

GEOL – Geology

GEOL 1104. EARTH HISTORY (HISTORICAL GEOLOGY) LABORATORY (0-3-1) 40.0601.54 03

Laboratory exercises include the study of plant and animal fossils and practical applications of the principles of Earth History. Laboratory exercises also focus on basic studies of rocks, interpretation of depositional environments, tectonic settings, stratigraphic sequence analysis and fossil interpretation. (For majors and non-majors) Recommended concurrent enrollment in GEOL 1304. Assessment Levels: R3, E3, M2. *Effective Spring 2014*

GEOL 1301. EARTH SCIENCES I (3-0-3) 40.0601.51 03

The study of geological materials, processes, and hazards; the origin and history of Earth and life on Earth; the origin of the ocean, ocean features, and oceanographic processes; the atmosphere, weather phenomena, and climate change; and the place of the Earth within the universe, galaxy, and Solar System. This class emphasizes the interactions between humans and the Earth, the atmosphere, and the oceans, and the place of the Earth and its biosphere in the cosmos. Assessment Levels: R3, E3, M2. *Effective Spring 2014*

GEOL 1304. EARTH HISTORY (HISTORICAL GEOLOGY) (3-0-3) 40.0601.54 03

Principles of physical and historical geology. Study of the earth's composition, structure, and internal and external processes. Includes the geologic history of the earth and the evolution of life. Introduction to geologic time; relative and absolute age-dating methods; stratigraphic principles; origin of the universe, solar system, atmosphere, oceans, life; changes on the earth's surface and development of organisms through geologic time. Assessment Levels: R3, E3, M2. *Effective Fall 2014*

GEOL 1345. OCEANOGRAPHY (3-0-3) 40.0601.51 03

The study of the Earth's Oceans, including tectonic and geological processes that shape ocean basins and shorelines, chemical and physical properties of seawater, atmosphere-ocean interactions and global weather and climate patterns, distribution of life in the oceans, and interactions between humans and the oceans, including coastal development and use of resources. Assessment Levels: R3, E3, M2. *Effective Spring 2014*

GEOL 2107. GEOLOGICAL FIELD METHODS LAB (0-3-1) 40.0601.55 03

Students will learn methods of collection of geological field data and its presentation, proper use of geological field and lab equipment instruments, interpretation and construction of geologic and topographic maps, required overnight camping field trip. (Accommodations can be made for students with disabilities). Prerequisites: GEOL 1303 and GEOL 1103 and completion of/or concurrent registration in GEOL 1304 and GEOL 1104. Assessment Levels: R3, E3, M2. *Effective Spring 2014*

GEOL 2389. GEOLOGICAL RESEARCH COOPERATIVE (1-6-3) 40.0101.53 03

Provide practical training and experience in laboratory and/or field investigations while presenting a research approach to the principles of geology with emphasis on scientific methodologies and techniques. Students will work under the supervision of a faculty member after a research project of mutual interest is selected. Students will design and

perform investigations, present and defend the results of their research. Course requires consent of instructor. Prerequisites and co-requisites are determined by the project proposal. Completion of GEOL 1303/1103 and GEOL 1304/1104 is recommended. Assessment Levels: R3, E3, M3. *Effective Spring 2014*