

General Physics (2-0) 2

Mechanics: Motion, velocity and acceleration, mass and force; balance; work and energy conservation; simple machines; Momentum; earth and the space systems; movements of earth; planets and the universe; gravity. Pressure and liquids. Heat and Temperature: sources of heat, diffusion, isolation, effects, expansion; change of state and its influence on the environment. Waves and their diffusion: light sources, their passage through substances, diffusion, reflection, mirrors, refraction, lenses, eye and vision, eye defects, optical instruments. Sound: formation of sound, diffusion, characteristics, isolation, recording. Electricity: electrical forces, electrical field, electric potential; electric current, resistance and variable resistance, ohm's law, power plants, transfer and use of electric energy.

Course Material:

Fizik İlkeleri, Bueche, F.J. and Jerde, D. A. (Çev. Editörü: Kemal Çolakoğlu), Palme Yayıncılık, Ankara, 2003.

Supplementary Materials:

□ Fiziğin Temelleri II, Halliday, D. and Resnick, R. (Çev. C. Yalçın). Ankara: Arkadaş Yayınevi, Ankara, 1998.

□ Fen ve Mühendisler için Fizik, Serway R. A. , Beichner J., Jewett J. W. (Çev. Editörü: Kemal Çolakoğlu), Palme Yayınevi, Ankara, 2000.