University of Pretoria Yearbook 2022

Petrology and geochemistry 701 (GLY 701)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	20.00
NQF Level	08
Programmes	BScHons *Geology*
Prerequisites	No prerequisites.
Contact time	2 lectures per week, 2 practicals per week
Language of tuition	Module is presented in English
Department	Geology
Period of presentation	Year

Module content

Interpretation and application of advanced petrogenetic tools: the Rb/Sr and Sm/Nd isotopic systems, quantitative interpretation of binary and ternary phase diagrams, Harker type diagrams, assimilation-fractional crystallisation – partial melting. Geothermometers and geobarometers, PT-t loops. Abundance of elements in the crust, crust-forming models. Hydrous geochemistry. Recognition of geochemical anomalies. Analytical methods and the treatment of geochemical data. A one-week field trip to the Bushveld Complex.