

Faculty of Engineering & Technology

Properties of Matter and Thermodynamics

Information:

Course Code: EMP121 Level: Undergraduate Course Hours: 4.00- Hours

Department: Faculty of Engineering & Technology

| Instructor Information : | | |
|--------------------------|---|--------------|
| Title | Name | Office hours |
| Professor | Waleed Abdelmonem Zein Elsheshtawy | 1 |
| Associate Professor | Ahmed Shawky Mohammed Ghareeb | 3 |
| Assistant Lecturer | REHAM MILAD KAMEL SAMAAN | |
| Assistant Lecturer | Nada El Said Abdallah Hassan Salem | |
| Teaching Assistant | Mohamed Mahmoud Yassin Ahmed Ismail | |
| Teaching Assistant | Sanaa Mohamed Mohamed Azab Abdo | |
| Teaching Assistant | Ammar Emad Hamdy Afifi | |
| Teaching Assistant | Asmaa Abdelfattah Alsayed Abdelfattah | |
| Teaching Assistant | Abdallah Sobhy Mahmoud Hussein | |
| Teaching Assistant | Asmaa Abdelmotlb Youssef Aly | |
| Teaching Assistant | Youssef Hany Abdelwahed Abdelghany Nour | |
| Teaching Assistant | Jomana Tamer Mohamed Abd Elghany | |
| Teaching Assistant | Mohammed Mamdouh Mohammed Ahmed Abo Raia | |
| Teaching Assistant | Farah Hossam Eldin Mahmoud Abdelhamed Ibrahim | |

Description:

Properties of Matter: Units and dimensions, Energy of a system, Elastic Properties of materials, Hydrostatics, Hydrodynamics and viscosity, applications of hydrodynamics. Waves: types, properties, and applications. Heat and thermodynamics: Temperature, thermal expansion of solids and liquids, Heat and internal energy, specific heat and calorimetry, latent heat, work and heat in thermodynamic processes, first law of thermodynamics including some applications, energy transfer mechanisms.

