GEOLOGY (GEOL)

GEOL 101 Physical Geology
(3 Credits, Fall/Spring/Summer)
This course investigates the composition of the Earth and the external and internal processes that shape it. Within the context of plate tectonics, it explores the origins of rocks and minerals and dynamic processes such as volcanic and magmatic activity, seismicity, and crustal deformation that are driven by the continual release of the Earth's internal heat. It also examines how air, wind, water, and ice move in response to gravity and energy from the Sun, sculpting Earth's surface by eroding, transporting, and depositing rock materials. COREQ: GEOL 101L. *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.). (3 lecture hours, 0 lab hours, 3 credits)*

GEOL 101L Physical Geology Lab
(1 Credit, Fall/Spring/Summer)
This is the required lab component to accompany GEOL 101. Lab exercises will include rock/mineral identification, applied geologic problems, and local field trips. COREQ: GEOL 101. *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.). (0 lecture hours, 2 lab hours, 1 credits)*

GEOL 102 Historical Geology
(3 Credits, Fall/Spring)
Introduction to the history of the Earth and the life it supports. Major events in Earth and life history are explored, including episodes of mountain building, glaciations, extinctions, climate change, and the evolution of species. The tools, techniques, and methods employed by geologists that help decipher the rock and fossil records are also examined. COREQ: GEOL 102L. *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.). (3 lecture hours, 0 lab hours, 3 credits)*

GEOL 102L Historical Geology Lab
(1 Credit, Fall/Spring)
This required lab accompanies GEOL 102. Lab exercises will include sedimentary rock identification and interpretation, stratigraphic and fossil analysis, geologic dating techniques, geologic maps, cross sections, regional geologic history, and local field trips. COREQ: GEOL 102. *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.). (0 lecture hours, 2 lab hours, 1 credits)*

GEOL 104 Natural Disasters and Environmental Geology
(3 Credits, Fall/Spring)
This course examines the interaction between modern society and Earth processes and resources. Natural Earth processes which adversely affect humans are considered including earthquakes, volcanic eruptions, flooding, meteorite impacts, mass wasting, coastal processes, and climate trends. The course also investigates the development of natural resources, pollution and waste disposal, climate change, land use and engineering, and energy resources. COREQ: GEOL 104L. *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.). (3 lecture hours, 0 lab hours, 3 credits)*

GEOL 104L Natural Disasters and Environmental Geology Lab
(1 Credit, Fall/Spring)
This required lab must accompany GEOL 104. Lab exercises will provide real-world problems and will introduce techniques and skills that can be used to address these issues. Field trips are included with the course. COREQ: GEOL 104. *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.). (0 lecture hours, 2 lab hours, 1 credits)*

GEOL 105 Earth's Natural Resources
(3 Credits, Fall/Spring)
This course will examine how we can sustainably continue to collect and use Earth's natural resources while facing an increasing global population and demand. The key to making informed decisions about these resources lies in an understanding of the geological and biological processes that form them as well as the engineering processes that collect and utilize them. Considerations will include environmental, economic, political, and earth system perspectives. For each resource covered we will explore the science of the resource as well as environmental and sustainability concerns. Topics will include energy resources (e.g. fossil fuels, alternative sources, and nuclear power), metals, life-supporting resources (e.g. building materials, industrial materials, and fertilizers), water and soil resources, and biological resources (e.g. wood, fish, and animals). *(This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing OR the CWI Global Perspectives requirement. [It will not fulfill both requirements.]). (3 lecture hours, 0 lab hours, 3 credits)*

GEOL 199 Geology Special Topics
(1-5 Credits, Varies)
This course is designed to permit the offering of special topics appropriate to a student's program. Regular or frequently recurring topics are not offered under this title. The course may be repeated as new topics are presented. *(1 lecture hours, 0 lab hours, 1 credits)*

GEOL 275 Field Geology
(4 Credits, Fall)
This field-based course is designed to serve as a capstone for students who are pursuing an AS degree in Geology. This course provides a unique early opportunity for students to gain roughly 90 hours of field experience, learn both traditional and modern field techniques, and expand their knowledge by visiting and studying exceptional geologic localities within a specific region. Students will also develop scientific writing skills and learn to create digital figures to aid in technical communication. Field projects will typically range in scale from one to four weeks in duration with the addition of two weekend trips and will be supported by weekly homework assignments. PREREQ: GEOL 102 and GEOL 102L with a grade of C or higher, or PERM/INST. *(1 lecture hours, 6 lab hours, 4 credits)*

GEOL 293 Geology Internship
(1-3 Credits, Varies)
Internships allow students to apply learning to real-life career possibilities. Credits are earned through supervised fieldwork specifically related to a student's area of study. An Internship Registration Form must be completed and turned into a One Stop Student Services location before a student may register for an internship course. PREREQ: Permission of department's internship coordinator and submission of a completed Internship Registration Form. *(0 lecture hours, 3 lab hours, 1 credits)*

GEOL 296 Geology Independent Study
(1-10 Credits, Varies)
This is a term long project. Each credit hour is equivalent to 45 hours of work on a project. Students should make arrangements with the instructor in their field of interest. Before enrolling for independent study, a student must obtain approval of the department chair and dean, acting on the recommendation of the instructor who will be supervising the independent study. An Independent Study Registration Form must be completed and turned into a One Stop Student Services location before a student may register for this course. PREREQ: PERM/INST and submission of a completed Independent Study Registration Form. *(0 lecture hours, 0 lab hours, 1 credits)*

Refer to How to Read Course Descriptions for an explanation of elements found in the course descriptions above.