Geology and Earth Sciences

Major Preparation Sheet 2016-2017

Geology and Earth Sciences – What is it?

Geology is the study of the earth—its substances, history, and evolution of life. With rivers, mountains, oceans, canyons, rocks, metals, minerals, and fossils, the earth is a vast laboratory for geological scientists.

Areas of study in Geology and Earth Sciences: Earth History, Mineralogy, Physics, Economics, Chemistry, Environmental Science, Oceanography, Landscapes, Geological Structures, Geological Mapping, and Volcanology.

Where does my path start?

You will complete an Associate of Science-Transfer (AS-T) Track 1 at Shoreline.

Use the AS-T Track 1 **Degree Planning Guide** to understand the requirements for graduation.

Once you complete your Shoreline degree, you can transfer to a four-year school to earn a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) in Geology and Earth Sciences.

Geology and Earth Sciences are excellent preparation for graduate studies in Geology, Hydrology, Environmental Science, Oceanography, and Law.

Where can I go for help?

Program Faculty Advisors

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tmeier@shoreline.edu Rm 5231

Career Planning
www.shoreline.edu/job-career-services/

General Academic Advising

FOSS (5000) Building, Rm. 5229
206-546-4559
advising@shoreline.edu
www.shoreline.edu/advising

International Student Academic Advising

9000 Building, Rm. 9302
206-546-4697
ieadvisors@shoreline.edu
www.shoreline.edu/international/advising/

Where can I transfer?

The AS-T makes it possible for students to transfer to public and private colleges and universities in the U.S. with junior standing. Washington State institutions with Geology and Earth Sciences majors are listed below.

Central Washington University
Eastern Washington University
Pacific Lutheran University
The Evergreen State College
University of Puget Sound
University of Washington – Bothell
University of Washington – Seattle
Washington State University
Western Washington University
Whitman College

What can I do with a Bachelor's Degree in Geology and Earth Sciences?

Geologists develop strong critical thinking, problem solving, communication, and technical skills to work in career fields that include environmental protection, environmental policy, conservation, hydrology, mining, natural resources, hazardous materials, consulting, research and development, education, and law.

Potential employers include: Petroleum industry, mining companies, engineering and consulting firms, public and private schools, colleges and universities, and government agencies, such as the Department of Energy, Bureau of Land Management, Bureau of Mines, and the Environmental Protection Agency. For more, please visit http://www.shoreline.edu/counseling-services/career-counseling.aspx.

What courses should I take?**

I. GENERAL EDUCATION REQUIREMENTS | 20 Credits

ENGL &101
ENGL &102, &230, or CMST &101
One course in Multicultural Understanding
Quantitative/Symbolic Reasoning (MATH &151)

II. DISTRIBUTION REQUIREMENTS | 15 Credits

One course in Humanities
One course in Social Sciences
A third course in either Humanities or Social Sciences

III. PRE-MAJOR PROGRAM I 54 – 59 credits

Chemistry	*19.5 Credits*	QTR	GR	CR
CHEM 171/181	*Fall, Win, Spr*			6.5
CHEM 172/182	*Win, Spr, Sum*			6.5
CHEM 173/183	*Spr, Sum, Fall*			6.5

Mathematics	*10 Credits*	QTR	GR	CR
MATH &152				5
MATH &163 or 211				5

Physics (choose one sequence - Algebra- or Calculus-based)				
Physics	*15-16.5 Credits*	QTR	GR	CR
PHYS &221 OR PHYS &114	*Fall, Win* *Fall*			5.5 5
PHYS &223 OR PHYS &115	*Fall, Win* *Win*			5.5 5
PHYS &222 OR PHYS &116	*Spr, Sum* *Spr*			5.5 5

MAJOR SCIENCE SEQUENCE AND/OR SUPPORT COURSES – minimum 10 Credits for AS degree

Recommended Courses	QTR	GR	CR
GEOL &101, &110, &115, &208			
GEOG 203, 204			
BIOL &211-&213			
BIOL 144,			
MATH 207, 208, 264			
ASTR &101			
OCEA &101			
ENVS &101			

What does my chosen four-year school require?

Before choosing classes, become familiar with the four-year program where you want to apply: visit the website, email the department, and/or speak with a Shoreline advisor. Below are examples from Washington schools with different admissions and graduation requirements. Check with the school for world language requirements. (Non-native speakers of English are often exempt from this requirement.)

School	Degrees	Requirements
Central Washington University	B.S. in Geology, B.S. in Environmental Geosciences; B.A. in Geology; B.A. in Geology with Professional Education Program	GEOL &101, Historical Geology (no SCC equivalent), Pre-calculus. Recommended courses: MATH &151, CHEM 171/181 and 172/182, PHYS &221 and &223. Required coursework can be completed at CWU as a pre-major.
University of Washington – Seattle	B.S. in Earth and Space Science with options in Biology, Geology, Physics and Environmental Earth Science; B.A. in Earth and Space Science	Open major. Recommended coursework: MATH &151 and &152, PHYS &221 or &114, CHEM 171/181, GEOL &101, additional related coursework is based on degree and option area.
Washington State University	B.S. in Earth Science; Certificate in Earth and Space Science Teaching	Recommended: ENGL &101, CMST &220, MATH &141 and &142 (unless placed higher), MATH &151, CHEM 171-173/181-183, ECON &201 or other social science

**** This unofficial guide is intended to support you as you prepare for your major. Please consult with an advisor and your chosen four-year school(s), as program and admissions requirements vary and may change without notice.**