

INTRODUCTION TO LINEAR ALGEBRA (LECTURE 04) – MAT 211: SPRING 2019

Topics and Text:

This course will focus mainly on computations (rather than on mathematical proofs). Some of the topics we will cover are: vectors in n -space; matrices and the algebra of matrices; vector spaces and subspaces; linear transformations and operators – and their kernels and images; basis for a vector space and dimension; eigenvalues and eigenvectors; diagonalization of linear operators.

Our text for the course is *Linear Algebra, A Modern Introduction*, fourth edition, by David Poole.

WebAssign WebAssign homework will be assigned weekly in this course; so you need to buy access to WebAssign. Information about purchasing WebAssign can be found by clicking on “Documents” on this website and then clicking on “Purchasing Webassign”.

Teacher and Graders:

Teacher = Lowell Jones: office is in Math Tower room 2-111; email at lejones@math.stonybrook.edu; phone at 632-8248; office hours our 1-2pm on Monday, Wednesday and Friday in 2-111.

Grader = James Seiner: office is in Math Tower room S-240A; email at James.Seiner@stonybrook.edu; office hours are Wednesdays 3-4pm in S-240A, and Tuesdays 4-4pm and Thursdays 4:30-5:30 pm in MLC.

Grader = Emily Schaal: office is in Math Tower room S-240A; email at Emily.Schaal@stonybrook.edu; office hours are Tuesdays 4:30-5:30pm in S-240A, and Mondays 4:30-6:30pm and in MLC.

Homework

Homework is assigned for each week; every week there will problems assigned on Webassign which you should complete and submit online by 10pm on Wednesday of the week following the posting of the assignment. For example, HW 1 – the assignment covering the sections 1.1 and 1.2 that we will cover in class during week 1 — will be due on or before 10pm Wednesday 2/6/19. To find the webassign portion of your HW 1 click on “Tools” and then click on “WebAssign”.

Most weeks you will also be assigned one or two HW problems that you should work out on paper and hand in during the lecture on Wednesday of the week following the posting of the assignment. These “hand-in” problems you can find on the course calendar. For example, to find this “hand-in” portion of HW1 click on “Tools”, then click on “Calendar”, and finally click on “HW1 and topics” which appears in the box of the calendar labeled 1/28/19 (the first day of week 1 of classes).

Exams There are two inclass midterms and a final exam, scheduled as follows:

Midterm I: This will be an in class test on Friday 3/8/19; please go to your usual lecture room at the usual lecture time on this date to take the midterm I.

Midterm II: This will be an in class test on Friday 4/19/19; please go to your usual lecture room at the usual lecture time on this date to take midterm II.

Final exam: This is scheduled for Wednesday 5/15/19 from 8:00am to 10:45am. The room assignment for the final exam will be announced on this website towards the end of the semester.

If you continue with this course it is with the understanding that you are able to take all of the exams at the scheduled times. If you miss an exam for reasons beyond your control, then discuss this as soon as possible with your teacher. Scheduling problems – such as another exam scheduled at the same time as your Mat 211 exam – are not considered an acceptable reason for missing an exam.

Grading Policy

Homework=20%,
Midterm I=20%,
Midterm II=20%,
Final exam=40%.

Disability Support Services (DSS) Statement

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. 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.stonybrook.edu/ehs/fire/disabilities>

Academic Integrity Statement

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/commcms/academic-integrity/index.html>

Critical Incident Management

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, and/or inhibits students' ability to learn.

Weekly Schedule

week of 1/28-2/1: sections 1.1-1.2.

week of 2/4-2/8: section 1.3 and pages 48-49.

week of 2/11-2/15: sections 2.1-2.2.

week of 2/18-2/22: sections 2.3-2.4 (examples 2.27-2.29 and 2.35 in section 2.4, as time permits).

week of 2/25-3/1: sections 3.1-3.2.

week of 3/4-3/8: section 3.3; midterm I on Friday.

week of 3/11-3/15: section 3.5 .

week of 3/18-3/22: no classes this week (spring break).

week of 3/25-3/29: section 3.6.

week of 4/1-4/5: sections 4.1-4.2.

week of 4/8-4/12: pages 286-288 and section 4.3.

week of 4/15-4/19: section 4.4; midterm II on Friday.

week of 4/22-4/26: sections 5.1-5.2.

week of 4/29-5/3: sections 5.3-5.4

week of 5/6-5/10: last week of classes; catchup and review.