Math 2263: Multivariable Calculus, Fall 2014

Instructor: Arnab Sen,   **Email:** arnab@umn.edu

Lectures: MWF 10:10 - 11:00 in STSS (Science Teaching & Student Services) room 220.

TAs: Chen Wan (wanxx123@umn.edu), Cihan Bahran (bahra004@umn.edu) and Ning Wei (weixx170@umn.edu).

Office hours: Arnab Sen: MWF 11:15 - 12:05 at Vincent Hall 238; also by appointment.
Office hours of TAs to be announced soon.

Discussion Sessions:
011: 10:10 - 11:00, TuTh, Akerman Hall 211, led by Chen Wan.
012: 10:10 - 11:00, TuTh, Vincent Hall 2, led by Cihan Bahran.
013: 10:10 - 11:00, TuTh, Vincent Hall 311, led by Ning Wei.
014: 11:15 - 12:05, TuTh, Ford Hall 151, led by Ning Wei.
015: 11:15 - 12:05, TuTh, Rapson Hall 54, led by Cihan Bahran.
016: 11:15 - 12:05, TuTh, Akerman Hall 327, led by Chen Wan.

Class Format: The instructor will present new materials in lectures. The TAs will mainly work out exercises in the discussion sessions. Students are expected to attend both lectures and discussions.

Course Website: `http://math.umn.edu/~arnab/2263.html`

Prerequisites: 1272 or 1372 or 1572 which basically means that you should have a good grounding in Calculus I and II.

Textbook: James Stewart, Calculus: Early Transcendentals, Volume 2, 7th Edition.

Course Content: Math 2263 Multivariable Calculus takes the concepts and techniques from Calculus I and II and extends them to functions of two or more variable. Multivariable Calculus starts with a review of vectors and a discussion of common mathematical surfaces (Chapter

12), and quickly moves to the three main topics for the course: partial derivatives (Chapter 14), multiple integrals (Chapter 15), and vector calculus (Chapter 16).

Homework: Homework will be assigned in class every day and the assignment will be posted on the course webpage. Homework will not be collected and graded. Yet doing homework is *absolutely indispensable* for success in the course. Problems on exams will be similar to the homework problems.

Grades: Quizzes: 15%, 3 Midterms: 15% each, Final Exam: 40%.
If your cumulative score is at least 90%, you are guaranteed an A. If your score is at least 75%, you are guaranteed a B-, and if your score is at least 60%, you are guaranteed a C- for the class.

Quizzes: A quiz (10-15 minutes long) will be given every Tuesday (except for week 1, 14 and 15) in the discussion section. It will be based on the homework assigned during the preceding week. You cannot make up a quiz. The two lowest quiz scores will be dropped.

Exams: There will be three 50-minute in-class midterm exams and a 3-hour final exam. The midterm exams will be in discussion sections, tentatively scheduled for October 2, November 6, and December 2. The final exam will be a comprehensive exam over all the material covered in the course. All sections of Math 2263 take the same final exam on December 12, 1:30-4:30 pm.

Makeup Policy: NO makeup of quizzes and midterm exams. Under exceptional circumstances and at the discretion of the instructor or TA (and after you submit a written excuse for your absence with valid documentation) the grade for a missed midterm exam will be prorated from the final exam. Missing the final will automatically earn an 'F' grade for the course. In case of final exam conflicts, email the instructor as soon as possible.

Calculator and Phones: Calculators and cell phones are not permitted in any exam or quiz. As a courtesy to me and your fellow students, please turn your cell phone off before class starts.

Drop Deadlines: The schedule for drop deadlines can be found at the following site: `http://onestop.umn.edu/calendars/cancel_add_refund_deadlines/Fall_2014.html`.

Extra Help: A free by-appointment tutoring is available through the SMART Learning Commons; see the website `http://smart.umn.edu/` for more information. If you want to hire a private tutor (for a fee), you can find a list of such people by emailing ugrad@math.umn.edu.

Disability Accommodations: See `https://diversity.umn.edu/disability/`.

Student Conduct and Academic Integrity: See `http://www.oscai.umn.edu`.