

GEOL 1121 Physical Geology

Catalogue Course Description: The course covers Earth materials and processes.

3 hours lecture, 2 hours laboratory, 4 credits.

BROAD LEARNING OUTCOMES

A student who successfully completes this course will be able:

KNOWLEDGE

To demonstrate knowledge and understanding of

1. The general physical properties of planet earth, its internal structure.
2. The chemical composition, properties, and classification of minerals.
3. The formation, properties, and classification of igneous, sedimentary, and metamorphic rocks as well as the interrelationship among three types of rocks.
4. The external and internal processes which influence the evolution of landscapes, the distribution of geological resources, and their relationships to plate tectonics.

SKILLS

To make sight identification of common rocks and rock-forming minerals

To demonstrate basic map skills useful to geologists.

APPLICATION

To discuss the effects of human activity on the terrestrial environment.

GEOL 1122 Historical Geology

Catalogue Course Description: This course covers geological time, sedimentary environments, fossils, and Earth history.

3 hours lecture, 2 hours laboratory, 4 credits.

BROAD LEARNING OUTCOMES

A student who successfully completes this course will be able:

KNOWLEDGE

To demonstrate knowledge and understanding of

1. The currently accepted theories of the formation and evolution of life.
2. The development of modern historical geology, its scope, methodology and challenges.
3. The Geologic Time Scale as well as the times of selected geotectonic episodes and paleontological events.
4. The relationship of selected orogenic episodes to plate tectonics and continental drift as well as to the accumulation of geological resources, and the evolution and distribution of life forms.

SKILLS

To identify common fossils and state their habitats.

To demonstrate basic map skills useful to geologists.