

Physics 2305 Syllabus

17 January, 2000

This is the course coordinator's schedule, and we will follow it reasonably closely.

Lect.	Date	Laboratory experiment	Reading in text	Topics
1	17 Jan	Pre-lab during recitation	1.1-1.6, 3.1-3.7	Orientation, units, dimensions, vectors
2	19 Jan	"	2.1-2.7	One-dimensional motion
3	21 Jan	"	2.8, 4.1-4.4	Free fall, Two-dimensional motion
4	24 Jan	1. Digitization Error	4.5-4.9	Two-dimensional motion continued
5	26 Jan	"	5.1-5.7	Force, Newton's laws of motion
6	28 Jan	"	5.8	Applications of Newton's laws
7	31 Jan	"	5.8	Applications of Newton's laws continued
8	2 Feb	"	6.1-6.3	Dissipative effects
9	4 Feb	"	6.4	Circular motion
10	7 Feb	2. Newton's Second	7.1-7.4	Work and kinetic energy
11	9 Feb	Law	7.5-7.7	Work by a variable force, power
12	11 Feb	"	through Chap. 6	review, Exam 1 at 5 pm
13	14 Feb	"	8.1-8.3	Potential energy
14	16 Feb	"	8.4-8.6	Conservation of mechanical energy
15	18 Feb	"	8.7	Conservation of energy
16	21 Feb	3. Conservation of	9.1-9.3	Center of mass
17	23 Feb	Energy	9.4-9.6	Conservation of linear momentum
18	25 Feb	"	10.1-10.4	One-dimensional collisions
19	28 Feb	"	10.5-10.6	Two-dimensional collisions and decay
20	1 Mar	"	11.1-11.5	Rotational kinematics
21	3 Mar	"	11.6-11.10	Rotational dynamics
22	6 Mar	4. Collisions in One	12.1-12.5	Rolling and angular momentum
23	8 Mar	Dimension	12.6-12.8	Conservation of angular momentum
24	10 Mar	"	13.1-13.4	Equilibrium
25	20 Mar	"	16.1-16.3	Simple harmonic motion
26	22 Mar	"	16.4-16.7	Simple harmonic motion continued
27	24 Mar	"	through Chap. 13	review, Exam 2 at 5 pm
28	27 Mar	5. Torsion Pendulum	16.8-16.9	Damped and forced harmonic motion
29	29 Mar	"	14.1-14.4	Gravity
30	31 Mar	"	14.5-14.6	Gravity continued
31	3 Apr	"	14.7-14.8	Planetary and satellite motion
32	5 Apr	"	15.1-15.5	Fluids at rest
33	7 Apr	"	15.6-15.10	Fluids in motion
34	10 Apr	6. Fluid flow	19.1-19.5	Temperature
35	12 Apr	"	19.6-19.7, 19.11	Temperature and heat
36	14 Apr	"	19.8-19.10	First law of thermodynamics
37	17 Apr	"	20.1-20.4	Ideal gasses
38	19 Apr	"	20.5-20.7	Kinetic theory
39	21 Apr	"	through Chap. 19	review, Exam 3 at 5 pm
40	24 Apr	Make-up labs 1-6	20.8-20.11	Ideal gas thermodynamics
41	26 Apr	(see rules	21.1-21.3	Entropy
42	28 Apr	in lab	21.4-21.5	Engines
43	1 May	instructions)	21.6	Statistical mechanics
44	3 May	"	through Chap. 21	review
Final	6 May	-	through Chap. 21	Final Exam at 7 pm