

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF PHYSICS

Physics 011 – Applied Physics I

Summer 2006 (Term 053)

Course Schedule and Grading Policy

Instructor: *Dr. Mohamed S. Kariapper*
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Office Hours: *U 05:30-06:30 pm*
T: 05:30-06:30 pm
W: 03:30 am -04:30 am

1) Course Description:

A basic survey covering the fundamental principles of Physics, experimental methodology, and problem solving techniques using examples from the areas of mechanics, heat, electricity and magnetism.

2) Textbook:

“Physics Principles with Applications”, D.C. Giancoli, Fifth Edition, Prentice Hall, Inc (1998)

3) Method:

The course material will be presented in lectures (6 hrs/week) and lab work (6 hrs/week). Attendance in both lectures and lab is compulsory.

4) Grading Policy:

A) Course Grade: The course grade will be evaluated as follows:

Quizzes and Attendance	15%
Laboratory	20%
First Major Exam	15%
Second Major Exam	20%
Final Exam	30%
Total	100%

B) Laboratory Work

The course for lab work will be based on any or a combination of the lab reports, lab quizzes, lab exams, etc. as chosen by the lab instructor. Lab sessions will start on the second week of the classes.

C) Major and Final Examinations

The major exam and the final exam will be of multiple choice + problem solving types. The exams are scheduled as follows:

First Major Exam	Wednesday 12 July 2006
Second Major Exam	Wednesday 26 July 2006
Final Exam	Wednesday 16 August 2006

5) Policy on Make-Up Exams:

- a) If you miss a major or final exam, you should see the course instructor with your official excuse within three days after the exam
- b) Only official excuses are accepted. Personal excuses are not allowed.
- c) If you miss the exam without a valid excuse, you get a ZERO score for that exam
- d) The make-up (for a valid official excuse) will be given once, and no make-up for the final exam

6) Attendance:

Attendance will be enforced and evaluated according to current university regulations. A DN grade will be given to any student exceeding 10 absences without official excuse and/or three absences in laboratory experiments. Any student in possession of an excuse for officially authorized absence must present this excuse to his instructor no later than one week following his resumption of class attendance. Only those students who have less than 6 absences in the whole semester shall be promoted to upper grade if they reach the borderline between two grades (for example F to D or B to B+, etc.)

PHYS 011 - Lecture Schedule - Summer (Term 053)						
	Day	Date	Topic	Chap.	Section	Homework
1	Sat	24. June	Introduction, measurements	01	1-4	3,4,12,17
	Sun	25. June	Units, order of magnitude.	01	5-7	
	Mon	26. June	Reference frame, displacement, Velocity, Accn.	02	1-4	2,11,14,20
	Tue	27. June	Motion in a constant Acceleration, free fall	02	5-7	23,34,44
	Wed	28. June	Scalars, Addition and Subtraction of Vectors	03	1-4	2,4,14,20,35
2	Sat	01. July	Projectile motion	03	5,6	
	Sun	02. July	Force, Newton 1 st , 2 nd and 3 rd law of motion	04	1-5	1,7,27,39,45,52
	Mon	03. July	Weight, Normal force and friction	04	6-8	
	Tue	04. July	Uniform circular motion and Centripetal Accn	05	1,2	4,7,8,12,25,26
Tuesday 4 July 2006 - Last day for dropping courses without permanent record						
	Wed	05. July	Universal gravitation, Apparent Weightlessness	05	6,7	
3	Sat	08. July	Work and Kinetic Energy, Potential energy	06	1,3-5	4,7,20,32,36,40,58
	Sun	09. July	Mechanical energy and its conservations, Power	06	6,7,10	
	Mon	10. July	Momentum and its Conservation	07	1,2	2,8,11,23,26
	Tue	11. July	Collisions and Conservation of Energy	07	3,4	
	Wed	12. July	First Major Exam	1-6	--	
Wednesday 12 July 2006 – First Major Exam (Chapter 01-06)						
4	Sat	15. July	Fluid Properties, Pascal's Principle	10	1-4	2,5,12,16,22,29
	Sun	16. July	Measurements of Pressure, Buoyancy, Archimedes' Principle	10	5,6	
	Mon	17. July	Wave Motion, Types of Waves, Energy Transported by Waves	11	7-9	38,39,45,51,55,60
	Tue	18. July	Interference of waves, Standing Waves, Resonance	11	11,12	
Tuesday 18 July 2006 - Last day for dropping courses with grade of "W" through internet						
	Wed	19. July	Characteristic and Intensity of Sound, Sources of Sound	12	1,2,5	1,5,9,15,26,28,35,52
5	Sat	22. July	Interference of Sound Waves, Doppler Effect.	12	7,8	
	Sun	23. July	Temperature and Thermometers, Thermal Expansion	13	2,4	4,9,18,25,28,35
	Mon	24. July	Thermal Stress, The Absolute temperature, Ideal Gas Law	13	6-8	
	Tue	25. July	Heat, Specific Heat, Latent Heat	14	2-6	9,14,22,28
	Wed	26. July	Second Major Exam	7-12	--	
Wednesday 26 July 2006 – Second Major Exam (Chapter 7, 10, 11,12)						
Saturday 29 July 2006 - Last day for withdrawal from all courses with grade of "W" through internet						
6	Sat	29. July	Electric Charge and Force, Electrostatic	16	1-3	1,15,22,38,43
	Sun	30. July	Induced Charge, Coulomb's Law, Problem Solving	16	4-6	4,11,12,21,30,37
	Mon	31. July	Electric Field, Field lines	16	7,8	
Tuesday 1 August 2006 – Second Major Exam (Chapter 7-12)						
	Tue	01. August	Electric Potential, Relation between Electric potential and Field	17	1-3	2,10,19,35,37,40
	Wed	02. August	Capacitance, Dielectrics, Energy Stored in capacitor	17	7-9	
7	Sat	05. August	Battery, Electric Current, Ohm's Law	18	1-3	4,8,13,19,26,31
	Sun	06. August	Receptivity, Electric Power	18	4-6	
	Mon	07. August	Resistors in Series and Parallel, Kirchhoff's Rules	19	1,3	4,7,13,20,24,34,42
	Tue	08. August	EMF and Capacitors in Series and Parallel	19	5,6	
	Wed	09. August	Sources of Magnetic Field, Magnetic Force	20	1-4	3,7,10,13,22,28
Saturday 12 August 2006-Last day for withdrawal from all courses with grade of WP/WF through internet						
8	Sat	12. August	Magnetic Field Due to Straight Wire, Force Between two Wires	20	5,6	
	Sun	13. August	Induced EMF, Faraday's Law	21	1,2	1,3,7,8,11,14
	Mon	14. August	EMF Induced in a Moving Conductor, Electric Generators (Last day of classes)	21	3,4	
			Final Exams 16 August 2006			