Week	Date	Topic	Date	Topic	Assignment
Week 1	06 Aug		07 Aug	Introduction	
Week 2	13 Aug	Review of Newtonian mechanics	14 Aug	Many-particle systems and constraints	
Week 3	20 Aug	Virtual work and Euler-Lagrange equations	21 Aug	Applications of E-L eqns	**HW1, Drop Test (Aug 25)**
Week 4	27 Aug	Mathematica Tutorial	28 Aug	Tutorial	1 Sep: E-L from Variational principle
Week 5	03 Sep	Method of Lagrange multipliers	04 Sep	Generalizations of KE, p, E	
Week 6	10 Sep	HOLIDAY	11 Sep	Legendre transforms, Hamilton's equations	**HW2**
Week 7	17 Sep	Two-body central force formalism	18 Sep	Kepler problem, Planetary motion	
Week 8	24 Sep	Scattering in central force	25 Sep	Applications	**HW3**
Week 9	01 Oct	Small oscillations, normal modes	**02 Oct**	**MIDTERM**	
Week 10	08 Oct	HOLIDAY	09 Oct	Forced oscillations, damping	13 Oct: Anharmonic oscillations
Week 11	15 Oct	Perturbation theory	16 Oct	Rigid body kinematics	**HW4**
Week 12	22 Oct	Rigid body dynamics	23 Oct	Applications	
Week 13	29 Oct	Tutorial	30 Oct	Tutorial	**HW5**
Week 14	05 Nov	Canonical transformations	06 Nov	Poisson brackets	
Week 15	12 Nov	Hamilton-Jacobi theory	13 Nov	Action-angle variables	**HW6, Projects (Nov 17)**
Week 16	19 Nov	Continuous media	20 Nov	Classical theory of fields	
Week 17	26 Nov	Mathematical formulations	27 Nov	Applications	**Final Exam (Nov 30)**