MATH 117 ADVANCED LINEAR ALGEBRA
SPRING 2019
COURSE INFORMATION

Instructor: Beren Sanders (my first name@ucsc.edu)
Office Location: McHenry 4184
Office Hours: Monday 2:40–4:00 & Wednesday 12:00–1:00.

Teaching Assistants:
- Philip Barron – Office Hours: Tuesday 2:30–3:30 and Thursday 11:00–12:00 in McHenry 4112.
- Herman Yu – Office Hours: Wednesday 5:30-7:30 in McHenry 1271.

Lectures: Monday, Wednesday, Friday 1:20pm – 2:25pm in Social Sciences 2 Room 71
Sections:
- Wednesday 2:40pm–3:45pm in McHenry 1257
- Wednesday 4:00pm–5:05pm in McHenry 1257

Grades:
- 15% Exercises
- 25% Midterm
- 60% Final

Dates:
- First Exercise Collection Date: Wednesday, April 17
- Second Exercise Collection Date: Wednesday, May 8
- Third Exercise Collection Date: Wednesday, May 29
- Midterm: Wednesday, May 1, 1:20–2:25 (in lecture room)
- Final: Thursday, June 13, 8:00–11:00 (in lecture room)

Outline:
I will post a course outline so that you have some idea where we are heading.

Books:
We will not be following any specific textbook. Although the lectures will be self-contained, it would be a good idea to read a book on linear algebra to complement the lectures. There are many linear algebra texts and which one will be best for you depends a lot on your taste. Here are some which might be useful:
- Berberian – Linear Algebra (1992)
- Halmos – Finite-dimensional vector spaces (2nd ed., 1958)

Date: May 9, 2019.
Hoffman & Kunze is a great book, but I think it might not be so readily available (out of print or expensive). Berberian has the advantage that it is very cheap — you can get a copy from Amazon for $15. Halmos is a beautiful book. It’s a true classic, although perhaps it might strike some as a bit old-fashioned. Some people like Axler. Katznelson–Katznelson takes a very clean, precise, mathematical approach.

**Exercises:** Homework will not be collected each week. I will explain more in class.

**Academic Misconduct:** Academic misconduct will not be tolerated. Please see the *UC Santa Cruz Academic Misconduct Policy for Undergraduates.*