

Physics 1313 Fundamentals of Physics Syllabus

Fall 2000

Professor Thomas E. Coan, Room 4B, FS (x8-2497)

email: coan@mail.physics.smu.edu

WWW page: <http://www.physics.smu.edu/~coan>

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

Office hours: Monday, 2:00 – 4:00 PM. Also by appointment.

DATE	LECTURE TOPIC	READING
Aug 28	Introduction and Describing Motion	Sec 2.1-2.3, pp. 26-34.
Aug 29	Measurement and Measurement Error (L)	
Aug 30	Describing Motion	Sec 2.4-2.5, pp. 34-45.
Sep 4	Labor(less) Day Holiday	
Sep 5	No Lab	
Sep 6	Falling Bodies	Sec. 2.6-2.7, pp. 46-50.
Sep 11	Vectors and Life in 2 Dimensions	Sec. 3.1-3.3, pp. 58-70.
Sep 12	Acceleration Due to Gravity (L)	
Sep 13	Newton's Laws of Motion	Sec 4.1-4.5, pp. 84-93.
Sep 18	Gravitation	Sec 4.6-4.7, pp. 93-97.
Sep 19	Vectors (L)	
Sep 20	Circular Motion	Sec. 5.1-5.3, pp. 130-137.
Sep 25	Pre-Test Review	
Sep 26	Test 1	
Sep 27	Special Topics	
Oct 2	Test 1 Postmortem and Special Topics	
Oct 3	Forces in Equilibrium (L)	
Oct 4	First Look at Work and Energy	Sec. 6.1-6.3, pp. 153-164.
Oct 9	Last Look at Work and Energy	Sec. 6.4-6.6, pp. 164-172.
Oct 10	Speed of Light (L)	
Oct 11	Impulse and Momentum	Sec. 7.1-7.2, pp. 187-197.
Oct 16	Fall Break, No Lecture	
Oct 17	Fall Break, No Lab	
Oct 18	Collisions	Sec. 7.3-7.4, pp. 197-201.
Oct 23	Rotational Motion	Sec. 8.1-8.3, pp. 212-222.
Oct 24	Conservation of Energy (L)	
Oct 25	Still More Rotational Motion	Sec. 8.4-8.6, pp. 222-227.

DATE	LECTURE TOPIC	READING
Oct 30	Pre-Test Review	
Oct 31	Test 2	
Nov 1	Rigid Bodies and Rotation	Sec. 9.1-9.3, pp. 237-248.
Nov 6	Rotational Motion	Sec. 9.4-9.6, pp. 248-260.
Nov 7	Test 2 Postmortem	
Nov 8	Fluids and Why Things Float	Sec 11.1-11.5, pp. 307-317.
Nov 13	Fluids and Special Topics	Sec 11.5-11.6, pp. 317-321.
Nov 14	Torque and Rotational Equilibrium (L)	
Nov 15	Simple Harmonic Motion	Sec. 10.1-10.2, pp. 273-282.
Nov 20	Yet More Simple Harmonic Motion	Sec. 10.3-10.6, pp. 282-290.
Nov 21	Hooke's Law (L)	
Nov 22	Waves and Sound	Sec. 16.1-16.3, 16.5, pp.458-464, 465-468.
Nov 27	More Waves and Sound	Sec. 17.1-17.2, 17.5,17.6, pp.494-499, 504-510.
Nov 28	SHM and the Simple Pendulum (L)	
Nov 29	Test 3	
Dec 4	Test 3 Postmortem and Special Topics	
Dec 5	Resonance (L)	
Dec 6	Special Topics	

FINAL EXAMINATION: Thursday, 14 Dec. '00, 8:00 AM – 11:00 AM.