Phys 201 Lecture Schedule
First Semester 2007-08 (Term 071)

Instructor: Dr. M.A. Solami
(Office: 6/143, Phone: 2695)
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Course Description:

A continuation of Phys 101 and 102. Topics covered include inductance; magnetic properties of matter; electromagnetic oscillations and waves; geometrical and physical optics. Relativity, introduction to quantum physics, atomic and molecular physics, nuclear physics, particle physics and cosmology.

Textbook:

Halliday, Resnick, and Walker, "Fundamentals of Physics, 6th Edition Extended, wiley (2001).

Method:

The course material will be presented in lectures. Problem-solving techniques will be shown recitation. Demonstrations and audiovisuals will be used to clarify material if available.

Prerequisites:

Physics 102, General Physics II
Math 102 Calculus II

Grading Policy:

The course grade will be evaluated as follows:

Class work	15%
Laboratory	20%
First Major Exam	15%
Second Major Exam	20%
Final Exam	30%

The class work will be on quizzes and homework.

The Laboratory score will be based on the Lab reports and the Lab final Exam.

Labs start on the second week of the classes (i.e. Monday, September 17, 2006).

Attendance will be evaluated according to the University Regulations. Attendance in lectures, recitations and labs is compulsory. It will be enforced and evaluated according to the current University regulations. **A DN grade shall be given to the student who has 3 absences in the labs or 12 unexcused absences in (lectures + recitation) or the combination of both. Student who has valid excuse for his absence must present officially authorized document to his instructor no later than one week following his resumption to the classes.**

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Week	Date	Topics	Chapter	Section	HW
1	08/09/07 10/09/07 12/09/07	Faradays Law of Induction Introduction RL Circuits	30	1-4 5-8 9-10	To be assigned in class
2	15/09/07 17/09/07 18/09/07 19/09/07	Energy stored in magnetic field LC Oscillations ***Last day for drooping course(s) without permanent record*** RLC Circuits	31	11-2 1-4 5-8	
3	22/09/07 23/09/07 24/09/07 26/09/07	Series RLC Circuits ***National Holiday*** Gauss' Law for magnetic field 32 Maxwell's equations	32	 8-11 1-4 5-7	
4	29/09/07 01/10/07 03/10/07	Magnetic Materials EM Waves Energy Transport	33	8-11 1-4 5-8	
4-19 Eid Al-Fitar Holidays					
5	20/10/07 22/10/07 24/10/07 25/10/07	Total Internal Refraction Plane and spherical Mirrors Spherical Refracting Surfaces ***Normal Class***	34	9-10 1-5 6-7	
6	27/10/07 29/10/07 31/11/07 31/11/07	Interference Young's Interference experiment Intensity in Double Slite Interference ***First major Exam (30-33)***	35	1-3 4-5 6-8	
7	03/11/07 05/11/07 06/11/07 07/11/07	Diffraction Wave Theory of Light Diffraction by Double Slite ***Last day for dropping course(s) with grade of "W" thru Internet*** Diffraction Gratings	36	1-4 5-6 8-10	
8	10/11/07 12/11/07 14/11/07	Relativity Relativity of Time and Length Lorantz Transformation	37	1-4 5-6 7-9	
9	17/11/07 19/11/07 21/11/07	Doppler Effect for Light Photon, The Quantum of Light Photons Have Momentum	38	10-12 1-3 4-6	
10	24/11/07 26/11/07 27/11/07	Schrodinger's Equation Energy of Trapped Electron ***Last day for withdrawal from all course(s) with grade of "W" thru***	39	7-9 1-4	

		Internet the University Registrar Office			
	28/11/07	An Electron in Finite Wall		5-6	
11	01/12/07	**Early Registration for the Second Semester 072**			
	01/12/07	Two and Three Dimensional Trap		7	
	03/12/07	The Hydrogen Atom		8-9	
	03/12/07	**Second Major Exam (Chapters (34, 38)**			
	05/12/07	Some Properties of Atoms	40	1-4	
12	08/12/07	Pauli Exclusion Principle		7-9	
	10/12/07	Lasers		11-12	
	12/12/07	Electronic Properties	41	1-4	
13-28 Eid Al-Adha Holidays					
13	29/12/07	Metals		5	
	31/12/07	Semiconductors		6-7	
	02/01/08	Some Nuclear Properties	42	1-3	
14	05/01/08	Radioactive Decay		4-5	
	07/01/08	B Decay		6-7	
	09/01/08	Nuclear Models		9	
15	12/01/08	Energy from the Nucleus	43	1-6	
	14/01/08	Review			
	16/01/08	Last day classes			
19- 29 January 2008 Final Examination					

Phys 201 LabSchedule

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Week	Date	Experiment Title
1	September 08-12	No Lab
2	September 15-19	Error Analysis
3	September 22-26	Current Balance
4	Sept. 29 –October 3	RC Circuits
04-19 Oct. Eid Al-Fitar Holidays		
5	October 20-24	RLC Circuits
6	October 27 – Nov. 01	Polarization of Light
7	November 03 - 07	Thin Lens and Spherical Mirrors
8	November 10 – 14	Refractive Index and Color
9	November 17 – 21	Michelson Interferometer
10	November 24 - 28	Diffraction of Light
11	December 01-05	Grating and Spectroscopy
12	December 08-12	Atomic Constants
13-28 Oct. Eid Al-Fitar Holidays		
13	December 29 – Jan. 02	Radiation Detection
14	January 05 - 09	Lab Final
15	January 12 - 16	No Lab

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