University of Pretoria Yearbook 2020

Physics 143 (PHY 143)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	8.00
Programmes	BSc Extended programme - Mathematical Sciences
	BSc Extended programme - Physical Sciences
Service modules	Faculty of Engineering, Built Environment and Information Technology
	Faculty of Education
Prerequisites	PHY 133
Contact time	2 discussion classes per week, 2 lectures per week, 2 practicals per week, Foundation Course
Language of tuition	Module is presented in English
Department	Physics
Period of presentation	Semester 2

Module content

Vectors. Kinematics of a point: relative motion, projectile, circular motion. Dynamics: Newton’s laws, friction. Work: point masses, ideal gas law, springs, power. Energy: kinetic energy, potential energy, conservative forces, spring, conservation of mechanical energy. Hydrostatics and dynamics: density, pressure, Archimedes' law, continuity, Bernouli.