GROWING THE GEOSCIENCE COMMUNITY THROUGH EXPERIENTIAL LEARNING ACTIVITIES WITH NON-GEOSCIENCE MAJORS

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Clemson Geopaths Organizational Framework

Tier I: Exposing Students to Geoscience

Students at Tier I will be exposed to geoscience through extra credit activities within their introductory geoscience courses.

Example Activities:
- Geocaching
- Virtual Field Trips
- Take home exercises
- Augmented Reality Sandbox
- Geology in Minecraft

Tier II: Exploring Geoscience

Students at Tier II explore geoscience through individual or group project-based learning activities in collaboration between non-major students, a geology major mentor, and a faculty mentor.

Focus Areas:
- Citizen Science
- Apply data collection and analysis
- Problem Solving with GIS
- Translate scientific questions into real-world applications
- Science Communication & Outreach
- Synthesize and tailor communication about geoscience projects as provided address.

Tier III: Enabling Geoscience

Students at Tier III are enabled to participate in geoscience by engaging in research experiences similar to that observed by our own majors. This experience will simultaneously help them understand how their own domain can be applied to the geosciences and in some cases, major to see the value of other disciplines.

We expect that some non-major students who have participated in Tier I and II activities may have, by this point, opted to either double major in Geology or switch majors entirely.

Summary

This project exposes thousands of non-geoscience students to geoscience research and STEM communication. By building an accessible pathway for non-majors to the geosciences and enhancing research experiences for Geology majors, we expect to make a significant impact on the development of the geoscience workforce in South Carolina.

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