Course # GEOL 101 Physical Geology
Credit Hours: 3
Scheduled hours per week
Lecture: 3
Lab: 0

Catalog Course Description: The physical, chemical, and biological processes that shape the Earth will be studied in light of the concept of global plate tectonics and the interactions of Earth's subsystems (the lithosphere, biosphere, hydrosphere, and atmosphere).

Pre-requisites: None

Co-requisites: GEOL 102

Course Learning Outcomes (CLO):

- Ability to understand, demonstrate, and analyze geologic processes including: rocks and minerals, the hydrologic cycle, weathering and erosion, mountain building, plate tectonics, evolution, relative dating techniques, fossils, geologic time, volcanic activity, glaciers and deserts, and environmental issues.
- Ability to demonstrate critical thinking and apply the scientific method to a problem or idea.
- Capability to correctly make observations and/or take measurements and use scientific formulas for problem solving.
- Communicate results of scientific investigations, analyze data and formulate conclusions.
- Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.
- Work safely and collaborate with peers to carry out the scientific method.

CLO Assessment Methods:

Direct: Exams, quizzes, presentations, research presentation, and prepared assignments.

Indirect Methods: Course Evaluations

Topics to be studied:
- Rocks and minerals,
- Weathering and erosion

- Running water and groundwater
- Glaciers and deserts
- Plate tectonics, volcanic activity, earthquakes, and mountain building
- Geologic time, relative and radiometric dating techniques,
- Structural geology, geologic and topographic maps,
- Earth resources and environmental issues
- Origin of the earth and solar system.

Relationship of Course to Program Learning Outcomes (PLO) or Institutional Learning Outcomes:

Check if approved as: ☒ Foundational Learning Course □ Reinforcement Learning Course

Special requirements of the course:

N/A

Additional information:

N/A

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