General information:

- **Lectures**: 09:00–09:50 am, MWF in ZHS 163
- **Discussions**: Tu, Th in KAP 159
  - 08:00-08:50 am (Section 39576R)
  - 09:00-09:50 am (Section 39577R)
- **Professor**: Jeremy Toulisse
  Office: KAP 406G
  Email: toulisse@usc.edu
  Office hours: M 11:00-12:00 pm, W 1:00-2:00 pm, F 10:00-11:00 am and by appointment (KAP 406G)
- **Teaching Assistant**: Xinrui He
  xinruihe@usc.edu
- **Grader**: Deepak Reddy Chintala
  dchintal@usc.edu
- **Textbook**: James Stewart, *Essential Calculus, Second Edition*
- **Prerequisites**: Math 126 or Math 127

Course content: space curve, surface, curvature, function of several variables, partial derivatives, multiple integral, line integral, surface integral, Stokes' Theorem and its applications.

Learning objectives: By the end of the semester, you will be familiar with the essentials of multivariable calculus: vector formalism, vector functions, partial derivatives, gradient vector of a function, geometry of curves and surfaces. You will be able to apply these skills to a variety of applications—thermodynamics, electromagnetism, classical and fluid mechanics. In particular, you will learn how to apply Green’s Theorem, the Divergence Theorem and Stokes’ Theorem. (They all actually are the same theorem in different contexts). We will cover Chapters 10–13 of Stewart.

Blackboard: Official announcements for the course, including homework assignments and grades, will be posted on Blackboard [http://blackboard.usc.edu](http://blackboard.usc.edu). It is everyone’s responsibility to visit this website on a regular basis.

Grading: Homework and Quiz 25%, Midterms 20% each, Final 35%.

Extra credit: Students who participate in the JEP program as a Math Mentor can earn up to 3% extra credit. This is a semester-long commitment to work with K–12 students, mentoring them on math-related subjects. You must register with JEP to earn extra credit; there is an online application: uscdornsife.usc.edu/secure/JEP/. More details will be announced in class.

Quizzes: There will be a 15–20 min quiz every Thursday during discussion sections. There will be no make-up, no exceptions. The lowest quiz score will be dropped. There will be no quiz during midterm exam weeks.
**Homework:** Weekly homework will be assigned every Monday. You will hand in your work a week later, during Monday’s lecture. Only a few chosen questions will be graded. However, every exercise must be treated. (This will be part of the grading policy.) Late and electronically submitted homework will not be accepted, no exceptions. The lowest homework score will be dropped.

You are strongly encouraged to discuss homework problems with your peers and to work in groups. This is the most efficient and rewarding way to work and learn. However, you must write your own solutions. **Homework which is simply copied from another source (friend, another textbook, internet, etc.) will be considered as plagiarism. This is a serious offense to USC honor codes and will not be tolerated.**

**Exams:** There will be two Midterms and one Final.
- **First Midterm:** Wednesday, February 17th, during class.
- **Second Midterm:** Wednesday, March 30th, during class.
- **Final Exam:** Wednesday, May 11th 8:00–10:00 am.

**Important dates:**
- **Martin Luther Kings Birthday:** Monday, January 18th.
- **Presidents Day:** Monday, February 15th.
- **Spring Recess:** From Sunday March 13th to Sunday March 20th.
- **Classes End:** Friday, April 29th.

**Calendar:** The calendar will be given each week on the course’s webpage [http://dornsife.usc.edu/jtoulisse/math-226/](http://dornsife.usc.edu/jtoulisse/math-226/).

**Resources:** The Math Center is located in KAP 263 and is open weekdays from 8 am to 7 pm (it closes earlier, around 5 pm, on Fridays). For up-to-date information on the consulting hours, go to the Math Center homepage [http://dornsife.usc.edu/mathcenter](http://dornsife.usc.edu/mathcenter). Its purpose is to provide an environment where students can stop by to get help on their math classes. The office hours of your TA will be held in the Math Center and, in general, it will probably be better to attend office hours of TA’s who are teaching Math 118 this term. However, you are welcome to stop by the Center at any time, and ask for help from any of the Instructors or TA’s who are present in the Center at that time.

**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 the instructor as early in the semester as possible. DSP is located in STU 301 and is open 8:30 am – 5:00 pm, Monday through Friday. The phone number for DSP is (213) 740–0776.