

Department:

Physical Science

Course Description:

This course provides an introduction to the basic principles of geology. The course covers geological measuring techniques, minerals and rocks, internal processes such as plate tectonics, earthquakes, and volcanoes, and surface processes such as streams, coasts, mass movements, and glaciers. The course is intended as a broad-based introduction to geology for students who are not majoring in science.

Course Competencies:

The learning outcomes and competencies detailed in this syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups for this course as approved by the Kansas Board of Regents. **(Kansas Regents Shared Number Course and Title: KSRN Course PSI1030 Physical Geology Lecture and Lab.)**

Lecture

Upon completion of this course, students will be able to:

1. Explain the nature of scientific inquiry and how it leads to our understanding of geologic processes.
2. Identify and describe a range of Earth materials, including minerals, rocks, soils, and fossils.
3. Discuss basic geologic principles, including Geologic Time and Plate Tectonics.
4. Interpret geologic features in terms of Earth system processes and cycles, including tectonic, water, and rock cycles.
5. Identify and evaluate the origin and nature of resources.

Lab

6. Identify, classify, and differentiate geologic samples.
7. Read and interpret topographic and geologic maps.
8. Use appropriate tools to investigate and analyze geologic problems.

Course Content:

- A. Minerals
 1. Atoms and elements
 2. Mineral structure and composition
 3. Physical properties of minerals
- B. Rocks and the Rock Cycle
 1. Volcanism and igneous rocks
 2. Sediment and sedimentary rocks
 3. Metamorphism and metamorphic rocks
- C. Relative and Absolute Dating Techniques
- D. Surficial Processes
 1. Mass wasting

2. Streams and flooding
 3. Glaciers and glaciation
 4. Deserts and wind action
 5. Waves, beaches, and coasts
- E. Internal Processes
 - F. Earthquakes
 - G. Earth's interior and geophysical properties
 - H. Plate tectonics

Learning Assessments:

Course competencies will be assessed by use of exams, quizzes, and lab reports.

Instructional Materials:

Textbook: Plummer, C., Carlson, D. & Hammersley, L. (2013). Physical Geology (14th ed.). New York, NY: McGraw-Hill. ISBN-13: 978-0073369389

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" on our [Disability Services website](#).

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an [online report](#) about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our [Equity Grievance Policy](#).