

Physics 1407 General Physics Syllabus

Fall 2001

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Text: Physics, Cutnell and Johnson, 5ed., ISBN 1-0471-38717-7 **OR** 0471-32146-X

Office hours: Monday, 1:30 – 3:30 PM. Also by appointment.

DATE	LECTURE TOPIC	READING
Aug 23	Introduction and Describing Motion	Sec. 2.1-2.3, pp. 26-34.
Aug 28	Describing Motion	Sec. 2.4-2.5, pp. 34-45.
Aug 30	Falling Bodies	Sec. 2.6-2.7, pp. 46-50.
Sep 4	Vectors	Sec. 3.1-3.3, pp. 58-70.
Sep 6	Projectile Motion	Sec. 3.3, pp. 64-71.
Sep 11	Newton's Laws of Motion	Sec 4.1-4.5, pp. 84-93.
Sep 13	Gravitation	Sec. 4.6-4.7, pp. 93-97.
Sep 14	Test 1	Ch. 2, 3.
Sep 18	Circular Motion	Sec. 5.1-5.3, pp. 130-137.
Sep 20	Work and Energy	Sec. 6.1-6.3, pp. 153-164.
Sep 25	Energy Conservation and Power	Sec. 6.4-6.5, 6.7; pp. 164-171, pp172-174.
Sep 27	Impulse and Momentum	Sec. 7.1-7.2, pp. 187-197.
Oct 2	Collisions	Sec. 7.3-7.4, pp. 197-201.
Oct 4	Describing Rotational Motion	Sec. 8.1-8.3, pp. 212-222.
Oct 5	Test 2	Ch. 4, 5, 6, 7.1-2.
Oct 9	Centripetal Acceleration	Sec. 8.4-8.6, pp. 222-227.
Oct 11	Rigid Bodies and Rotation	Sec. 9.1-9.3, pp. 237-248.
Oct 16	Fall break, no lecture.	
Oct 18	Rotational Motion	Sec. 9.4-9.6, pp. 248-260.
Oct 23	Why Things Float	Sec. 11.1-11.4, pp. 307-315.
Oct 25	Bernoulli's Equation	Sec 11.5-11.9, pp. 315-327.

DATE	LECTURE TOPIC	READING
Oct 30	Simple Harmonic Motion	Sec. 10.1-10.2, pp. 273-282.
Nov 1	Yet More Simple Harmonic Motion	Sec. 10.3-10.6, pp. 282-290.
Nov 2	Test 3	Ch. 8, 9, 11
Nov 6	Waves and Sound	Sec. 16.1-16.3, 16.5, pp.458-464, 465-468.
Nov 8	More Waves and Sound	Sec. 17.1-17.2, 17.5,17.6, pp.494-499, 504-510.
Nov 13	Ideal Gas Law, Kinetic Theory	Sec. 14.1-14.3, pp.403-413.
Nov 15	Temperature and Thermal Expansion	Sec. 12.1-12.6, pp. 346-357.
Nov 20	Heat Transfer	Sec. 12.7-12.8, 13.1-13.5; pp. 358-366, 382-396.
Nov 22	Thanksgiving	
Nov 27	1st Law of Thermodynamics	Sec. 15.1-15.3, pp.426-429.
Nov 29	Heat capacity, 2nd Law of Thermo	Sec. 15.7-15.10, pp.435-442.
Nov 30	Test 4	Ch. 10, 12, 13, 14, 16, 17
Dec 4	Special Topics	

FINAL EXAMINATION: Friday, 14 Dec. '01, 8:00 AM – 11:00 AM, rm. 123 FS.