INTRODUCTION TO LINEAR ALGEBRA – MAT 211: SPRING 2014

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; abstract 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 with Applications*, fifth edition, by Otto Bretscher.

Your Teachers:

C. Denson Hill is teaching Lecture 01, which meets MWF 12:00pm-12:53pm in Simons Center room 103; his office is Math Tower 2-113; email at dhill@math.sunysb.edu; phone at 632-8251.

Lowell Jones is teaching Lecture 02, which meets TuTh 4pm-5:20pm in Physics 113; his office is Math Tower 2-211; email at lejones@math.sunysb.edu; phone at 632-8248.

Jingzhou Sun is teaching Lecture 03, which meets MWF 10am-10:53am in Library W4535; his office is Math Tower 3-102; email at jsun@math.sunysb.edu; phone at 632-8884

Bernard Moore is the grader for this course. Contact by email at bernard.moore@stonybrook.edu

Homework

Homework is assigned for each week and should be handed in during your first lecture of the following week. Only your highest 10 Homework scores will count towards your final grade for this course. (See below for grading policy.)

The first homework assignment can be found by going to the date 1/27/14 on the course "Calendar" (on course Black Board website for your lecture) and clicking on "HW 1 and topics". The second homework assignment can be found by going to the date 2/3/14 of the second week of classes and clicking on "HW 2 and topics". Likewise all later home work assignments can be found by going to the Monday of the appropriate week on our course "Calendar" and clicking on "HW and topics".

Exams There is one inclass midterm and a final exam, scheduled as follows:

Midterm: This will be an in class test during your last lecture for the week 3/10-3/14: for Lecture 01 this is Friday 3/14, 12pm-12:53pm; for Lecture 02 this is Thursday 3/13,4:10pm-5:03pm; and for Lecture 03 this will be Friday 3/14, 10am-10:53am. Please go to your usual lectures at these times to take the midterm.

The Final exam is scheduled for Thursday May 15, 5:30pm-8pm. The room assignments for this 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 lecturer. Scheduling problems – such as another exam scheduled at the same time as your Mat 211 exam – are not considered an acceptable reason for missing and exam.

Grading Policy

Homework=30%, Midterm=30%, 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 or at http://studentaffairs.stonybrook.edu/dss/. They will determine with you what accomadations are necessary and appropriate. All information and documentation is confidential.

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/uaa/academicjudiciary/.

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 saftey of the learning environment, and/or inhibits students' ability to learn.

Course Schedule

- week of 1/27-1/31: sections 1.1-1.3.
- week of 2/3-2/7: 1.3,2.1-2.2.
- week of 2/10-2/14: sections 2.3-2.4.
- week of 2/17-2/21: sections 3.1-3.2.
- week of 2/24-2/28: sections 3.3-3.4.
- week of 3/3-3/7: section 4.1-4.2.
- week of 3/10-3/14: section 4.3, midterm during last lecture for week.
- week of 3/17-3/21: spring recess
- week of 3/24-3/28: go over exam problems, section 5.1.
- week of 3/31-4/4: sections 5.2-5.3.
- week of 4/7-4/11: sections 5.4,5.5
- week of 4/14-4/18: sections 6.1-6.2.
- week of 4/21-4/25: sections 6.3,7.1
- week of 4/28-5/2: sections 7.2-7.3.
- week of 5/5-5/9: last week, catchup and review.