EECE 212 Linear Algebra and Engineering Programming
Spring 2017

Location & Time	- Lecture: MWF, 12:00-1:00PM, AA G008 - Lab: Based on the BU Brain

Instructors:	- Zi-Ang Zhang, Assistant Professor
	  Office: ES 2317
	  Email: *ziang.zhang@binghamton.edu*
	  Office Hours: Th, F 4-5, or after class, or by appointment

Textbooks and Course Website:	- Introduction to Linear Algebra	Edition: 5 (Required)
		  o Author: Gilbert Strang
		  o ISBN: 978-09802327-7-6
		- MATLAB online help
		  o https://www.mathworks.com/help/matlab/linear-algebra.html
		- MATLAB Mathematics (Chapter 1 and 2)
		  o https://www.mathworks.com/help/pdf_doc/matlab/math.pdf
		- Class website will be on Blackboard which is where announcements, course materials, etc. will be posted.

Prerequisite:	PHYS 132
Objective:	An introduction to linear algebra for electrical engineers with computer analysis, visualization and mathematical programming. Linear algebra topics include matrix operations, systems of linear equations, determinants, solution to matrix equations, vector space, eigenvalues and eigenvectors. Introduction to Matlab programming includes programming variables and arrays, matrix operation, functions, data representation, user defined functions and a brief introduction on graphical programming. Engineering applications such as the matrix representation of graphs, matrices applied to electric circuits and linear systems will be introduced during the class.
Grading:	- Homework: 10% - Lab reports: 30% - Class project: 10% - Exam: #1: 25%, Exam: #2: 25%. (closed book)
Additional Readings	- Stanford EE 103: http://stanford.edu/class/ee103/ - MIT 18.06: http://ocw.mit.edu/courses/mathematics/18-06-linear-algebra-spring-2010/