University of California, Santa Barbara

Department of Physics

Syllabus - Physics 2 - Spring 1999

Week	Date	Pre-Lecture Reading	Topics
1	4/5-9	10-1 → 10-4 pp.294-307	Torque, Angular Acceleration, Rotation about Moving Axis
		1-11 pp. 21-23	Vector Cross Product
		10-5 → 10-8 pp.307-318	Work and power in rotations, Angular Momentum & its Conservation, Gyroscopes
2	4/12-16	11-1 → 11-4 pp.329-337	Equilibrium, Center of Gravity, Solving Equilibrium, Couples
		11-5 → 11-8 pp.337-346	Stresses and Strains, Elasticity, Plasticity
3	4/19-23	12-1 → 12-4 pp.358-367	Newton's Law of Gravitation, Weight, Field, Potential Energy
		12-5 pp.367-370	Satellite Motion
		12-9 pp.379-384	Black Holes
4	4/26-30	22-1 → 22-6 pp.669-683	Electric Charge, Conductors and Insulators, Conservation and Quantization, Coulomb's Law, Field and Force
		22-7 → 22-9 pp.683-695	Field Calc., Lines, Dipoles
5	5/3-5	23-1 → 23-6 pp.704-723	Gauss's Law, Flux, Charge on Conductors
5	**5/6, 5/7**	**MIDTERM**	**Chapters 10-12, 22**
6	5/10-14	24-1 → 24-5 pp.731-749	Electric Potental & Energy, Computation of Potentials, Equipotentials
		24-6 → 24-8 pp.749-760	Gradient, Oil Drop, Cathode Ray Tube, Equipotential Lines
7	5/17-21	25-1 → 25-5 pp.771-787	Capacitors, Calculation of Capacitance, Series and Parallel, Field Energy, Dielectrics
		25-6 → 25-7 pp.787-791	Dielectrics, Induced Charge, Gauss in Dielectrics
8	5/24-28	26-1 → 26-4 pp.799-809	Current, Resistivity, Resistance
		26-5 → 26-8 pp.809-824	EMF, Energy and Power in Circuits, Metallic Conduction, Physiological Currents
9	5/31-6/4	27-1 → 27-3 pp.832-841	Resistors: series, parallel, Kirchoff's Rules
		27-4 → 27-6 pp.842-854	Elecrical Measurement, RC Circuits, Power Distribution
10	6/7-11	Review / Contingency	
11	**6/15**	**FINAL EXAM 1610 Broida**	**Chapters 10-12,22-27**