**GEOLOGY**

A geology degree provides an understanding of issues associated with the physical earth and skills which are in demand in today's job market. The geology graduate will have a detailed understanding of climate change, sustainability of the Earth's resources, and the close interplay between human activity and the environment.

**About this Program**
- **College:** Liberal Arts and Sciences
- **Degrees:** Bachelor of Arts | B.A.: Environmental Geosciences | Bachelor of Science
- **Credits for Degree:** 120
- **Additional Information**
- **Related Geology Programs**

To graduate with this major, students must complete all university, college, and major requirements.

**Bachelor of Arts**

The Bachelor of Arts in geology provides knowledge of the basic concepts related to earth materials and processes, and how to collect and organize geological data in the field. Through laboratory and field-based exercises, students will learn how to interpret geologic maps and cross sections, and to understand the application of the scientific method to solve these problems in teams and individually.

**Before Graduating Students Must**
- Pass GLY 4155C Geology of Florida according to the department grading rubric.
- Complete requirements for the baccalaureate degree, as determined by faculty.

**Students in the Major Will Learn to**

**Student Learning Outcomes (SLOs)**

**Content**
1. Identify, describe and define the basic concepts related to earth materials and processes.
2. Collect data in the field.
3. Organize geologic, temporal and spatial data.

**Critical Thinking**
4. Interpret geologic maps and cross sections.
5. Interpret results using the scientific method.

**Communication**
6. Produce a clearly and effectively written synthesis of data collected in the field.
7. Work in teams to solve geologic problems and to present the results of such collaboration effectively.

**Curriculum Map**

$I =$ Introduced; $R =$ Reinforced; $A =$ Assessed

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**Assessment Types**
- Lab assignments
- Projects
- Exams

**Bachelor of Science**

The Bachelor of Science in geology provides knowledge of the basic concepts, theories, observational findings related to earth materials and processes, minerals and rocks, geologic time, stratigraphy and landforms. Through laboratory and field-based exercises, students will learn how to analyze data in the published literature, synthesize analog and digital datasets to produce geological maps, and understand the application of the scientific method to solve geological problems in teams and individually.

**Before Graduating Students Must**
- Pass GLY 4790 Summer Field Camp according to the department grading rubric.
- Complete requirements for the baccalaureate degree, as determined by faculty.

**Students in the Major Will Learn to**

**Student Learning Outcomes (SLOs)**

**Content**
1. Identify, describe and define the basic concepts related to earth materials and processes.
2. Identify and describe minerals and rocks.
3. Define geologic time, stratigraphy and landforms.

**Critical Thinking**
4. Analyze data in the published literature.
5. Synthesize analog and digital datasets to produce geologic maps.
6. Apply the scientific method to the analysis of published and self-generated data.

**Communication**
7. Use computers for the presentation of geologic maps and data.
8. Solve geologic problems in teams and present the result of such collaboration effectively.

**Curriculum Map**

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**Capstone**

**Assessment Types**
- Six weeks of practical field exercises and mapping, including observation and data collection in New Mexico and the western USA