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 + Euler's Method
3	3-Feb 1.5 (Existence and Uniqueness Theorem)	5-Feb 1.6 (Equilibria and Phase Line)
4	10-Feb 1.9 (Integrating Factor)	12-Feb **Quiz 1** + ODE45
5	17-Feb 1.7 (Bifurcation)	19-Feb *Project 1 (The Spruce Budworm - Hysteresis)*
6	24-Feb Bifurcation contd.	26-Feb **Quiz 2** + Review
	Midterm 1	
7	2-Mar 2.1 (Predator-Prey Model) + Nullclines and Direction Field	4-Mar 3.1 (Linear Systems) + LA Review
	Spring Break + *Bonus Project (Recipe for an All-nighter - Kick-flow systems)*	
8	23-Mar 3.2 (Straight line solutions) + using PPLANE	25-Mar 3.3 (Phase Portraits for Real Distinct Eigenvalues)
9	30-Mar 3.4 (Complex Eigenvalues)	1-Apr Trace-Determinant Plane, Defective and Degenerate cases, Bifurcation
10	6-Apr Second Order Linear ODEs, Simple Harmonic Oscillators	8-Apr **Quiz 3** + Review
	Midterm 2	
11	13-Apr *Project 2 (Linear Systems in Higher Dimensions)*	15-Apr Forced Harmonic Oscillation, Method of Undetermined Coefficients, Resonance
12	20-Apr 5.1-5.2 (Equilibrium Point Analysis, Jacobian)	22-Apr *Project 3 (SIR model)*
13	27-Apr Almost Linear Systems, Consequences of Poincaré–Bendixson theorem	29-Apr *Project 4 (Glycolytic Oscillations - Hopf Bifurcation)*
14	4-May Lorenz Equations, Example of Chaos	6-May **Quiz 4** + Review