

MA 242 (002): Calculus III
Fall 2026

Section 002, MWF 9:35-10:25am, 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: Helen Reed (hereed@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. This is also where to go to find class recordings.

Prerequisites: MA 241 with a grade of C- or better

Content: 4 credit hours. This is the third of three semesters in a calculus sequence for science and engineering majors. Vectors, vector algebra, vector functions, functions of several variables, partial derivatives, gradients, directional derivatives, maxima and minima, multiple integration, line and surface integrals, Green's Theorem, Divergence Theorem, Stokes' Theorem, and numerous applications will be covered.

Textbook: Calculus III for Engineers and Scientists (Franke, Griggs, Norris). This ebook is accessible via WebAssign.

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 **ncsu 8265 6957** to self-enroll. 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 8
Test 3: Oct 29
Test 4: Nov 17

Please note: After the tests are returned, 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 Friday December 4 from 8:30-11am, 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 take 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	1.1 3D Coordinate System 1.2 Vectors 1.3 Dot Product

Aug 24-28	1.4 Cross Product 1.5 Lines & Planes
Aug 31-Sept 4	2.1 The Calculus of Vector Functions 2.2 Parametrized Curves in Space 2.3 Tangent Vectors, Arc Length, and Curvature
Sept 7 Sept 8-11	Labor Day (No class) 3.1 Multivariable Functions Thursday Sept 10: Test 1 (held during recitation) 3.3 Directional Derivatives: Partial Derivatives
Sept 14-18	3.3 Geometrical Interpretation of Partial Derivatives 3.3 Tangent Plane 3.4 Differentiability of multivariable functions
Sept 21-25	3.5 Directional Derivative & the Gradient Vector 3.5 Chain Rule 3.6 Optimization
Sept 28 Sept 29 Sept 30-Oct 2	3.6 Optimization Wellness Day (No class) 3.7 Constrained Optimization (time permitting) 4.1 Double Integrals
Oct 5-9	4.1 Double Integrals 4.2 Applications of Double Integrals Thursday Oct 8: Test 2 (held during recitation) 4.2 Cont.
Oct 12-16	4.3 Triple Integrals 5.1 Polar Coordinates
Oct 19-20 Oct 21-23	Fall Break (No class) 5.2 Cylindrical Coordinates 5.3 Spherical Coordinates 6.1 Vector Fields

Oct 26-30	6.2 Line Integrals 6.3 Line Integrals of Vector Fields Thursday Oct 29: Test 3 (held during recitation) 6.3 Conservative Vector Fields
Nov 2-6	7.3 Green's Theorem 6.4 Parametric Surfaces 6.5 Surface Area
Nov 9-13	6.5 Surface Integrals 6.5 Flux
Nov 16-20	7.2 Curl & Divergence Tuesday Nov 17: Test 4 (held during recitation) 7.4 Stokes' Theorem
Nov 23-24 Nov 25-27	7.5 Divergence Theorem Thanksgiving Break (No class)
Nov 30-Dec 1	Review for the Final
Dec 4	Friday Dec 4: Final Exam 8:30-11am, Broughton 2211