

COURSE DETAIL

PETROLOGY AND GEOCHEMISTRY OF IGNEOUS SYSTEMS

Country

New Zealand

Host Institution

University of Auckland

Program(s)

University of Auckland

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Earth & Space Sciences

UCEAP Course Number

104

UCEAP Course Suffix**UCEAP Official Title**

PETROLOGY AND GEOCHEMISTRY OF IGNEOUS SYSTEMS

UCEAP Transcript Title

PETROLOGY & GEOCHEM

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course covers the principles and applications of geochemistry and petrology to igneous systems. Basic principles of geochemistry and geochronology precede discussions of planetary accretion, the mantle, magma genesis and evolution, magmatic ore systems, and volcanic systems/volcanology. This course uses a process-based approach, examining magmatic systems in the context of the global (or planetary) environment in which they form, with particular emphasis given to subduction zone, mid-ocean ridge and ocean-island magmatism. This course then focuses on the evolution and modification of primary magmas as they transit the crust, including magmatic ore deposits, and the effect of magmas on volcanic processes and products.

Language(s) of Instruction

English

Host Institution Course Number

EARTHSCI 304

Host Institution Course Title

PETROLOGY AND GEOCHEMISTRY OF IGNEOUS SYSTEMS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Earth Sciences

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