

# Math 32A FALL 2016

## Calculus of Several Variables

MWF 1:00-1:50PM Humanities Building A51

**Instructor:** Evan Randles  
**Email:** randles@math.ucla.edu  
**Course Websites:** <https://ccl.e.ucla.edu/course/view/16F-MATH32A-3>  
**Personal Website:** <http://www.math.ucla.edu/~randles>  
**Office:** Mathematical Sciences 6322  
**Office hours:** Monday 4:00-6:00pm & Wednesday 3:00-4:00pm

**Teaching Assistant: Sections/Location: Times:**

Ioannis Lagkas Nikolos 3A: KNSY PV 1200B. Tuesday, 1:00pm-1:50pm  
(giannislagas@ucla.edu) 3B: BOELTER 5280. Thursday, 1:00pm-1:50pm

John Susice 3C: BUNCHE 3153. Tuesday, 1:00pm-1:50pm  
(jpsusice@ucla.edu) 3D: BUNCHE 3153. Thursday, 1:00pm-1:50pm

Tianqi Wu 3E: GEOLOGY 4660. Tuesday, 1:00pm-1:50pm  
(timwu@ucla.edu) 3F: GEOLOGY 4660. Thursday, 1:00pm-1:50pm

TA office hours will be announced in section and posted on the course website.

**Course Description:** This is a standard course in differential multivariable calculus. We will study curves in the plane, curves and surfaces in three-space, partial differentiation, tangent planes to surfaces, and directional derivatives. The culmination of the course is learning how to solve optimization problems using Lagrange multipliers.

**Textbook:** J. Rogawski and C. Adams, Multivariable Calculus, 3rd edition

**Prerequisites:** 31A or equivalent.

**Grading:** The final grade is determined as the maximum of the following two schemes.

Scheme 1:

Quizzes	10%
Midterm 1	25%
Midterm 2	25%
Final Exam	40%

Scheme 2:

Quizzes	10%
Best Midterm	35%
Final Exam	55%

Your lowest quiz score will be dropped (see Homework & Quizzes below). Letter grades will not be assigned until the end of the quarter, at which point your composite numerical score will be converted into a letter grade based on class ranking, using the department guidelines for this course.

**Exams:** All exams will be held in Humanities Building A51 unless specified otherwise.

- Midterm 1: Monday, October 17th, 2016, 1:00pm-1:50pm, (week 4).  
Midterm 2: Monday, November 7th, 2016, 1:00pm-1:50pm, (week 7).  
Final Exam: Tuesday, December 6th, 11:30am-2:30pm unless otherwise specified during week 9.

Students must bring their UCLA ID cards to the midterms and to the final exam. Phones must be turned off. Cheating on an exam results in a score of zero on that exam. There are no make-up midterms. If you miss a midterm, the weight from this midterm will be distributed between the other midterm and the final exam (see the grading scheme above). The date of the final exam cannot be changed. You must attend the final exam in order to pass the class.

**Academic Integrity:** Please review the regulations at the following website:

<http://www.deanofstudents.ucla.edu/Student-Conduct>

**Homework & Quizzes:** Homework will be assigned weekly (on the course website) and not collected. Instead, there will be a quiz in section every week (excluding the first) consisting of one or two problems based on the previous week's homework. The quiz problems will usually be exact homework problems. You must take the quizzes with your assigned section. No make-up quizzes will be given, but to allow for one illness or other legitimate conflict, your lowest quiz score will be dropped in computing your grade.

### Course Policies:

- **Schedule:** We will approximately follow the standard outline for this course, available at <http://www.math.ucla.edu/ugrad/courses/math/32A> . Specific reading will be assigned for each lecture.
- **Exam coverage:** This course is 27 lectures long, excluding exams. The first midterm will cover the material of approximately Lectures 1-9, the second midterm will cover the material of approximately Lectures 10-19. The final exam will be roughly sixty percent from the material of Lectures 20-27 and forty percent from the preceding lectures. More specific guidance will be given as we approach the exams.
- **Regrades:** Requests for regrades of quizzes and midterms will be considered up to fourteen days after the quiz or midterm is returned, and should be turned in to me in writing (preferably typed) and signed. Please make sure to look over your graded work carefully before the time limit passes.
- **Questions and Getting Help:** For mathematical questions, you are encouraged to attend office hours (both mine and those of your TA). You may also find the Student Math Center in MS 3974 helpful (see <http://www.math.ucla.edu/ugrad/smc>). Because this is a very large course, if you have a logistical question, the best thing to do is to check the syllabus/website, then email or talk to your TA, and then get in contact with me if you still have questions. This helps ensure that when you have an issue that really needs to be dealt with by me, I'll have the attention and time to handle it. Please make sure that all emails you send have a signature.
- **Use of Calculators:** You do not need a calculator for this course, and none are permitted on quizzes/exams.