University of Pretoria Yearbook 2020

Physics 153 (PHY 153)

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
Prerequisites	PHY 143
Contact time	2 discussion classes per week, 2 practicals per week, 3 lectures per week, Foundation Course
Language of tuition	Module is presented in English
Department	Physics
Period of presentation	Semester 1

Module content

System of particles: centre of mass, Newton's laws. Rotation: torque, conservation of momentum, impulse and collision, conservation of angular momentum, equilibrium, centre of gravity. Oscillations. Waves: sound, intensity, superposition, interference, standing waves, resonance, beats, Doppler effect. Physical optics: Young-interference, coherence, thin layers, diffraction, gratings, polarisation.