



First Common Years For Scientific College السنة الأولى المشتركة للكليات العلمية



# Course Specifications of PHYS3111

Course No.	Course Title	No. of Units			Des esquisites
		Th.	Pr.	Credit	Pre-requisites
PHYS 3111	General Physics I	3	2	4	-

#### **Course Objectives:**

The course provides a general introduction to the fundamental concepts of mechanics.

### **Course Description:**

Physical quantities and dimensional analysis, vectors, motion in one dimension, motion in a plane, Newton's laws of motion, friction, work and energy, impulse, momentum, rotational motion, torque, and angular momentum.

#### **Main Textbook:**

• Physics for Scientists and Engineers, Raymond A. Serway and John W. Jewett, Publisher: Cengage Learning, 10th edition (2018).

## **Subsidiary Books:**

- Fundamental of Physics by Halliday, Resnick & Walker John Wiley & Sons, 10<sup>th</sup> Edition, 2014.
- University Physics by Sears, Zemansky & Young, Addison-Wesley Professional, 10<sup>th</sup> Edition (2015).
- Physics by Halliday, Resnick & Krane, John Wiley & Sons, Vol. 2, 5<sup>th</sup> Edition (2008).

