

## Course outline for PHYS-109 (Term 452: Second Semester)

**Textbook:** College Physics, A strategic Approach.

Randall D. Knight, Brian Jones and Stuart Field, third edition, 2014, Pearson,  
ISBN-13: 9781292057156

From Sunday	Weeks	Chapters	Sections
<b>Part I: Force and Motion</b>			
14/01	01	Chapter 2 Motion in One Dimension [86 slides]	1-5, 7
21/01	02	Chapter 3 Vectors and Motion in Two Dimensions [64 slides]	1, 3, 4
28/01	03	Chapter 4 Force and Motion [79 slides]	1- 7
04/02-11/02	04-05	Chapter 5 Applying Newton's Laws [134 slides]	1-5, 7, 8
18/02	06	Chapter 8 Equilibrium <del>and Elasticity</del> [45 slides]	1, 2
<b>Part II Conservation Laws</b>			
03/03	06	Chapter 9 Impulse and Momentum [55 slides]	1- 5
10/03-17/03	07-08	Chapter 10 Energy and Work [94 slides]	1-4, 6-8
<b>Part III Properties of Matter</b>			
24/03	09	Chapter 13 Fluids [65 slides]	1- 3, 5, 6
<b>Part V Optics</b>			
15/04	10	Chapter 18 Ray Optics [43 slides]	2, 3, 5, 7
<b>Part VI Electricity</b>			
21/04	11	Chapter 20 Electric Fields and Forces [41 slides]	1-5, 7
28/04	12	Chapter 21 Electric Potential [18 slides]	1, 7
		Chapter 22 Current and Resistance [13 slides]	1, 2, 5
<b>Part VII: Atomic, Electromagnetic, and Optical Phenomena</b>			
05/05	13	Chapter 30 Nuclear Physics [40 slides]	1, 4, 5

### Credit hours distribution:

4 (3+0+2)

3 hours of lectures a week (15 weeks in the term).

2 hours a week for laboratory experiments.

### Marks distribution:

- 1) Midterm Exams -----M----- = 2x15=30 marks
  - 2) Practical Work (Lab.)-----L----- = 30 marks
  - 3) Final Exam-----F----- = 40 marks (covering all the chapters)
- Total----- = 100 marks

## **Absence Policy:**

### **I. Attendance percentage:**

- Student should attend the course lectures during all the weeks of the semester.
- Students with absence hours more than 25% of the total course hours will be banned from the Final Exam.

### **II. Absence from Examinations:**

- If you are unable to attend an examination (first or second midterm) owing to illness or other unavoidable circumstances, you should provide an acceptable evidence of 'good cause' for such absence to the competent commission. If the absence is regarded as authorized, student will grant a Makeup Exam only once.
- No other Makeup Exam will be done in the same semester. If you miss the Makeup Exam, you will have a mark of zero.

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