

# **MATH W53 –Multivariable Calculus**

## **Syllabus 2014**

### **Course Description**

This course has the same content as the usual, face-to-face version of Math 53. The official description in the course catalog is as follows: Parametric equations and polar coordinates. Vectors in 2- and 3-dimensional Euclidean spaces. Partial derivatives. Multiple integrals. Vector calculus. Theorems of Green, Gauss, and Stokes. The purpose of this course is to introduce the basic notions of multivariable calculus which are needed in mathematics, science, and engineering.

### **Course Credits**

4 units. This course counts the same as the usual version of Math 53 to satisfy prerequisite or major requirements.

### **Instructor Information, Contact, and Office Hours**

Please use the course site for all correspondence with the Course Instructor and GSIs. You may post general questions to the [Questions and Answers Forum](#) or use the Inbox inside the course site to send a private email message.

#### **Course Instructor**

Professor Michael Hutchings

#### **Graduate Student Instructors (GSIs)**

- TBA
- TBA
- TBA
- TBA

#### **Office Hours**

The GSI's and the instructor will hold live online office hours at various times throughout the week. Any student can participate in any session. However if no one shows up for an office hour in the first ten minutes, then that office hour will be cancelled.

Day: TBD

Hours(PDT): TBD

## **Course Materials**

### **Book:**

Stewart, Calculus: Early Transcendentals, 7th edition. A custom edition containing only the chapters needed for this course will be made available at a reduced price.

## **Help & Support**

### **Who to Contact for Support:**

#### **Difficulties with the Online Classroom (Canvas):**

Review the links provided in the [Orientation module](#).

#### **Questions about the course registration and exam proctoring services:**

Program coordinator: Tracie Littlejohn, phone: 510-664-9898,  
email: [summer\\_online\\_support@berkeley.edu](mailto:summer_online_support@berkeley.edu)

#### **Questions about homework, online discussion, lecture material, material on the exam:**

**YOUR PRIMARY POINT OF CONTACT IS YOUR GSI.** Please send course mail, post to the Question and Answer forums and/or attend the office hours. If your questions cannot be answered fully by you GSI, then please contact the instructor.

---

## **Instructor**

Professor Michael Hutchings

### **The Course Instructor is responsible for the following activities:**

- Monitoring discussion forums
- Creating and modifying all assignments, multimedia presentations, quizzes, and exams
- Reviewing requests for extensions
- Monitoring student progress
- Providing designated office hours
- Approval of final course grades

**You should contact or post questions for the Course Instructor for the following issues:**

- Questions about the material, including readings, assignments, multimedia presentations, and discussion forums
  - Questions concerning quizzes/exams
  - Course policies or procedures
  - Requests for extensions or incompletes
- 

### **GSI (Graduate Student Instructors)**

- TBA
- TBA
- TBA
- TBA

**The GSI is responsible for the following activities:**

- Moderating small group collaboration (chat) sessions
- Monitoring and responding to Discussion Board postings on a daily basis
- Grading student assignments and providing feedback to the student
- Monitoring and recording weekly student participation in the course
- Notification to student and Instructor of non-participation on a weekly basis
- Interacting with each student via email, posts, or the online collaboration tools (chat)
- Responding to student questions

**You should contact the GSI for the following issues:**

- Questions regarding assignments/grades
  - Attendance for any online collaboration (chat) sessions
- 

### **Online Program Coordinator**

**Tracie Littlejohn**

Online Learning Department

UC Berkeley Extension

1995 University Ave.

Berkeley, CA 94704

Phone and voicemail: 510-664-9898

E-mail: [summer\\_online\\_support@berkeley.edu](mailto:summer_online_support@berkeley.edu)

**The Online Program Coordinator is responsible for the following activities:**

- Notifying students about textbook information
- Monitoring course and orientation sites
- Posting announcements about course or schedule revisions
- Maintaining student records, database updates, and address changes

**You should contact the Online Program Coordinator for the following issues:**

- Course Registration
- Change of address, phone, or e-mail
- If you have not received your course materials
- If you are having difficulty contacting your GSI or instructors
- If you have difficulty navigating the course site or using course tools
- General course information

### **Learning Activities**

## **VERY IMPORTANT**

You won't be able to access your course material until you read and make your pledge to Academic Integrity. Click the button below to navigate to and complete the Academic Integrity pledge.

[Academic Integrity Pledge](#)

The following are the basic components of the course:

- **Lectures and “check your understanding” questions.**  
There will be a number of short video lecture segments each week. Each lecture segment will be followed by one or more multiple choice questions to check your understanding of the material, with instant feedback and explanations of the answers. Sometimes these will be survey questions instead. Completion (but not correctness) of these questions counts towards the participation component of the grade. While the lecture segments can be viewed at any time, each lecture segment and its accompanying check your understanding questions must be completed before a fixed deadline to receive full credit.
- **Homework.**  
Since extensive practice is essential for mastering this material, there will be a number of substantial homework assignments, which will be due twice a week. These will be given a pass/fail grade based on completeness. Collaboration on homework with fellow

students is permitted, as long as each student writes their own solutions independently.

