

MATH 259, Multivariate Calculus, 3 credits, Spring 2008

MWF 3:00-3:50, Minard Hall 219

Recitation, section 07: R 2:00-2:50, Stevens Hall 229

Recitation, section 09: T 2:00-2:50, Stevens Hall 229

INSTRUCTOR: Sean Sather-Wagstaff

OFFICE: Minard Hall 310D

E-MAIL: Sean.Sather-Wagstaff@ndsu.edu

PHONE: 231-8105

OFFICE HOURS: M 11:00–11:50, W 12:00–1:50, F 2:00–2:50, and by appointment

TEACHING ASSISTANT: Christopher Spicer

OFFICE: Minard Hall 305B

E-MAIL: Christopher.Spicer@ndsu.edu

PHONE: 231-8726

OFFICE HOURS: TR 1:00–1:50, and by appointment

PREREQUISITE: MATH 166

USEFUL WEBPAGES:

Course webpage: <http://math.ndsu.nodak.edu/faculty/ssatherw/sp08/cal3/>

Instructor webpage: <http://math.ndsu.nodak.edu/faculty/ssatherw/>

TA webpage, section 07: <http://math.ndsu.nodak.edu/students/cspicer/>

Math department webpage: <http://math.ndsu.nodak.edu/>

NDSU webpage: <http://www.ndsu.edu>

NDSU blackboard site: <https://bb.ndsu.nodak.edu/>

NDSU webpage on academic responsibility/conduct: <http://www.ndsu.nodak.edu/policy/335.htm>

REQUIRED TEXT: *Calculus, Early Transcendentals Multivariable*, Fifth Edition, by J. Stewart

COURSE DESCRIPTION: Topics include functions of several variables, vectors in two and three variables, partial derivatives, surfaces and gradients, tangent planes, differentials, chain rule, optimizations, space curves, and multiple integrals. MATH 259 meets for 150 minutes of lecture and 50 minutes of recitation each week.

COURSE GRADES: Student grades are based on quizzes, attendance and participation, two (2) midterm examinations, and one (1) comprehensive final examination covering students' understanding of topics covered in MATH 259. Weights are summarized in the following table along with grade ranges.

Quizzes	25%	A	90–100%
Attendance and Participation	5%	B	80–89.9%
Midterm Exams	20% each	C	70–79.9%
Final Exam	30%	D	60–69.9%
		F	0–59.9%

Your grades will be updated throughout the semester at the NDSU Blackboard site.

HOMEWORK: Homework will be assigned daily in lecture. Assignments will also be listed on the course webpage. Homework will not be collected. Students are encouraged to work on homework in groups.

QUIZZES: Quizzes will be given each week in recitation. You will be allowed to use one (1) page of notes during each quiz. Books and calculators will not be allowed during the quizzes. Your two (2) lowest quiz scores will be dropped. Make-up quizzes will not be allowed.

ATTENDANCE: While attendance is not explicitly required, it is worth 5% of your grade. In addition, your presence, attention, and participation in lecture will greatly help your performance in this class. For these reasons, attendance will be taken each class period. Officially excused absences will not be counted against you, but you must document such situations with us personally.

EXAMS: Midterm exams will be taken outside of class and will last 50 minutes. The final examination will be comprehensive and will last 2 hours. You will be allowed to use one (1) page of notes during each exam. Books and calculators will not be allowed during the exams. Make-up exams will only be allowed under extreme circumstances. If you have a conflict with one of the exam dates, you are responsible for making alternative arrangements beforehand.

TENTATIVE SCHEDULE: We reserve the right to make reasonable changes to the schedule.

Last day for No Record Drop of classes	Wed 16 Jan, 11:59 PM
Martin Luther King Jr. Day holiday	Mon 21 Jan
Midterm 1	Thu 14 Feb, 5:00-5:50 PM, Minard Hall 136
President's Day holiday	Mon 18 Feb
Spring Break Week	Mon 03 Mar to Fri 07 Mar
Holiday/recess	Fri 21 Mar to Mon 24 Mar
Midterm 2	Thu 27 Mar, 5:00-5:50 PM, Minard Hall 136
Last day to Drop Classes (W)	Fri 18 Apr, 11:59 PM
Classes end	Fri 02 May
Final Exam	Thu 08 May, 10:30 AM-12:30 PM

LECTURE NOTES: Clear and thorough course notes will provide you with a basis for your preparations for homework assignments, quizzes, and exams. You are responsible for taking notes during class, as lecture notes will not be posted online.

WORKLOAD: You should plan to spend 10–15 hours per week working on this course outside lecture.

ANNOUNCEMENTS: Periodically, course announcements will be sent to your ndsu.edu email account. It is your responsibility to check this email account regularly.

GRAPHING CALCULATORS: Graphing calculators are not required for this course, but you may find one useful. (The instructor uses a TI-85.) Calculators will not be allowed in the quizzes or exams.

QUESTIONS: If something we say or write in lecture or recitation is unclear, raise your hand and ask a question. We will try to clarify the point being made.

GROUP STUDY: You are required to find at least one person in the class with whom you can study. Not only does this help you study better, but also, in the event you miss a lecture, you can get the notes and assignments from this person.

TEXT READING: Read the relevant sections of the text book before lecture. Even if you don't understand everything, seeing it once before it is presented will help you follow lecture considerably.

OFFICE HOURS: Come to office hours for help. This gives us the opportunity to focus on specific problems you may be having and to explain things in a more personal manner. If the scheduled times are bad for you, make an appointment with one of us.

INSTRUCTOR FEEDBACK: At the course webpage, there will be a link to an anonymous evaluation form where students can submit comments or suggestions for the instructor and/or TA at any time during the semester.

ADA STATEMENT: The Americans with Disabilities Act requires that reasonable accommodations be

provided for students with physical, cognitive, systemic, learning and psychiatric disabilities in order to ensure their equal access to course content. If you have a documented disability and require accommodations, please let your instructor know as soon as possible. For more information, please contact Disability Services at 231-7671 or go to <http://www.ndsu.edu/counseling/disability.shtml>.

ACADEMIC HONESTY: All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct. Violations of this policy in this course will result in a 0 for the quiz or exam on which academic misconduct occurred. You can read the Senate Policy at <http://www.ndsu.nodak.edu/policy/335.htm>.

TENTATIVE COURSE OUTLINE:

Chapter 12 (3 weeks) Vectors and the Geometry of Space

Chapter 13 (4 weeks) Vector Functions

Chapter 14 (4 weeks) Partial Derivatives

Chapter 15 (4 weeks) Multiple integrals