

**I. COURSE INFORMATION**

- A. Physical Science 154 Physical Geology
- B. 5 credit hours
- C. Marsahak, Stephen. *Earth: Portrait of a Planet*. 5<sup>th</sup> ed. New York: W.W. Norton & Company, 2015  
Wilkerson, M. Scott, M. Beth Wilkerson, and Stephen Marsahak. *Geotours Workbook*. 2<sup>nd</sup> ed. New York: W.W. Norton & Company, 2017
- D. Prerequisites: Eligible for COL 101 English Composition I or completion of COL 101
- E. KRSN: PSI 1030 Physical Geology with Lab

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.

**II. COURSE DESCRIPTION**

This course provides a basic introduction to the earth science area, and more particularly to physical geology. It is intended to meet the general education requirement for a laboratory science or to provide a first course for those interested in majors in the earth sciences or some areas of engineering.

**III. LEARNING OUTCOMES**

- A. Explain the nature of scientific inquiry
- 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 topographic and geologic maps
- H. Use appropriate tools to investigate and analyze geologic problems

**IV. MAJOR CONTENT AREAS**

- A. Physical quantities
- B. Minerals
- C. Igneous, sedimentary, and metamorphic rocks
- D. Weathering and erosion
- E. Geological time
- F. Plate tectonics
- G. Mountain building and evolution of continents
- H. Moving water
- I. Glaciations
- J. Sea floor spreading
- K. Wind and deserts

**V. ASSIGNMENTS** (may include but are not limited to)

- A. Reading assignments
- B. Writing assignments
- C. Laboratory exercises
- D. Discussion

**VI. EVALUATION METHODS** (may include but are not limited to)

- A. Attendance and participation
- B. Laboratory reports
- C. Comprehensive final