- **Quizzes.**

There will be two quizzes each week, on Mondays and Thursdays. However there will be no quiz on the first Monday or on the last Thursday. Quizzes will be similar to homework, except that they will be shorter and will have a (generous) time limit. Quizzes will be graded by the GSI's, who will provide detailed personalized feedback. Each quiz may be taken at any time during the day for which it is assigned.

- **[Questions and Answers Discussion Forum.](#)**

Here students can ask each other questions and exchange thoughts on the course at any time. The GSI's and the professor will check in and help answer questions. It is not appropriate to post solutions to homework problems here until after the corresponding assignment is due.

- **Homework Discussion Forums.**

Some homework assignments will include a few questions to discuss online. For these discussions, students will be divided into groups by GSI, and a different forum will be set up for each group and each assignment.

**Sections for grading purposes,** each of you has been assigned to one of the four course GSIs and placed within his/her section. Your particular GSI will grade all of your work, as well as that of your section-mates, and engage with you in the course discussions. You can see whose section you've been placed in by exploring the "Section" column within the "People" page or by examining your discussion group's title, which includes your GSI's name.

### **Group Discussions**

Each module contains a group discussion in which we ask you to write reflectively and critically about the discussion topic. Your posts and responses are considered your class participation and represent a unique opportunity for you to exchange views with your group-mates, share experiences and resources, and ensure your understanding of the course material.

Discussion groups have been preassigned and include other members of your GSI section. When you navigate to a discussion forum, you will automatically be taken to your group's instance of that discussion and to your group's space within the course. When finished with the discussion, you will need to navigate from your group space back to the main course space in order to continue participating in other aspects of the course.

- **Final exam.** The final exam will take place on Thursday August 14. Each student must show up in person for the final exam with an ID, either in Berkeley or at an approved proctoring center.

For more information on getting a proctor look at the [Proctor Info](#) on the left navigation menu.

## Reminder: Your Course End Date

Your access to the online classroom will have read only access after the course end date. As you work through the course, please keep the End Date in mind, and if you want to save any commentary or assignments for future reference, please make sure to print or copy/paste those materials before your access ends.

## Grades

### The course grade will be determined as follows:

- **Homework & Participation:** 25%. This is determined by the percentage of homework assignments that are completed on time. (The lowest three assignments will be dropped. Here an “assignment” consists of the homework for one section of the course. Sometimes more than one assignment will be due on the same day.) A small amount of bonus points can be earned for helpful participation in the discussion forums.
- **Quizzes:** 20%. The lowest two quiz scores will be dropped.
- **Check your understanding:** 5%. This is determined by the percentage of check your understanding questions (including those that are survey questions) that are answered on time.
- **Final exam:** 50%. A passing grade on the final exam is required to pass the course.

Although your grades for assignments are recorded in the course gradebook and are available for you to see through the Report tab, you should not count on seeing your final grade recorded there by the time your access to the course ends. Your final letter grade will be mailed to you by the Registrar's office.

## Policies

### Late Work

Late work will be accepted only after the student has received permission from the instructor to submit it past the due date. Permission will be granted on a case-by-case basis, only under exceptional circumstances, and only within the guidelines of university policy.

## **Collaboration and Independence**

Reviewing lecture and reading materials and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended. However, unless otherwise instructed, homework assignments are to be completed independently and materials submitted as homework should be the result of one's own independent work.

## **Cheating**

A good lifetime strategy is always to act in such a way that no one would ever imagine that you would even consider cheating. Anyone caught cheating on a quiz or exam in this course will receive a failing grade in the course and will also be reported to the University Center for Student Conduct. Exams are to be completed without the assistance of other people, and without reference to texts, notes, and other materials. The expectation is that you will be honest in the taking of exams.

## **Plagiarism**

To copy text or ideas from another source without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. For additional information on plagiarism and how to avoid it, explore the resources linked below:

[UC Berkeley Library Citation Page, Plagiarism Section](#)

[GSI Guide for Preventing Plagiarism](#)

## **Academic Integrity and Ethics**

Cheating on exams and plagiarism are two common examples of dishonest, unethical behavior. Honesty and integrity are of great importance in all facets of life. They help to build a sense of self-confidence, and are key to building trust within relationships, whether personal or professional. There is no tolerance for dishonesty in the academic world, for it undermines what we are dedicated to doing - furthering knowledge for the benefit of humanity.

## **Grade Dispute**

Any question or dispute over the earned points for a quiz or exam, should be addressed in writing to the Course Instructor, who will follow the grade dispute policy of the University.

## **Students with Disabilities**

- Any students requiring course accommodations due to a physical, emotional, or learning disability must contact UC Berkeley's Disabled Students' Program (DSP), <http://dsp.berkeley.edu/services.html>. The DSP will review all requests on an individual basis.
- Please have your Disabled Student Program Specialist send the instructor a formal request **BEFORE** the course start date by email
- In addition, notify Online Program Coordinator prior to the course start date
- 

### **End of Course Evaluation**

UC Berkeley Summer Sessions is committed to improving our online courses and instruction. Please take a few minutes to participate in our End of Course Evaluation to share your opinions about this course. We are interested in your online learning experience, and your candid feedback will help us plan for the future and make improvements. Please take the evaluation before your course end date. The evaluation does not request any personal information, and your responses will remain strictly confidential. To access the evaluation, please click on the Course End Evaluation button in the left navigation inside your course.