



**Franklin College of
Arts and Sciences**
UNIVERSITY OF GEORGIA

CURRICULUM REQUEST FORM

Please complete a separate request for each curriculum item being submitted. Each request should include a PDF file of the curriculum item being reviewed. This form along with the file should be emailed to April Brown at albrown@uga.edu.

Date:

Department/Institute/Program:

Contact Person: Adam Milewski

Email Address: geohead@uga.edu

Curriculum Item Request:

Please provide an explanation/justification for this request:

The submission of this minor, as well as additional curriculum updates, is a part of the overall enhancement of the direction of the Department of Geology as we align ourselves with the strategic vision of our department, discipline, and Franklin College. Our current collaborations within the industry and student focus groups indicate the need to move in this direction. Credentialization of the skills and knowledge earned through this training is critical to student success. Offering this minor to students within, as well as outside of our department, is proof of the academic innovation we are now setting as the standard within our discipline. This broadens the marketability of graduates and more closely aligns them with career competencies that makes them competitive in the current job market within our field and beyond.

This minor will explore the tectonic systems of Earth and other terrestrial planets in our solar system, with the goal of providing students with a better understanding of interior structure and the physical and chemical processes involved in the deformation of rock and other materials. Topics will include rock mechanics, the generation of earthquakes and +

As Department Head, you are affirming that the department procedures have been followed for approval with your unit.

PROPOSAL FOR MINOR PROGRAM OF STUDY

1. **School/College:** Franklin College of Arts & Sciences
2. **Department/Division:** Geology
3. **Minor Name:** Solid Earth Dynamics
4. **Proposed Effective Date:**
5. **Which campus(es) will offer this programs:** Athens
6. **Program Description:**

This minor will explore the tectonic systems of Earth and other terrestrial planets in our solar system, with the goal of providing students with a better understanding of interior structure and the physical and chemical processes involved in the deformation of rock and other materials. Topics will include rock mechanics, the generation of earthquakes and volcanic eruptions, the use of seismic waves to image planetary interiors, mantle convection and the nature of forces driving tectonic plate motion on Earth, mountain building, and the formation of continents and ocean basins on Earth and analogous features on other planets. Course material will cover the results of major new initiatives such as NSF's EarthScope program and recent planetary missions and will draw on the research experiences of faculty members in the UGA Department of Geology.

7. **Program of Study/Requirements:**

See attached.

8. **Approvals:**



Department Head



Department



Date

Dean

School/College

Date

Proposed Minor in Solid Earth Dynamics

Unless specified, all classes are A-F (traditional)

All students will complete a minimum of 15 credit hours, including:

Required Courses (6 to 8 hours), choose two of the following:

GEOL1121/1121L: Earth Processes and Environment, 3 or 4 hours

GEOL1122/1122L: Earth's History of Global Change, 3 or 4 hours

GEOL1250/1250L: Physical Geology, 3 or 4 hours

GEOL1260/1260L: Historical Geology, 3 or 4 hours

***Elective Courses, choose three from the following list.**

GEOL 4330 Geology of North America

GEOL 4350 Planetary Dynamics

GEOL 4360 Introduction to Rock Mechanics

GEOL 4600 Solid Earth Geophysics

GEOL 4620 Exploration Geophysics

GEOL 4940 Volcanology and Volcano Petrology

***One of these courses can be replaced with a 3-hour research or thesis course (listed below).**

GEOL 4400 Introduction to Research in Planetary Geology

GEOL 4430 Introduction to Research in Geophysics

GEOL 4470 Introduction to Research in Petrology

GEOL 4490 Introduction to Research in Structure/Tectonics

GEOL 4960 Faculty-Mentored Undergraduate Research I

GEOL 4970 Faculty-Mentored Undergraduate Research II

GEOL 4980 Faculty-Mentored Undergraduate Research III

GEOL 4990 Undergraduate Thesis