GEOL: GEOLOGY

GEOL 1200 Introduction to Geology (4 Credits)
Geology is the core discipline of the Earth sciences and encompasses many different phenomena. This study focuses on the physical aspects of the Earth system, its major features, and the processes responsible for their formation. Themes central to the Earth system will be introduced: plate tectonics, rock cycle, volcanism, earthquakes, mass wasting, groundwater, streams, and climate. Students will become familiar with the material and then challenged to defend their views on the interplay of human activities and these natural processes. They will use data to understand geological systems and learn the roles of both science and policy. This course uses a mandatory hands-on lab kit to provide students an authentic laboratory experience. The kit (in addition to the textbook) will add an additional cost to the Course Materials. See the Learning Contract/Syllabus for specific details.
Attributes: Natural Science Gen Ed, *Natural Science Gen Ed, Liberal

GEOL 1998 Individualized Studies in Geology (GEOL) (1-8 Credits)
Students have the opportunity to develop individualized studies with their mentor in Geology (GEOL). Registration for this class must be approved by the student's mentor.

GEOL 2200 Historical Geology with Lab (4 Credits)
Historical geology serves as an introduction to the development and history of Earth. On the grand scale, Earth is a constantly changing planet. Emphasis will be placed on: understanding the environments of the changing earth; evolutionary processes; the fossil record; application of fundamental principles of sequence stratigraphy to the reconstruction of ancient tectonic relationships; and, the procedures used in scientific analysis. Laboratory exercises provide support and reinforce the core concepts of the course. This course uses a mandatory hands-on lab kit to provide students an authentic laboratory experience. The kit (in addition to the textbook) will add an additional cost to the Course Materials. See the Learning Contract/Syllabus for specific details. Highly Recommended (not required): Introduction to Geology (GEOL 1200) or Earth Science (ENSC 1000)
Attributes: Natural Science Gen Ed, *Natural Science Gen Ed, Liberal

GEOL 2998 Individualized Studies in Geology (GEOL) (1-8 Credits)
Students have the opportunity to develop individualized studies with their mentor in Geology (GEOL). Registration for this class must be approved by the student's mentor.

GEOL 3200 Geomorphology (4 Credits)
Geomorphology is the study of landforms and the processes that create them. The course examines how factors such as climate and bedrock structure influence landform development. We concentrate on the physical character of the United States and the geologic configurations which determine landform distribution. Students will explore topics in geomorphology through readings, hands-on activities and data sets. Readings will cover the areas of climatic geomorphology, chemical and physical weathering, fluvial processes, wind processes, glacial landform and coastal processes. Prerequisites: Introduction to Geology (GEOL 1200) or Earth Science (ENSC 1000) or foundational knowledge in geology and/or earth sciences.
Attributes: Natural Science Gen Ed, Liberal

GEOL 3202 Hydrology (4 Credits)
In this study, students will follow the pathways water takes through the environment as it interacts with the Earth's atmosphere (influencing patterns of precipitation and moderating climates), flows across the Earth's surface (cutting stream channels and valleys), provides habitats for diverse populations of aquatic organisms, and supplies humans with an essential resource for life, agricultural activities, and industrial processes. Students will examine ways human activities have altered local, regional, and global water cycles, and as a result, have altered patterns of relative humidity and precipitation, changed flood frequencies, modified channel flow, and impacted water quality and access to potable water. Prerequisites: Earth Science, or Introduction to Geology; and, Algebra and Statistics, or equivalent. Foundational knowledge about Earth's system processes gained in a lower level course as well as proficiency in basic algebraic and statistical analysis are required.
Attributes: Liberal

GEOL 3996 Special Topics in GEOL: (1-8 Credits)
Attributes: Liberal

GEOL 3998 Individualized Studies in Geology (GEOL) (1-8 Credits)
Students have the opportunity to develop individualized studies with their mentor in Geology (GEOL). Registration for this class must be approved by the student's mentor.

GEOL 4998 Individualized Studies in Geology (GEOL) (1-8 Credits)
Students have the opportunity to develop individualized studies with their mentor in Geology (GEOL). Registration for this class must be approved by the student's mentor.