Linear Algebra and Introduction to Matlab Schedule (subject to change)

Week	Date	Room	Topic	Classwork
1	7/3	L.A. Tech L361	Fundamental vector, matrix operations & Essence of L.A.	Review Syllabus Icebreaker / introductions
	7/5		How to solve linear equations?	geometric meaning, row reduction, the inverse of a matrix
	7/6		Solution Sets	linear independence, linear combination, span, basis
2	7/9		Determinants	review and introduction to determinant
	7/10		Vector Spaces	subspaces, column space, null space, rank
	7/11		Dot product and Cross product	how to compute, geometric understanding
	7/12		Eigenvalues and Eigenvectors	geometric understanding
	7/13		Orthogonality	Orthogonal Bases and the Graham-Schmidt Procedure
3	7/16		Optimization	Least Squares Approximation and Regression
	7/17		In class mid-term exam	
	7/18	Matlab Tech C135	Fundamental introduction	math, matrics, vectors, indexing, solve LA problem
	7/19		Array arithmetic	element-wise and array operation, solve LA problem
	7/20		Coding Habit and basic Matlab function	develop coding habit, write comments
4	7/23		Flow Control	if/else, while/for
	7/24		Basic Plotting and Graphics	plot functions
	7/25		Project Lab course	TBD
	7/26		Project Lab course	TBD
5	7/30		Final project report and cheat sheet due	