



## **CURRICULUM GUIDE 2014-2015**

### **GEOLOGY**

#### **Associate in Science in Geology for Transfer (AS-T)**

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Science in Geology for Transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Upon successful completion of the Associate in Science in Geology for Transfer, students will acquire fundamental knowledge of geology as well as laboratory and field experience and be better prepared for seamless transfer into baccalaureate programs in geosciences at CSU. In addition, this degree will facilitate their careers in academic research, natural resource exploration, hydrology, environmental remediation, climate studies, natural hazard assessment, state and federal regulation, hazardous materials disposal, and industries such as geotechnical engineering and computer mapping (GIS).

#### **Requirements for Associate in Science for Transfer Degree:**

- a) Complete all Major Field courses with a grade of C or better.
- b) Complete CSU GE (Plan B) or IGETC (Plan C) requirements. These requirements are specified in the Ohlone College catalog.
- c) Complete 60 CSU-transferable semester units.
- d) Complete a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum GPA of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- e) Complete 28 semester units in the Geology major.
- f) Complete at least 12 units at Ohlone College.

#### **Student Learning Outcomes**

1. Demonstrate scientific literacy by defining and explaining the major steps in the scientific method such as empirical data, testable hypothesis, and theory, applying general math skills such as metric unit conversion,

solving rate problems, and producing and interpreting data in tables and graphs.

2. Identify and classify the earth materials, such as most common minerals, rocks, and major groups of fossils in the lab and the field and their basic relationship to common natural resources.
3. List, explain, and evaluate global and local geological hazards such as earthquakes, volcanoes, landslides, and seismic sea waves in terms of appropriate geological processes and the theory of plate tectonics.
4. Demonstrate an understanding of the geologic time scale and relative and numerical methods of measuring geologic time, age of the Earth, and major events in its history.

**MAJOR FIELD**

CHEM-101A	General Chemistry	5
CHEM-101B	General Chemistry	5
GEOL-101	Introduction to Geology	4
GEOL-104	The Changing Earth: Historical Geology	3
GEOL-104L	Historical Geology Laboratory	1
MATH-101A	Calculus with Analytic Geometry	5
MATH-101B	Calculus with Analytic Geometry	<u>5</u>

Total Required Units: 28