

General Physics 2 PHY 125

1 st year Semester Two				
Course Title	Lecture	Tutorial	Practical	Credit Hours
General Physics 2	3	-	2	4

Course Description

The course gives an overview of general physics with more stress of the various form of energy . A series of extensive practical laboratory experiment are conducted to reinforce the theoretical aspect of the course.

Prerequisite

PHY1 115

Text Book

- (1) Nelson and Parker, Advanced Level Physics.
- (2) Yavorsky and Pinsky , Fundamental of Physics , Volume (I) and (II).
- (3) Hay and Hughes (First Year Physics for Radiographers).
- (4) Young & Freedman, University Physics, Addison-Wesley, 10th ed., Chapter 39 to 44 (Atomic Physics)
- (5) Halliday & Resnick, Fundamentals of Physics, Wiley, 5th ed., Chapter 39 to 45 (Atomic Physics)
- (6) F. Ajzenberg-Selove (1990) Energy levels of light nuclei., Nucl. Phys., A5061–158.
- (7) P. Amaudruz et al. (1995) A re-evaluation of the nuclear structure function ratios for D, He, 6Li, C and Ca, Nucl. Phys., B441, 3–11.
- (8) W. N. Cottingham and D. A. Greenwood (2001) An Introduction to Nuclear Physics, 2nd edn. Cambridge University Press, Cambridge, UK

Course Objective

The course is designed to overview fundamental principles of physics required for a through understanding of radiation physics and radiation protection

Class/Lab. Schedule

3-hours lectures , 2 hours practical.

Computer Application

None.

Laboratory Projects

Experiments Done In the Physics Lab

Contribution of Course to Meeting the Professional Component

Basic science 4 credit hours .

Relationship of Course to Program Outcomes

This course will enhance the students :

- Ability to apply knowledge in Math to radiation physics applied in medical and health physics .
- This course will help the students in diagnostic and radio therapy field to apply knowledge about basic mathematic and physical theories , units of measurements to the application in the radiology field.
- Ability to understand and discuss the various type the radiation interaction methods to the radiation protection program, and application in the radiology field.

Prepared by

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