

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
Lecturer	MOHAMED EHAB AHMED FAKHERELDIN BAKR	18
Lecturer	AHMED MOHAMED ALI ASHOUR AHMED	2
Assistant Lecturer	Reham Milad Kamel Samaan	
Assistant Lecturer	Alaa Mohamed Yossry Abdo	
Assistant Lecturer	Nada El Said Abdallah Hassan Salem	30
Teaching Assistant	Riham Hamza Mostafa Saada	
Teaching Assistant	Osama Ahmed Ibrahim Mohamed Montaser	
Teaching Assistant	Mohamed Fathy Salem Mohamed	
Teaching Assistant	Mariam Mohamed Kamal Abdelaziz	
Teaching Assistant	Reham Ahmed Ali Soliman	

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.