

MAT 211 - INTRODUCTION TO LINEAR ALGEBRA

Summer 2020

Instructor: Yunpeng Niu (yunpeng.niu@stonybrook.edu)

Course Descriptions: This online course offers an introduction to the theory of linear algebra. In the course we will focus mainly on computations (rather than on mathematical proofs). Some of the topics we will cover are: systems of linear equations, Gauss-Jordan elimination, matrices and determinants, vector (linear) spaces and linear transformations, bases, dimension, the kernel-image theorem, inner-product spaces, orthogonality, Gram-Schmidt orthogonalization, eigenvalues and eigenvectors, diagonalization.

Time: The class meet weekly via zoom every Monday, Wednesday and Thursday at 6:00pm-8:15pm, which can be accessed through Blackboard or with a Meeting ID and password (TBD). The lectures will be recorded and videos can be accessed through Blackboard.

Office Hours: Tuesday 7:00pm-8:00pm, also by appointment, will be a one-to-one meeting via Zoom.

Textbook: *Linear Algebra With Application*, fifth edition, by Otto Bretscher

Exams:

Midterm Monday, Jun 15 6:00pm-8:15pm

Final Thursday, July 2 6:00pm-8:15pm

All exams will be given online using Respondus.

Homework: All homework will be submitted through Blackboard before due date. Students can also access the grades in Blackboard system.

Grading Policy: Homework (30%), Midterm (30%), Final (40%).

Your course average will be determined by a weighted average of the graded components above.

Late Homework Policy: A student's homework assignment shall be considered late if it is not submitted in the Blackboard system before scheduled due time. Late homework may be accepted with a scanned copy sent through email by the end of the first lecture after the due date, but will be penalized 40%. Late homework will not be accepted more than one lecture past the due date.

Missed Exam Policy: No make-up exams will be given. If a student misses a midterm exam, then the final exam grade will be substituted for the missed midterm. A student must sit the final exam (show attendance through webcam and submit his/her work) at the scheduled time in order to receive a passing grade in the class.

Student Accessibility Support Center Statement: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Student Accessibility Support Center, ECC (Educational Communications Center) Building, Room 128, (631)632-6748. They will determine with you what accommodations, if any, 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 Student Accessibility Support Center. 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 is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. 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 Statement: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.