

PHYS 2005 CLASSICAL PHYSICS AND ADVANCED TECHNOLOGIES

Legacy Code 301393

Coordinator Timothy Stait-Gardner (<https://directory.westernsydney.edu.au/search/name/Timothy Stait-Gardner/>)

Student Contribution Band

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Assumed Knowledge

Introductory mechanics: Newton's laws, work, conservation of energy and momentum. Introductory Electrostatics: Electric forces and Coulomb's law; DC electricity, voltage, current, resistance, Ohm's law, electric power, circuit laws. Introduction to Magnetic fields: production by magnets & currents, magnetic forces on currents & charges; Induced EMF, Faraday's law and electrical generators; AC current & voltage, peak & rms values, capacitance and inductance.