

Course Description

ADMINISTRATIVE INFORMATION

- Instructor:** John M. Lee
Phone: 543-1735
Office: Padelford C-546
Office Hours: Mon & Fri 9:30–10:20 or by appointment
E-mail: lee@math.washington.edu
- Class Meetings:** Math 324B: MWF 10:30–11:20, Johnson 123
Math 324C: MWF 11:30–12:20, Johnson 123
- Study Sessions:** Thursdays 12:30–2:20, Padelford C-36
- Exams:** Midterm 1: Friday, April 19
Midterm 2: Monday, May 6
Final (Math 324B, MWF 10:30): Monday, June 10, 8:30–10:20 AM
Final (Math 324C, MWF 11:30): Wednesday, June 12, 2:30–4:20 PM
- Text:** [ET] *Calculus, Early Transcendentals*, 4th Edition, by James Stewart, *or*
[C] *Calculus*, 4th Edition, by James Stewart, *or*
[MC] *Multivariable Calculus*, 4th Edition, by James Stewart
- Prerequisite:** Either 2.0 in Math 126 or 2.0 in Math 136. You should have a solid understanding of derivatives, integrals, vectors, vector-valued functions, and partial derivatives at the level of Math 124/5/6. If it has been a long time since you took Math 126 or its equivalent, it would be an excellent idea to review the material now.
- Course Web Site:** <http://www.math.washington.edu/~lee/Courses/324-2002>, or from the Math Dept. home page, choose *Selected Course Web Pages*.

COURSE CONTENT

Here's the official catalog description: *Topics include the chain rule, Lagrange multipliers, double and triple integrals, vector fields, line and surface integrals. Culminates in the theorems of Green and Stokes, along with the Divergence Theorem.* We will cover chapters 14, 15, and 16 in [ET] (which correspond to 15, 16, and 17 in [C] or [MC]). In brief, this course will introduce you to the concepts and computational techniques for applying calculus to scalar-valued and vector-valued functions of two and three variables. It is probably fair to say that this branch of mathematics has a broader range of practical applications than any other.

REGISTRATION INFORMATION

Unfortunately, all sections of Math 324 have been filled for several weeks. It is likely that a few spaces will open up during the first two weeks of classes, as people drop the course. If you are not currently enrolled, the only way to get in is by registering through STAR when space becomes available; no entry codes will be given.

STUDY SESSIONS

Every Thursday from 12:30 to 2:20, there will be an (optional) Math 324 Study Session in Padelford C-36 (C-wing, basement level LL, near the stairs). It will be available to students in all sections of Math 324, and will be staffed by Math 324 instructors on a rotating basis. You are encouraged to use it as a place to work or to meet with a study group, whether or not you need help.

HOMEWORK

Each week, there will be several sections assigned for you to read from the textbook. I really expect you to read these (preferably before they're discussed in class)! There is far too much material in this course for me to explain it all in detail in lectures, so reading the text will be an important component of your learning. In addition, a written homework assignment will be due each Friday, consisting of problems from the text. To save paper, I will not be passing out printed assignments; instead, you will have to get them from the class Web page. Some of the homework problems may take a lot of time, so *don't put them off until the day before they're due!* Late homework will not be accepted except in extraordinary circumstances and with advance permission.

I encourage you to form study groups and work together on the homework problems. But when writing up solutions to hand in, you must write your own solutions in your own words; it is not permissible for the group to come up with a solution and appoint a "secretary" to write it up for everyone. In addition, please list the names of any people with whom you collaborated on the assignment. Your solutions should be written *neatly*, stapled *in numerical order*, and with *all of your work shown*. Be sure to put your name and student number on the front of your paper.

EXAMS

There will be two 50-minute midterm exams, in class on *Friday, April 19* and *Monday, May 6*. The final exam will be given in Johnson 123, according to the following schedule:

Math 324B (MWF 10:30): Monday, June 10, 8:30-10:20 AM

Math 324C (MWF 11:30): Wednesday, June 12, 2:30-4:20 PM.

For each exam (midterms and final), you may bring two $8\frac{1}{2}'' \times 11''$ one-sided pages (or one sheet written on both sides) of your own handwritten notes. No books, photocopies, printed materials, calculators, computers, or other devices are allowed.

You may not take exams other than at the scheduled time except for serious illness, religious reasons, or other extraordinary circumstances of grave personal import. To arrange an alternative exam time for reasons other than medical emergency, give Professor Lee a written request, accompanied by appropriate written documentation, no later than two weeks before the exam. Approval of such requests is by no means automatic. If you are unable to take an exam for medical reasons, you must contact Professor Lee before the exam or as soon as medically possible thereafter, and you will need to provide a written medical excuse.

GRADES

Your grade will be based on a weighted average of the following scores.

- 10% Homework assignments
- 25% Midterm 1
- 25% Midterm 2
- 40% Final exam