

**FACULTY OF SCIENCES - DEPARTMENT OF PHYSICS  
COURSE SYLLABUS**

**PHYS 110: General Physics (1)**

<i>COURSE TITLE</i>	<i>ENGLISH CODE/NO</i>	<i>ARABIC CODE/NO.</i>	<i>CREDITS</i>			
			<i>Th.</i>	<i>Pr.</i>	<i>Tr.</i>	<i>Total</i>
<b>General Physics (1)</b>	PHYS 110	110 فيز	3			3
<b><i>Pre-requisites:</i></b>	None					
<b><i>Course Role in Curriculum</i></b> <i>(Required/Elective):</i>	Required Course					
<b><i>Catalogue Description:</i></b> Physical quantities and dimensional analysis, vectors, motion in one dimension, motion in a plane, Newton's laws, friction, work and energy, impulse, momentum, collisions, and rotational motion.						

**Textbooks:**

1. C. H. Edwards & D. E. Penney, Elementary Differential Equations with Boundary Value Problems, Sixth Edition. Pearson Prentice Hill, 2008.

**Supplemental Materials:**

1. Physics for scientist and engineers with modern physics by Serway (2005), Saunders College Publisher.
2. University Physics by Sears, Zemansky, and Young (2007).
3. Physics by Halliday, Resnick & Krane (2008) John Wiley & Sons.

**Course Learning Outcomes:**

*By the completion of the course the student should be able to:*

1. Describe understanding of the fundamental concepts of mechanics.

**Topics to be Covered:**

1. Physical quantities and dimensional analysis,
2. Vectors,
3. Motion in one dimension,
4. Motion in a plane,
5. Newton's laws,
6. Friction,
7. Work and energy,
8. Impulse,
9. Momentum,
10. Collisions,
11. Rotational motion.