

**Course # GEOL 104 Historical Geology Lab**

**Credit Hours:** 1

**Scheduled hours per week**

Lecture: 0

Lab: 2

**Catalog Course Description:** The laboratory study of sedimentary rocks, fossils, correlation of rock units, interpretation of geologic maps, and local geology with field trips.

**Pre-requisites:** GEOL 101/ GEOL 102, or PSCI 112/PSCI 112L

**Co-requisites:** GEOL 103

**Course Learning Outcomes (CLO):**

- Ability to understand, demonstrate, and analyze rocks and minerals, topographic maps, correlation of rock units, sedimentary environments and related deposition, taxonomy, morphology, and evolution of fossil organism groups, paleoecology, paleogeography, and paleoclimatology.
- Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations, and predictions.
- Capability to correctly make observations and/or take measurements and use scientific formulas for problem solving.
- Communicate the results of scientific investigations, analyze data and formulate conclusions.
- Work safely and collaborate with peers to carry out the scientific method.

**CLO Assessment Methods:**

Direct: Exams, quizzes, laboratory assignments, and field trips.

Indirect Methods: Course Evaluations

**Topics to be studied:**

- Geologic maps
- Correlation of rock units
- Sedimentary environments
- Taxonomy, morphology, and evolution of fossil organism groups
- Paleoecology
- Paleogeography,
- Paleoclimatology

**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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