Anything can change without notice at any time...

MATH 226 (Calculus III)

Fall 2016
39571R (MWF at noon in SOS B44)
Final exam is Wednesday, December 7, 2-4 pm.
Class schedule
Homework Assignments
Computer Project
Old Final Exams

More old final exams
Fall 2015
Spring 2016

Our Math 226 in Fall 2016 semester: Key dates

- Monday, August 22: first day of classes
- Monday, September 5: Labor Day, no classes
- Friday, September 9: Drop Day 1 (refund, no W)
- Wednesday, September 21: Exam 1
- Friday, October 7: Drop Day 2 (no refund, no W)
- Wednesday, October 19: Exam 2
- Friday, November 11: Drop Day 3 (no refund, W)
- Wednesday, November 16: Exam 3
- Wednesday-Friday, November 23-25: Thanksgiving, no classes
- Friday, December 2: Computer project is due
- Wednesday, December 7: Final exam

Slide show from the first lecture

- **Instructor:** Dr. Sergey Lototsky
Office: KAP 248D.
Phone: (213) 740-2389.
E-mail: lototsky (at) usc (dot) edu
URL: http://www-bcf.usc.edu/~lototsky
Office hours: MWF 1:15-2:15pm
Walk-ins and appointments at other time are welcome.

Please do not hesitate to talk to me about your problems, questions, or concerns in

this class.

- **Discussions:** 8am and 9am, Tuesday and Thursday, in KAP 134.
- **Teaching Assistant:** Jihoon Sohn

E-mail: jihoonso (at) usc.edu

Office hours: M3-4pm, W3-5pm, all in the Math Center (KAP 263).

- **SI leader:** Amanda Shantz. The session schedule

- **Grader:** Deepak Chintala (dchintal [at] usc [dot] edu)

- **Textbook:** "Essential Calculus" by James Stewart, Second Edition, ISBN 978-1-133-11229-7.

Course goal: Learning Calculus techniques with more than one variable. More specifically, we will cover all the topics mentioned in the catalog description of the class (vectors, vector valued functions; differential and integral calculus of functions of several variables; Green's theorem [as well as those of Gauss and Stokes]) using Chapters 10-13 of the book.

Save the dates! There will be THREE in-class one-hour exams: September 21 (Wednesday), October 19 (Wednesday), and November 16 (Wednesday), in the regular lecture room. The two-hour final exam is Wednesday, December 7, 2-4 pm.

Note that the time of the final exam has nothing to do with the regular final exam time for this particular class; it is a special time for the common final for all MATH 226 sections: see the ``Exceptions'' section at the bottom of the final examination schedule.

Your grades will be securely posted on our Blackboard course page. All other materials will be posted on THIS page. Please visit both pages frequently.

Homework, Quizzes, etc.: There will be 13 weekly quizzes and 15 homeworks. You are welcome to use any help whatsoever with the homework problems, computer project, and any other class-related work outside the classroom. Quizzes, midterms, and the final are your individual effort.

Grading:

- Quizzes and homeworks, 25%
- Three One-Hour Mid-Term Exams, 10% each
- Computer project, 10%
- Final Two-Hour Exam, 35%

Books, notes, calculators. All quizzes and mid-term exams are closed-book **with no calculators or notes allowed. Make sure to turn off your cell phones and similar devices during the classes and exams.**

The final exam is the same for all MATH 226 sections.

The final exam will count 35% towards your overall grade. The questions will be designed to test both your knowledge of the theory and also your ability to solve problems based on that theory. Calculators will NOT be allowed. Books and lecture notes will NOT be allowed. You MIGHT be allowed to use one self- prepared handwritten formula sheet (one piece of letter size paper, both sides may be used).

Missed work. There will be no make-up exams or quizzes, either before or after the regular date, and no late homework or computer project will be accepted (early submission is fine, if necessary). In the case of a valid excuse, the missed work will be covered by your other work in the class.

General Info

If you are having difficulty with this class, keep in mind that there are other other sources of help, beside me and TA:

- The Math Center in KAP 263; starting with week 3 of the semester, there will be a TA with expertise in math 226 most of the time.
- The USC Center for Academic Support offers tutoring and learning skills instruction and computer-assisted instruction to USC students in many classes, as well as more general counseling.
- For engineering students, check out the Viterbi Academic Resource Center (VARC)

Students with Disabilities: Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in GFS 120 and is open from 8:30 a.m. to 4:30 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Other materials (mostly results of semi-random searches on the web...)
- Solutions to some old final exams (NOT MINE!) Not verified, but greatly appreciated: Fall 2013 Fall 2014 Fall 2015
- Some standard solids in various coordinate systems
- A nowhere differentiable function from the book **Fourier Analysis** by T. Korner (Cambridge University Press, 1988)
- Grad, Div, Laplacian, and Curl in non-cartesian coordinates
- Motion in a central field (Kepler's laws as an application of vectors and vector calculus)
- Cross product ``out of this space''
- About steepest descent
- More about steepest descent
- About the conjugate gradient method
- (Much) more about both the steepest descent and conjugate gradient methods
- General intro to Gaussian curvature (A large pdf file)
- A note (by an undergraduate student) about fundamental forms and Gaussian curvature
- You can look HERE if you are getting hopelessly stuck [or hopelessly out of time] with problems 2 and 3 on the computer project. Running those Matlab codes can give you something, but certainly not full credit on the project.
- About Sudoku matrices (Written by the USC people!)
- A summary of Linear Algebra

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