recitation)
	4.3 Cont.
Nov 2-6	4.3 Convergence Tests: Comparison, Limit Comparison, Estimating a sum
	4.4 Alternating Series
	4.5 Absolute Convergence
Nov 9-13	4.6 Power Series, Interval of Convergence
	4.7 Functions as Power Series
Nov 16-20	4.8 Taylor and Maclaurin Series
	Tuesday Nov 17: Test 4 (held during recitation)
	4.8 Taylor and Maclaurin Series: Binomial Series
Nov 23-24	4.9 Taylor and Maclaurin Polynomials, Error Analysis
Nov 25-27	Thanksgiving Break (No class)
Nov 30-Dec 1	Review for the Final
Dec 9	Wednesday Dec 9 Final Exam 12-2:30pm, Broughton 2211