

## **Introduction to Petrology**

Earth Sciences 205

Section: D100

Term: 2013 Spring

Instructor: Kevin Cameron

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Discussion Topics: General:

Introduction to Petrology provides an overview of the study of rocks. The petrographic microscope is used extensively in the introduction of igneous, sedimentary and metamorphic petrology. Emphasis is placed on mineral and rock classification using hand specimens and thin sections, processes and environments of rock formation, and geological significance of rock assemblages. Lectures cover the principles and utility of petrology, while laboratory exercises focus on physical and optical methods of rock identification. Students must provide their own hand lens and mineral identification kits.

Course Topics:

Optical microscopy of grain mounts and thin sections.

Recognition and classification of rocks.

Physical and chemical environments of rock formation.

Geological relationships among rock assemblages.

Grading: Lecture:

Mid-term 20%

Final 40%

Laboratory:

Assignments 10%

Mid-term exam 10%

Final exam 20%

Required Texts: Introduction to Mineralogy (2012). William D. Nesse. Oxford University Press, New York, Oxford, Toronto; ISBN 978-0-19-982738-1. (Note: The 2000 edition of this textbook may be used as an alternate ISBN: 978-0-19-510691-6)

Recommended Texts: Geological Dictionary.

## **Introduction to Petrology**

Materials/Supplies: Handlens.

Prerequisite/Corequisite: EASC 202, CHEM 122, PHYS 121 (or PHYS 102 with a grade of B or higher), and PHYS 131 (or PHYS 130 with a grade of B or higher). PHYS 126 may be substituted for PHYS 121

Notes: None.

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