

## Faculty of Engineering & Technology

### Physics 1

#### Information :

**Course Code :** PHY 131

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Faculty of Engineering & Technology

#### Instructor Information :

Title	Name	Office hours
Professor	Ossama Mohamed Salaheldin Hassan Nasser	
Associate Professor	Elsayed Salama Ahmed Elsayed	
Lecturer	Mohamed Ehab Ahmed Fakhr Eldin Bakr	2
Assistant Lecturer	Ahmed Saeed Abdelsamea Sayed	
Assistant Lecturer	Nermin Mohamed Fawzy Mahmoud Salem	
Assistant Lecturer	Mohamed Rizk Mohamed Elsayed Hamouda	
TEACHING ASSISTANT	Mohamed Ahmed Nasr Kamal Abdo Mostafa	
TEACHING ASSISTANT	Mohamed Ali Zeinelabedein Mohamed Elhosseiny Elmossallamy	
TEACHING ASSISTANT	Ahmed Moreab Hussien Mohamed	
TEACHING ASSISTANT	Ahmed Essam Fahim Zahran	
TEACHING ASSISTANT	Mohamed Kamal Ahmed Sayed	
TEACHING ASSISTANT	Mohamed Moussa Sayed Emam Ahmed	
TEACHING ASSISTANT	Samar Abdelmohaimen Mohamed Soliman	
TEACHING ASSISTANT	Mohamed Essam Abd El Aziz Abd El Aal	4
TEACHING ASSISTANT	Lamia Hamdy Ahmed Kamal Shehab Eldin	4
TEACHING ASSISTANT	Mohamed Yassein Ahmed Yassein Elbakry	2
TEACHING ASSISTANT	Dina Hassan Hanafy Hassan	4
TEACHING ASSISTANT	Mohamed Zohdy Abdelhameed Zahran	
TEACHING ASSISTANT	Sherouk Sobhy Abdel salam Fouda	4
TEACHING ASSISTANT	Mai Ahmed Ali Mohamed Kandil	

#### Description :



Properties of Matter: Units in the SI system of units and conversion of units, Dimensions, Dimension analysis, Elastic Properties of Solids, Stress, Strain, Young's Modulus Shear modulus, Properties of Fluids, Pressure inside a fluid, Bulk Modulus, Buoyant Force, Hydrodynamics, Continuity equation for a laminar Flow, Bernoulli's equation, Pilot tube, Venturi meter, Torricelli's Law, Viscosity, Poiseuille's law, viscous drag and Stoke's law.  
Heat and thermodynamics: Zeroth law of thermodynamics, Quantity of heat, First law of thermodynamics, Heat transfer mechanisms, Entropy and the second law of thermodynamics, Some one way processes, Reversible and irreversible processes, Carnot cycle and Carnot engine, The absolute temperature scale, Principles of heat engines and refrigeration.

