

# **MAT 310 Syllabus (Stony Brook University)**

## **Summer Session I, 2021**

A. **Textbook:** Linear Algebra Done Right by S. Axler.

### **B. Instructor Info**

a. **Lecturer:** Daniel An

b. **Office Hours:** Tuesday 9AM-10AM, Wednesday 9AM-10AM (Through Zoom link posted on Blackboard. By appointment only.)

c. **E-mail:** otlmath@gmail.com

### **C. Course Overview**

This course is a continuation of MAT 211. We will cover fundamentals of finite dimensional vector spaces, linear maps, dual spaces, bilinear functions, and inner products. A tentative weekly plan for the course is here.

### **D. Homework**

Find your homework assignments in BlackBoard and submit your work there. I will accept hand-written works only and it must be in pdf form. (There are several apps for taking pictures of your work and turning it into a pdf. Adobe scan, Microsoft Lens, and vFlat Scan to name a few.)

### **E. Quizzes**

There will be a short quiz on every Thursday when there is no exam.

### **F. Exams and Grading**

a. **Weights:** There will be two midterms, and a final exam (dates here), whose weights in the overall grade are listed below.

15% Homework

10% Quizzes

20% Midterm 1

20% Midterm 2

35% Final Exam (cumulative)

b. **Final Grade Assignments:** A = 94 - 100; A- = 90 - 93; B+ = 87-89; B = 83 - 86; B- = 80 - 82; C+ = 77 -79; C = 73-76; C- = 70-72; D+ = 65 -69; D = 60-64; F < 60.

**G. Course schedule (This schedule is subject to change during the course.)**

5/24/2021	Review and preview
5/26/2021	Chapter 1. Vector Spaces
5/27/2021	Chapter 2. Finite Dimensional Vector Spaces
5/31/2021	Chapter 2. Finite Dimensional Vector Spaces
6/2/2021	Chapter 3. Linear Maps: Null Spaces and Ranges
6/3/2021	Midterm 1 (Chapters 1 and 2)
6/7/2021	Chapter 3. Linear Maps: Matrix and Invertibility
6/9/2021	Chapter 3. Linear Maps: Quotients and Dual Spaces
6/10/2021	Chapter 5. Eigenvalues and Eigenvectors
6/14/2021	Chapter 6. Inner Product Spaces
6/16/2021	Chapter 6. Inner Product Spaces
6/17/2021	Midterm 2 (Chapters 3 and 5)
6/21/2021	Chapter 7. Operators on Inner Product Spaces
6/23/2021	Chapter 7. Operators on Inner Product Spaces
6/24/2021	Chapter 8. Operators on Complex Vector Spaces
6/28/2021	Chapter 8. Operators on Complex Vector Spaces
6/30/2021	Review
7/1/2021	Final Exam (Cumulative)

**H. Information for students with disabilities:** If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services at (631) 632-6748 or <http://studentaffairs.stonybrook.edu/dss/>. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: <http://www.sunysb.edu/ehs/fire/disabilities.shtml>