

University of Pretoria Yearbook 2022

Analytical physics 714 (PHY 714)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	15.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	4 lectures per week
Language of tuition	Module is presented in English
Department	Physics
Period of presentation	Semester 1

Module content

Review of surface analytical techniques, surface structure determinations, surface topography techniques, theory of contrast in electron microscopy; electron microscopic surface and interface techniques; scanning tunnelling microscopy; electrical and electro-optical characterisation of semiconductors; determination of defects and impurities in semiconductors; propagation of laser rays; photoluminescence.

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