



# The University of Jordan Accreditation & Quality Assurance Center

# **COURSE Syllabus**

Radiation Detection and Measurements 0302765

## **Physics Department**

### **Radiation Detection and Measurements**

Course Title: Radiation Physics

Course Number: 0302765

Credit Hours: 3

Instructor: Prof. Jamal Sharaf

Office: M202

Office Hours: Sunday &Tuesday 1- 2 pm

Textbook: Radiation Detection and Measurements, 2<sup>nd</sup> edition, 1989,

by **Knoll.** 

References: Atoms, Radiation and Radiation Protection, 3<sup>rd</sup> edition,

2007, by James E. Turner.

Introduction to Health Physics, 3<sup>rd</sup> edition, 1996, by

Herman Cember.

#### **Course Objective**

- 1) Understanding the fundamentals of radiation physics including the production of ionizing radiation and its interaction with matter.
- 2) Discussing topics in radiation dosimetry, instrumentation, applications and radiation protection.
- 3) Introducing examples on chemical and biological effects of radiation.
- 4) Developing self-learning and problem solving.

#### **Assessment**

M. Term ExamHome WorkFinal Exam40%