# **COURSE SYLLABUS**

LAST REVIEW	Fall 2022	
COURSE TITLE	Physical Geology & Lab	
COURSE NUMBER	NASC-0186	
DIVISION	Math, Science, Business & Technology	
DEPARTMENT	Physical Sciences	
CIP CODE	24.0101	
CREDIT HOURS	4	
CONTACT HOURS/WEEK	Class: 3	Lab: 2
PREREQUISITES	None	
COURSE PLACEMENT	Students must meet the correct placement measure for this course. Information may be found at: <u>https://www.kckcc.edu/admissions/information/mandatory-evaluation-placement.html</u>	

# **COURSE DESCRIPTION**

This course provides students with a comprehensive study of the principles of geology while simultaneously providing classroom and laboratory applications. The course is a study of the structural and dynamic features of the Earth. Rock-forming minerals, rocks and their decay are studied. A short history of the Earth is included.

# KANSAS SYSTEMWIDE TRANSFER: PSI 1030

The learning outcomes and competencies detailed in this course outline or syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents.

#### **General Education Learning Outcome**

- Basic Skills for Communication
- Mathematics
- \_\_\_\_ Humanities
- Natural and Physical Sciences
  - Social and Behavioral Sciences

#### **Institutional Learning Outcomes**

Communication

Computation and Financial Literacy

Critical Reasoning

 $\boxtimes$  Technology and Information Literacy

Community and Civic Responsibility

Personal and Interpersonal Skills

# TEXTBOOKS

http://kckccbookstore.com/

#### **METHODS OF INSTRUCTION**

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

#### **COURSE OUTLINE**

The course outline is indicated below and is subject to change as course development dictates.

- I. Structure of the Earth and plate tectonics
- II. Earth's dynamic systems
- III. Minerals
- IV. Igneous rocks and volcanism
- V. Sedimentary rocks; types, structures, and origins
- VI. Metamorphic rocks and the rock cycle
- VII. Weathering
- VIII. River systems
- IX. Processes of stream erosion and deposition
- X. Evolution of landforms
- XI. Ground water systems
- XI. Glacier systems
- XII. Crustal deformation
- XIII. Evolution of the ocean basins
- XV. Evolution of the continents

# **COURSE LEARNING OUTCOMES AND COMPETENCIES**

Upon successful completion of this course, the student will:

- A. Explain the nature of scientific inquiry and how it leads to our understanding of geologic processes.
- B. Identify and describe a range of Earth materials, including minerals, rocks, soils, and fossils.
- C. Discuss basic geologic principles including Geologic Time and Plate Tectonics.
- D. Interpret geologic features in terms of Earth system processes and cycles, including tectonic, water, and rock cycles.
- E. Identify and evaluate the origin and nature of resources.
- F. Identify, classify, and differentiate geologic samples.
- G. Read and interpret topgraphic and geologic maps.
- H. Use appropriate tools to investigate and analyze geologic problems.

# ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

# **COLLEGE POLICIES AND PROCEDURES**

Student Handbook https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-ofconduct.pdf

College Catalog

https://www.kckcc.edu/academics/catalog/index.html

**College Policies and Statements** 

https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations

https://www.kckcc.edu/academics/resources/student-accessibility-supportservices/index.html.