GEOLOGY (GE)

GE-114 Foundations of Earth Science (4 credits)
This course includes discussion, lab, and two mandatory field trips. The student focuses on an analysis of selected earth and space systems and concepts. She studies aspects of geology (materials and landforms of the earth's crust and dynamic processes that change and shape the crust), meteorology (weather and climate), and space and planetary science. She investigates forces forming and driving these systems and the interrelationships among these systems. She also evaluates effects of human activities on the earth's systems.
Prerequisite(s): QL 051/120/122 completed or concurrent registration.

GE-115 Introduction to Geologic Principles (2 credits)
This half-semester course runs concurrently with GE-117, Foundations of Earth Science, and covers the geology portion of that course. The student learns about and practices how science is done, making observations and using them to draw reasonable conclusions. She does this by using the frameworks of geology, studying the materials that comprise and the processes that shape the earth's surface and subsurface. The course includes discussion, laboratory activities, and two required Saturday field trips. Major themes include earth materials, the earth's structure and composition, energy and earth systems, water and the hydrologic cycle, land-forming processes, and plate tectonics. If both SC/GE-115 and SC/GE-116 are completed successfully, they will count as the equivalent of SC/GE-114 (gen ed lab science)
Prerequisite(s): QL 050/110 completed. Required field trips are April 16 & 30 from 8 am-2 pm. Note: does not fulfill General Education Science requirement, QL 051/120 completed or concurrent registration.

GE-116 Introduction to Earth Science Principles (2 credits)
This half-semester course runs concurrently with GE-117, Foundations of Earth Science, and covers the astronomy and meteorology portions of that course. The student learns about and practices how science is done, making observations and using them to draw reasonable conclusions. She does this by using the frameworks of astronomy and meteorology, studying the processes that shape the earth's weather and form the galaxy and solar system. The course includes discussion and laboratory activities. Major themes include weather and climate, energy and earth systems, and space and planetary science. If both GE-115 and GE-116 are completed successfully, they will count as the equivalent of GE-117 (gen ed lab science)
Prerequisite(s): QL 050/110 completed. QL 051/120 completed or concurrent registration.

GE-117 Foundations of Earth Science (4 credits)
This course includes discussion, lab, and two mandatory field trips. The student focuses on an analysis of selected earth and space systems and concepts. She studies aspects of geology (materials and landforms of the earth's crust and dynamic processes that change and shape the crust), meteorology (weather and climate), and space and planetary science. She investigates forces forming and driving these systems and the interrelationships among these systems. She also evaluates effects of human activities on the earth's systems.
Prerequisite(s): QL 051/120/122 completed or concurrent registration.

GE-220 Earth Science (4 credits)
This course includes discussion, lab, and field trips. The student focuses on an analysis of selected earth and space systems and concepts. She studies aspects of geology (materials and landforms of the earth's crust and dynamic processes that change and shape the crust), meteorology (weather and climate), and space and planetary science. She investigates forces forming and driving these systems and the interrelationships among these systems. She also evaluates effects of human activities on the earth's systems. An independent project or experiment with associated paper and presentation to the class is required.
Prerequisite(s): SC-119 completed., CM 156Q/QL-156 completed or concurrent registration.

GE-410 Environmental Geology (4 credits)
The student uses geologic information and frameworks along with economic, political, and cultural information and frameworks to address issues related to land and resource use and sustainability, and analyze resources and natural geologic hazards. She uses aerial photography, Google Earth, and geologic and topographic maps to interpret, analyze, and communicate information, and technology such as GIS (Geographic Information Systems) to evaluate geologic and environmental hazards. She identifies underlying assumptions and bias in data, evaluates risks, and proposes reasonable actions as an effective citizen. Guest experts and field trips to local environmental and geologic points of interest may be included.
Prerequisite(s): SC-118 or SC-120 completed. One Communication Level 4 ICM, Analysis Level 4 & Problem Solving Level 4 completed. Other information: Spring 2018: plus 1 hour online

GE-497 Independent Study (3-4 credits)
Under the approval and direction of a faculty member, independent study is available to students.