

Course Instructor.

Name: Vardan Oganessian
 Email: vardan.oganesyan@stonybrook.edu
 Office: 4-119
 Office hours: Tuesday 1:30-2:30, Thursday 2:30-3:30
 Math Learning Center: Thursday 5:30-6:30

Textbook. Linear Algebra (5th edition) by Otto Bretscher

Course Website. All the information about the course will be posted on Blackboard (<https://blackboard.stonybrook.edu/>).

Marking Scheme. Your final grade will be determined as follows:

Homework	20%
Midterm 1	20%
Midterm 2	20%
Exam	40%

Midterms. There will be two midterms in this course. They will be held in-class.

	Date	Time
Midterm 1	Tuesday, March 2	4:00 PM to 5:20 PM
Midterm 2	Tuesday, April 7	4:00 PM to 5:20 PM

Exam: May 13, 8:00 AM to 10:45 AM.

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, 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 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 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/academicintegrity/index.html>.

TENTATIVE
SCHEDULE

Week of Jan 27: 1.1, 1.2;
Week of Feb 3: 1.3, 2.1;
Week of Feb 10: 2.2, 2.3;
Week of Feb 17: 2.4, 3.1;
Week of Feb 24: 3.2 3.3;
Week of Mar 2: 3.4, 4.1;
Week of Mar 9: 4.2 4.3;
Week of Mar 16: Spring break;
Week of Mar 23: 5.1, 5.2, 5.3;
Week of Mar 30: 5.4, 5.5;
Week of Apr 6: 6.1, 6.2;
Week of Apr 13: 6.3, 7.1;
Week of Apr 20: 7.2, 7.3;
Week of Apr 27: Review;
Week of May 4: Review.

MAJOR TOPICS

Systems of Linear Equations
Gauss Elimination and Row Echelon Form
Vectors and Matrices
Linear Transformations
Matrix Multiplication, Inverse Matrices
Image and Kernel of a Linear Transformation
Subspaces of \mathbb{R}^n
Linear Independence, Basis, and Dimension
Coordinates
Inner Product Spaces
Projections
Orthonormal Bases and Gram-Schmidt Orthogonalization
Orthogonal Transformations and Matrices
Determinants
Eigenvalues and Eigenvectors
Diagonalization