Week No.	Monday	Wednesday
1		22-Jan Syllabus Overview + 1.1 (Modelling via Differential Equations)
2	27-Jan 1.2-1.3 (Separtaion of Variable, Slope Field) + **Using DFIELD**	29-Jan **Intro to Octave - Basic Plotting, ODE45**
3	3-Feb 1.3-1.4 (Slope Field, Euler's Method) + **Quiz 1**	5-Feb 1.5 (Existence and Uniqueness Theorem)
4	10-Feb 1.6 (Equilibria and Phase Line)	12-Feb 1.9 (Integrating Factor)
5	17-Feb 1.7 (Bifurcation)	19-Feb ***Project 1 (The Spruce Budworm - Hysteresis and Cusp Catastrophe)***
6	24-Feb Bifurcation contd., Change of Variable techniques + **Quiz 2**	26-Feb **Review + Project 1 due**
	Midterm 1 (1.1-1.7)	
7	2-Mar 2.1 (Predator-Prey Model) + 3.1 (Linear System)	4-Mar 3.1 (Linear Systems contd.) + 3.2 (Straight line solutions) + **using PPLANE**
	Spring Break	
8	23-Mar 3.3 (Phase Portraits)	25-Mar 3.4 (Complex Eigenvalues)
9	30-Mar 3.5 (Equal and Zero Eigenvalues) + **Quiz 3**	1-Apr **Trace-Determinant Plane, Defective and Degenerate cases, Bifurcation**
10	6-Apr ***Project 2 (Romeo & Juliet - Bifurcation Diagrams of Love Affairs)***	8-Apr **Review**
	Midterm 2	
11	13-Apr **Second Order Linear ODEs, Simple Harmonic Oscillators**	15-Apr Forced Harmonic Oscillation, Method of Undetermined Coefficients + **Project 2 due**
12	20-Apr Undamped Forcing, Resonance + **Quiz 4**	22-Apr 5.1-5.2 (Equilibrium Point Analysis, Jacobian)
13	27-Apr Almost Linear Systems, Consequences of Poincaré–Bendixson theorem	29-Apr ***Project 3 (Glycolytic Oscillations - Hopf Bifurcation)***
14	4-May **Lorenz Equations**	6-May **Review + Project 3 due**