

Phys101 General Physics I

Fall 2014

People

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Time-table

	Monday	Tuesday	Wednesday	Thursday	Friday
08:30-09:20	PHYS 101 FC-Z23D			LAB	
09:30-10:20	PHYS 101 FC-Z23D			LAB	
10:30-11:20			Recitation FC-Z23D	LAB	
11:30-12:20			PHYS 101 FC-Z23D	LAB	
13:40-14:30					
14:40-15:30					
15:40-16:30					
16:40-17:30					



Textbook: Bauer and Westfall, *University Physics with Modern Physics*, (McGraw-Hill). Will be available from the bookstore by this week.

Other recommended textbooks:

- Jewett and Serway, *Physics for Scientists and Engineers*,
- Ohanian, *Physics for Engineers and Scientists*,

Solving example problems is an essential part of the course. It is the method by which you get feedback on your comprehension of the material. It is very important that you spend time working on understanding the problems. In case of difficulty, please contact your instructor within the office hours. Working together in a group for the HW is often a useful way of tackling difficult problems. However, please mind the rules of academic honesty.

HW & Quiz: There will be a quiz about every week, either in class or take-home quizzes; this is meant to give you an early warning on your deficiencies before you realize it in a midterm/final when it is too late.

Recitations

The 4th hour of each week starting from the 2nd week is reserved for the recitation hour. Selected past exam questions will be solved. Please, attend the recitation of your section; recitation attendance is particularly critical as it can give an upward boost if your overall grade is just below the allocated letter bin.

Recitation Attendance: +1% bonus

Labs: Experimental Work

The laboratory is also an integral part of the course. Physics is an experimental science and the lab work will give you insight into the phenomena that are discussed in class. It will not be possible to pass the course if your overall lab grade is below 60/100.

The laboratory this semester will proceed according to new rules. These rules will be published in the first week of the semester

Visit the [lab webpage](#) to learn the new rules and schedule.

If you are repeating this course, your lab grade can be transferred from the previous year if it was above 60 (For this, you have to apply to Lab Coordinator).

Lab. Coordinator: physlab@fen.bilkent.edu.tr

<http://www.fen.bilkent.edu.tr/~physlab/>

Examinations

- The exams will be common and will be administered to all students at the same time.
- Tentatively, there will be four/five questions per exam (duration will be about 100 minutes).
- No calculators will be allowed (the questions will be prepared accordingly) also no cellular phones.
- A formula sheet will be provided.
- Needless to say, the students should **mind the rules of academic honesty during these exams.**

1st Midterm: October 23rd, 2014 Thursday 18:00 (will cover Ch. 1-5)

2nd Midterm: November 29th, 2014 Saturday 10:00 (will cover Ch. 6-10)

Final: To Be announced Ch. 1-14 (Ch. 11 on Equilibrium and Elasticity, Ch. 12 Fluid Mechanics are excluded)

FZ Grade

You will not be admitted into the final examination and will receive an automatic **FZ grade** if:

- your overall lab average grade is below 60/100
- the average of Midterm I and Midterm II is below 30/100

Grading

Out of 100 points:

Midterm 1: 20%	Homework and
Midterm II: 20%	Quiz : 10%
Final : 30%	Lab : 20%

Recitation Attendance: +1% bonus

Letter Bins: (Out of 100 points)

A [100,85], A- (85,80],
B+ (80,75], B (75,70], B- (70,65],
C+ (65,60], C (60,50], C- (50,45],
D+ (45,40], D (40,35],
F (35,0]

Weekly Calendar

Week	Subject	Note
#1 Sept. 15	Units, Physical Quantities, and Vectors (Ch.1)	
#2 Sept. 25	Motion along a Straight Line (Ch.2)	Recitations and labs start this week
#3 Sept. 29	Motion in 2- or 3-dimensions (Ch.3)	
#4 Oct. 8	Newton's Laws of Motion (Ch.4)	
#5 Oct. 13	Applying Newton's Laws (Ch.5)	
#6 Oct. 20	Review	Midterm-1 (Thur. 23 Oct.) [Ch.1-5]
#7 Nov. 3	Work and Kinetic Energy (Ch.6)	Monday No Classes
#8 Nov. 10	Potential Energy and Energy Conservation (Ch.7)	
#9 Nov. 17	Momentum, Impulse, and Collisions (Ch.8)	
#10 Nov. 24	Rotation of Rigid Bodies (Ch.9)	Midterm-2 (Sat. 29 Nov.) [Ch. 6-10]
#11 Dec. 1	Dynamics of Rotational Motion (Ch.10)	
#12 Dec. 8	Dynamics of Rotational Motion (Ch.10)	
#13 Dec. 15	Periodic Motion (Ch.14)	
#14 Dec. 22	Gravitation (Ch.13)	
#15 Dec. 29	Review	

Web page

There is a general 101 web page for the common syllabus HW assignments, and current and some past exams & solutions:

<http://www.fen.bilkent.edu.tr/~phys101/>