

EARTH SCIENCE BA/BS

The Earth Science major provides a broad-based science education with focus on Earth's systems, including the geosphere, hydrosphere, atmosphere and biosphere. Students gain an understanding of the major features of each of these systems with foundational courses in Earth system science, environmental earth science, historical geology, and earth materials. Elective courses in the program include hydrogeology, structural field geology, geographic information systems, geochemistry, ecology, and field biology. Students can opt to participate in internships, research projects, or serve as teaching assistants. The program prepares students for a wide variety of careers in the private and government sectors including the fields of environmental science, geotechnical services, natural hazards mitigation, mining and petroleum industries, and resource management. It also provides an excellent foundation for students interested in continuing their education with graduate work in the natural sciences. Students may complete additional courses required for secondary teaching certification.

The goals of the Earth Science program are to provide students with learning experiences in the classroom, laboratory, and field so that they can achieve the following:

- o Understand the major features and processes in Earth's systems and the interrelationships between them;
- o Understand the interactions between Earth systems and human society;
- o Apply geoscience knowledge and critical thinking skills to identify and address a variety of earth science problems;
- o Understand field research techniques and be able to critically interpret geologic phenomena in the field;
- o Apply scientific methods with clearly articulated hypotheses and understand the fundamentals of collecting and applying data to test hypotheses;
- o And, communicate in a scientifically effective manner, in both oral and written form.

General Education Requirements

Code	Title	Credits
Written Communication		
Select one of the following:		6.00
ENGL-101 & ENGL-102	COLLEGE WRITING and RESEARCH WRITING	
ENGL-109	COLLEGE WRITING AND RESEARCH	
Oral Communication		
Select one from the following:		3.00
COMM-101	PRINCIPLES OF SPEECH	
COMM-202	INTERPERSONAL COMMUNICATION	
COMM-203	SMALL GROUP COMMUNICATION	
COMM-204	PUBLIC SPEAKING	
Mathematical Ways of Knowing		
MATH-170	CALCULUS I	4.00
Humanistic & Artistic Ways of Knowing		
Select one of the following:		3.00
ENGL-150	INTRODUCTION TO LITERATURE	
ENGL-257	WORLD CLASSICS	
ENGL-258	INTERNATIONAL LITERATURE	
Select one of the following:		3.00
ART-100	SURVEY OF ART	
HUM-101	THE ART AND HISTORY OF THE MOTION PICTURE	
HUM-150	INTRODUCTION TO THE ARTS	
MUS-101	SURVEY OF MUSIC	
MUS-102	MUSIC IN AMERICA	
MUS-150	WORLD MUSIC	
MUS-151	HISTORY OF MUSICAL THEATER	
THEA-101	SURVEY OF THE THEATER	
Scientific Ways of Knowing		
Select two of the following:		8.00

CHEM-111	PRINCIPLES OF CHEMISTRY I	
PHYS-111	GENERAL PHYSICS I	
PHYS-211	ENGINEERING PHYSICS I	
Social & Behavioral Ways of Knowing		
Select one course from two disciplines:		6.00
ANTH-102	CULTURAL ANTHROPOLOGY	
ANTH-120	WORLD PREHISTORY	
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES	
ECON-201	PRINCIPLES AND THEORY OF MACROECONOMICS	
ECON-202	PRINCIPLES AND THEORY OF MICROECONOMICS	
GEOG-102	INTRODUCTION TO GEOGRAPHY	
HIST-101	HISTORY OF CIVILIZATION	
HIST-102	HISTORY OF CIVILIZATION	
HIST-111	UNITED STATES HISTORY TO 1865	
HIST-112	UNITED STATES HISTORY SINCE 1865	
HRPT-184	DIVERSITY IN ORGANIZATIONS	
HRPT-185	HUMAN RELATIONS IN ORGANIZATIONS	
POLS-101	AMERICAN NATIONAL GOVERNMENT	
POLS-237	INTERNATIONAL POLITICS	
POLS-285	COMPARATIVE GOVERNMENT	
PSYC-101	INTRODUCTION TO PSYCHOLOGY	
PSYC-205	DEVELOPMENTAL PSYCHOLOGY	
SOC-101	INTRODUCTION TO SOCIOLOGY	
SOC-102	CURRENT SOCIAL PROBLEMS	
SS-184	DIVERSITY IN ORGANIZATIONS	
SS-185	HUMAN RELATIONS IN ORGANIZATIONS	
Diversity		
Select one of the following:		3.00-4.00
ANTH-102	CULTURAL ANTHROPOLOGY	
ANTH-120	WORLD PREHISTORY	
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES	
ANTH-360	RACE AND ETHNICITY	
COMM-345	COMMUNICATION AND DIVERSITY	
ENGL-258	INTERNATIONAL LITERATURE	
ENGL-474	NATIVE AMERICAN WRITTEN LITERATURE	
GEOG-102	INTRODUCTION TO GEOGRAPHY	
HIST-101	HISTORY OF CIVILIZATION	
HIST-102	HISTORY OF CIVILIZATION	
HIST-111	UNITED STATES HISTORY TO 1865	
HIST-112	UNITED STATES HISTORY SINCE 1865	
HRPT-184	DIVERSITY IN ORGANIZATIONS	
KIN-220	SOCIAL-CULTURAL ASPECTS OF SPORTS	
NP-101	ELEMENTARY NEZ PERCE LANGUAGE I	
NP-102	ELEMENTARY NEZ PERCE LANGUAGE II	
POLS-285	COMPARATIVE GOVERNMENT	
SOC-101	INTRODUCTION TO SOCIOLOGY	
SPAN-101	BEGINNING SPANISH I	
SPAN-102	BEGINNING SPANISH II	
SPAN-201	INTERMEDIATE SPANISH I	
SPAN-202	INTERMEDIATE SPANISH II	
Integrative Seminar: Ethics & Values		
Select one of the following:		3.00

