



University of Pretoria Yearbook 2019

Geophysics and basin analysis 703 (GLY 703)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	16.00
Programmes	BScHons Geology
Prerequisites	No prerequisites.
Contact time	5 lectures per week, 5 practical sessions per week
Language of tuition	Module is presented in English
Department	Geology
Period of presentation	Year

Module content

Physical properties of rocks and minerals: porosity and permeability; density; magnetic properties; natural radioactivity; elastic properties; seismic wave attenuation; thermal properties; electrical properties. Basic principles and applications of various geophysical techniques: gravity, magnetic, resistivity, electromagnetic, seismic and radiometric techniques. Principles of basin analysis; controls on sea level change; subsurface analytical methods; basin mapping methods; subsidence analysis (decompaction and sediment loading, subsidence curves); sequence stratigraphy; sedimentation systems in different basin types; Precambrian basins.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.