Week No.	Monday	Wednesday
1		4-Sep Syllabus Overview + 1.1 (Modelling via Differential Equations)
2	9-Sep 1.2-1.3 (Separtaion of Variable, Slope Field) + **Using DFIELD**	11-Sep 1.3-1.4 (Slope Field, Euler's Method) **+ Quiz 1**
3	16-Sep **Lab 1 (Intro to Octave - Basic Plotting, ODE45)**	18-Sep 1.5 (Existence and Uniqueness Theorem)
4	23-Sep 1.6 (Equilibria and Phase Line)	25-Sep 1.7 (Bifurcation)
5	30-Sep ***Project 1 (The Spruce Budworm - Hysteresis and Cusp Catastrophe)***	2-Oct 1.9 (Integrating Factor) **+ Quiz 2**
6	7-Oct Bifurcation contd., Change of Variable techniques	9-Oct **Summary Worksheet + Review**
	Midterm 1 (1.1-1.7)	
7	14-Oct **Fall Vacation**	16-Oct 2.1 (Predator-Prey Model) + 3.1 (Linear System)
8	21-Oct 3.1 (Linear Systems contd.) + 3.2 (Straight line solutions)	23-Oct 3.3 (Phase Portraits) **+ Quiz 3**
9	28-Oct ***Project 2 (An Application from Economics: Modeling Profit)***	30-Oct 3.4 (Complex Eigenvalues)
10	4-Nov **Lab 2 (Trace-Determinant Plane, Defective and Degenerate cases, Bifurcation)**	6-Nov **Summary Worksheet + Review**
	Midterm 2	

Week No.	Monday	Wednesday
11	11-Nov **Lab 3 (Second Order Linear ODEs, Harmonic Oscillators)**	13-Nov Forced Harmonic Oscillation, Method of Undetermined Coefficients, Resonance
12	18-Nov 5.1-5.2 (Equilibrium Point Analysis, Jacobian)	20-Nov Almost Linear Systems, Consequences of Poincaré–Bendixson theorem **+ Quiz 4**
	25-Nov	27-Nov
	Thanksgiving Break	
14	2-Dec ***Project 3 (Glycolytic Oscillations - Hopf Bifurcation)***	4-Dec Summary Worksheet
15	9-Dec **Lab 4 (Lorenz Equations)**	11-Dec **Review**