ID 300A - 300Z (see course descriptions for options)

ID-301A HELLS CANYON INSTITUTE

Foreign/Heritage Language

Select 16 credits of language if selecting Bachelor of Arts Degree 16.00

Total Credits 39.00-40.00

Program Requirements

Code	Title	Credits
Major Courses		
CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
GEOL-100	ENVIRONMENTAL EARTH SCIENCE	4.00
GEOL-120	INTRODUCTION TO EARTH SYSTEMS	4.00
GEOL-202	HISTORICAL GEOLOGY	4.00
GEOL-313	EARTH MATERIALS I	4.00
GEOL-314	EARTH MATERIALS II	4.00
GEOL-450	EARTH SYSTEMS CAPSTONE	3.00
GEOL-491	WORKSHOP IN GEOLOGY	1.00
PHYS-205	DESCRIPTIVE ASTRONOMY	4.00
PHYS-112	GENERAL PHYSICS II	4.00
or PHYS-212	ENGINEERING PHYSICS II	
Select 8 credits of GEOL 200 level or above		8.00
Electives		
Select 45 elective credits		45.00
Total Credits		89.00

Sequential Plan of Study

Course	Title	Credits
First Year		
Fall		
CHEM-111	PRINCIPLES OF CHEMISTRY I	4.00
ENGL-101	COLLEGE WRITING	3.00
GEOL-100	ENVIRONMENTAL EARTH SCIENCE	4.00
CORE	Social & Behavioral Ways of Knowing	3.00
Elective	Elective Credits	3.00
		Credits
		17.00
Spring		
ENGL-102	RESEARCH WRITING	3.00
GEOL-120	INTRODUCTION TO EARTH SYSTEMS	4.00
CORE	Oral Communication	3.00
CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
Elective	Elective Credits	3.00
		Credits
		17.00
Second Year		
Fall		
CORE	Humanistic & Artistic Ways of Knowing	3.00
MATH-170	CALCULUS I	4.00
PHYS-111	GENERAL PHYSICS I	4.00
Program Requirement	Select GEOL course 200 level or above	4.00
		Credits
		15.00
Spring		
CORE	Humanistic & Artistic Ways of Knowing	3.00
GEOL-202	HISTORICAL GEOLOGY	4.00

PHYS-212	ENGINEERING PHYSICS II	4.00
Program Requirement	Select GEOL course 200 level or above	4.00
Elective	Elective Credits	3.00
	Credits	18.00
Third Year		
Fall		
PHYS-205	DESCRIPTIVE ASTRONOMY	4.00
GEOL-313	EARTH MATERIALS I	4.00
CORE	Social & Behavioral Ways of Knowing	3.00
Elective	Elective Credits	3.00
	Credits	14.00
Spring		
GEOL-314	EARTH MATERIALS II	4.00
CORE	Diversity	3.00
CORE	Integrative Seminar: Ethics & Values	3.00
Elective	Elective Credits	3.00
Elective	Elective Credits	3.00
	Credits	16.00
Fourth Year		
Fall		
GEOL-491	WORKSHOP IN GEOLOGY	1.00
Elective	Elective Credits	4.00
Elective	Elective Credits	4.00
Elective	Elective Credits	3.00
Elective	Elective Credits	3.00
	Credits	15.00
Spring		
GEOL-450	EARTH SYSTEMS CAPSTONE	3.00
Elective	Elective Credits	4.00
Elective	Elective Credits	3.00
Elective	Elective Credits	3.00
Elective	Elective Credits	3.00
	Credits	16.00
	Total Credits	128.00

Graduates with a BA/BS in Earth Science (<https://www.candidcareer.com/video-geologist,6bb1e54c05222f186dcf,LCSC>) go on to obtain careers in a variety of fields:

- Resources
- Landscape
- Astrogeology and Space Sciences
- Education
- Minerals
- Geologic Mapping
- Hazards

Click here for more videos related to this major (https://www.candidcareer.com/search_result.php?shared=LCSC&UID=4747&viewtype=detailed&search_id=earth+&search_type=search_major&search_advice=0&submit=+)