

**Physics 101 Course Schedule**  
**Section 103**  
**Fall term 2007**  
**Instructor: J. E. Eldridge**

Text: "PHYSICS for Scientists and Engineers"  
 by R. D. Knight. ( + Giancoli online )

Week, commencing	1 <sup>st</sup> Lecture 11:00 am Tuesday	2nd Lecture 11:00 am Thursday
1 – Sep.3		Fluids: Statics; Pressure in fluids Ch. 15.1, 2.
2 – Sep. 10	Fluids: Statics; Atmos. Press; Blood press; Pascal, Hydraulic jack. Ch. 15.3	Fluids: Statics; Buoyancy, Archimedes Principle. Ch. 15.4
3 – Sep. 17	Fluids: Dynamics; Bernoulli's Eq. Ch. 15.5.	Fluids: Dynamics; Bernoulli's Eq. Ch. 15.5.
4 – Sep. 24	Fluids: Dynamics: Bernoulli's Eq. Viscosity, Giancoli:Ch. 13-10, 11.	Simple Harmonic Motion (S.H.M.), Circular Motion, Ch. 14-1, 2, 4
5 – Oct. 1	S.H.M. (continued), Energy. Ch 14.3, 5	S.H.M. Pendulum, Damped Harmonic Motion, Ch. 14.6, 7
6 – Oct. 8	Forced Harmonic Motion, Resonance Ch. 14-8	Travelling Waves Ch. 20.1, 2, 3, 4.
7 – Oct. 15	Sound, Intensity, Decibels, Ear response Ch. 20.5, 6. Giancoli: Ch. 16-1, 2, 3.	Doppler effect: sound waves, reflections Ch. 20.7, Giancoli Ch. 16-7.
8 – Oct. 22	Doppler effect: electromagnetic radiation Ch. 20.7.	<b>Mid-term Exam</b> October 25.
9 – Oct. 29	Interference, Standing waves on Strings Ch. 21.1, 2, 3.	Mid-term Exam review
10 – Nov. 5	Standing waves in Air columns. Ch. 21.4	Interference, Thin films Ch. 21.5, 6, Class notes
11 – Nov. 12	Interference, Thin films, Beats Ch. 21.8.	Young's 2-slit experiment. Ch. 22.1, 2
12 – Nov. 19	Diffraction, Single slit Ch. 22.4.	Diffraction: Double slit, Circular aperture Class notes, Ch. 22.5.
13 – Nov. 26	Diffraction: Resolution, Grating Ch.22.3, 5, Class notes	Review.