

Lecture: Mondays, Wednesdays, and Fridays 10:00-10:50 in Geology 6704.

Discussion: Tuesdays 10:00-10:50 in MS 5147.

Instructor

Brent Nelson

MS 3969

bnelson6 [at] math.ucla.edu

TA

Jiayin Guo

MS 3955

jyguo [at] math.ucla.edu

Instructor Office Hours: Mondays 2:30-3:30 pm, Wednesdays 2:30-3:30 pm, Fridays 11:30 - 12:30 pm, or by appointment.

TA Office Hours: Tuesdays 12:30-1:30 pm.

Course Webpage: http://www.math.ucla.edu/~bnelson6/Math_32B.html

Textbook: J. Rogawski, *Multivariable Calculus*, 2nd Ed., W.H. Freeman & CO.

Please be sure you have the correct edition as homeworks and quiz questions will be taken from the text.

Course Description: Math 32B is the second quarter of Multivariable Calculus. Whereas Math 32A focuses on multivariable differentiation, this course is focused on multivariable integration. We begin with an introduction to multivariable integration in rectangular, polar, cylindrical, and spherical coordinates and the change of variables formula for the multivariable setting. Next we cover vector fields (maps whose output is a vector rather than a scalar), line integrals, and surface integrals. Finally, the course culminates in Green's Theorem, Stoke's Theorem, and the Divergence Theorem; all three theorems assert that integrating over domain is equivalent to integrating over the boundary of the domain.

Math 31B and Math 32A are prerequisites for this course, therefore students are expected to be familiar and comfortable with the material from these courses.

Homework: There will be a total of 8 homework assignments. These will be posted on the course webpage and the CCLE class site, and will be collected at the beginning of lecture on Fridays. No late homework will be accepted. The lowest two homework scores will be automatically dropped.

Midterms: The course will have two midterm examinations:

Midterm 1 Friday, April 18th (Week 3)

Midterm 2 Friday, May 16th (Week 7)

No make-up exams will be offered. Please check early in the quarter to make sure you have no time conflicts with these exams.

Final: The final exam will be on Tuesday, June 10th from 3:00 - 6:00 pm. You must take the final exam to pass the class. Please bring your UCLA ID card with you to the final exam.

Grading: There will be two grading schemes offered and I will automatically select the one which gives you the better grade. They are as follows:

	Homeworks	Midterms	Final Exam
Scheme 1:	10%	50% (25% each)	40%
Scheme 2:	10%	35% (best one)	55%

If you believe there is an error with the grading of any course material you must notify the instructor within 14 calendar days of when it was completed, otherwise it will not be given further consideration.