

MA-242-002: Calculus III
Summer 2019, May 15 - June 18
MTWThF 10:20a-12:30p, Ricks 105

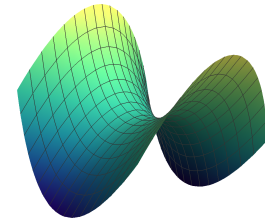
Instructor: G. Michael Lavigne

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Office Hours: Tues. & Thurs., 12:30p-1:30p

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Course Description. Third of three semesters in a calculus sequence for science and engineering majors. Vectors, vector algebra, calculus and geometry of space curves. Functions of several variables, partial derivatives, gradients, directional derivatives, maxima/minima, constrained optimization, and multiple integration. Vector fields and vector calculus: line and surface integrals, Green's Theorem, Divergence Theorems, Stokes' Theorem, and applications.

Prerequisites. MA 241 with grade of at least C-, AP Calculus credit, or Higher Level IB credit.

Attendance Policy. Attendance will be taken at all lectures. Students with **4 or fewer total absences (excused and unexcused)** who have **attended all tests** may replace their lowest in-class test score with their score on the final exam.

Required Materials.

- (1) *WebAssign access code:* You must purchase access to homework assignments and study materials via WebAssign at <http://webassign.ncsu.edu>.
- (2) *Textbook:* **Calculus for Engineers and Scientists, Volume III, 1st Edition** (J. Franke, J. Griggs, and L. Norris). The textbook is available for download on WebAssign and Moodle.

No calculator is necessary for this course. Use of online resources such as Wolfram Alpha during homework is highly encouraged. Googling the answers is highly discouraged. Graphing calculators will **not** be allowed on tests.

STRUCTURE AND GRADING

Letter grading follows the +/- 10 point scale on the right below. All other grading in accordance with University policy. Grades will be determined as shown on the left below.

Component	Weight
WebAssign	10%
Quizzes	10%
4 In-class Tests	60%
Final Exam	20%

Grading Scale

98-100	A+	93-97.99	A	90-92.99	A-
87-89.99	B+	83-86.99	B	80-82.99	B-
77-79.99	C+	73-76.99	C	70-72.99	C-
67-69.99	D+	63-66.99	D	60-62.99	D-

WebAssign. WebAssign homework assignments are obtained, submitted, and graded online at <http://webassign.ncsu.edu>. Assignments will be due weekly at midnight on the evening of the Test. Though submission is electronic, I recommend you to work out problems with pencil and paper as though you were taking an exam.

Quizzes. Quizzes will be given throughout the course. Quizzes may or may not be announced ahead of time, but no quiz will test on any material introduced in current day's lecture. Fifteen minutes will be allotted to complete each quiz. Half credit will immediately be given on quizzes just for turning them in. Only a student's five highest quiz grades will contribute to their final grade.

Tests. The 4 in-class tests are closed-book, closed-note, with no graphing calculators permitted. The following test material is subject to change at the instructor's discretion.

Test #1: Wednesday, May 22 covering Chapters 1 2

Test #2: Thursday, May 30 covering Chapter 3

Test #3: Friday, June 7 covering Chapters 4 5

Test #4: Friday, June 14, covering Chapters 6 7

Final Exam. The final exam date is scheduled by the University for **Tuesday, June 20, 8a-11a** in Ricks 105 and is non-negotiable.

OTHER POLICIES

Test Make-up Policy. Test make-ups are administered in accordance with University policy. Anticipated, excused absences (such as NCSU obligations, required court attendance, and religious observance) must be reported to the instructor with appropriate certification *well before* the scheduled test date. Legitimate emergency absences must be reported with appropriate documentation within one week of returning to class. No other make-ups will be given.

Corrections to Grading. If you think an error may have been made in the grading of your test, carefully review the answer key posted on Moodle and then contact the instructor within 1 week of the test being returned with your question. Any alteration of the original work will be considered an academic integrity violation.

Code of Student Conduct. All students are expected to adhere to the University's regulations on academic integrity. For more, see <https://policies.ncsu.edu/policy/pol-11-35-01/>.

Accommodations. Reasonable accommodations will be made for students with verifiable disabilities. To take advantage of available accommodations, students must register with Disability Resources Office at <https://dro.dasa.ncsu.edu> and then **meet with the instructor**. Please see the Academic Accommodations for Students with Disabilities Regulations (REG02.20.1).

Mediasite. Our class lectures will be automatically recorded and uploaded to the class Mediasite page. Please be aware that your image may appear in these recordings as you enter or exit the room, but only the instructor will be visible during normal lecture time. By remaining in this course you are consenting to be present during recordings.

Summer Session Expectations. The pace of summer session classes is exceptionally fast. In order to succeed, I recommending thinking of this course as an immersion program. If you do not make a concerted effort outside of class to immerse yourself in the study of this material for the duration of the course, you will struggle to achieve a sufficiently developed understanding of this difficult subject. For this reason, you should budget a minimum of **two hours** per day outside of lecture time to spend on this course. That time should be a combination of reviewing lecture notes/videos, studying from online resources, and doing WebAssign homework.