

# MEGAN MCGROARTY

✉ mm5349@nau.edu

## EDUCATION

**Northern Arizona University** August 2022 - Present

PhD Student in the Department of Biology

Center for Ecosystem Science and Society

**Arizona State University** December 2021

Bachelor of Science: Earth and Space Exploration (Astrobiology and Biogeosciences)

German Language (Minor) | Sustainable Food Systems (Certificate)

Barrett Honors Student

## RESEARCH

**Barrett Honors Thesis Project** | *Studying Litter Decomposition in Drylands* Fall 2019 - Fall 2021

Conducting a research project using litterbags to explore how microclimate and macroclimate differentially affect litter decomposition in drylands across the western United States.

**Conservation/Environmental Education Research Project** | *Research Volunteer* Fall 2021

Determining the impact of conservation and environmental education projects outside of formal education through studying and coding research articles as a team.

**School of Earth and Space Exploration Capstone Project** Fall 2020 - Spring 2021

*High Operating Temperature Soil Properties Observation Tool (HOTSPOT)*

Worked with a group to develop a fire-resistant device containing probes that could be dropped via drone into a designated site to record what happens to soil properties before and after the event of a fire. Advised the team as the science lead; researched and performed tests with the HOTSPOT package to determine instrument effectiveness.

**Dryland Ecosystems Research Team (DERT) Lab at ASU** | *Research Volunteer* Spring 2019 - Fall 2021

Assist in general laboratory procedures working with soils, researching how global changes influence arid and semi-arid ecosystems. Exposed to the laboratory environment and data collection as well as field work.

## TEACHING EXPERIENCES

**Unity of Life I Laboratory, BIO 181L, Northern Arizona University** | *Teaching Assistant* Fall 2022

Responsible for teaching over 70 students each week on concepts of Biology, the Unit of Life I. Created weekly presentations, graded assignments, and helped students one on one to complete labs and develop scientific skills.

**Geochemistry, GLG 481, Arizona State University** | *Teaching Aide* Fall 2021

Communicated with the professor to grade assignments for students in GLG 481. Assess assignments as needed to check the difficulty level with the professor. Also assisted any students if they needed help.

## ACADEMIC EXPERIENCE

**School of Earth and Space Exploration (SESE) Mentor** | *Mentor to incoming students* Fall 2021

Advising first-year students in the School of Earth and Space Exploration in the various opportunities available to them and how to better navigate college.

**Barrett Honors Contracts** | *Biology, Sustainability, and Earth and Space Courses* Fall 2018 - Fall 2020

Involved in extra projects created through communicating with the professor outside of the class syllabus, such as interest-driven presentations, research papers, and projects.

**Barrett Study Abroad Experience** | *Germany, Switzerland, and France* Summer 2019

Engaged in two courses abroad on a Barrett Honors Program based on Frankenstein and the history/connections behind the story. Visited the places from the novel as they are today, changed by climate and human activity.

## WORK EXPERIENCE

**Matrix Sciences** | *Laboratory Technician* Spring 2022

Tested food samples for food borne pathogenic bacterias through the use of culture plates, petrifilms, etc. Worked with coworkers in order to weigh, plate, and incubate samples efficiently to meet client standards.

**School of Earth and Space Exploration at ASU** | *Gallery Docent* Fall 2019 - Fall 2021

Gave tours to the general public in the Interdisciplinary Science and Technology Building 4 based on the contributions ASU has had in the field of Earth and Space Exploration. Additionally, helped develop K-12 material and create gallery content for both public events.

**Costco Wholesale** | *Stocker* Summer 2021

Stocked shelves in the food department individually and with others under time constraints. Acquired experience in working overtime to assist in other departments as needed.

**CUBiC Lab at ASU** | *Graphic Designer* Spring 2019

Worked with engineering students and professors in the Center for Cognitive Ubiquitous Computing (CUBiC) Lab to create graphical designs for accessible technology using programs such as Adobe Illustrator.

**America Reads at ASU** | *Tutor* Fall 2018

Created daily activity plans, evaluations, and activities targeted to help students academically at the Salvation Army.

## ACCOLADES

Dean's Medal Recipient for the School of Earth and Space Exploration Fall 2021

College of Liberal Arts and Sciences Student Leader Award Fall 2021

College of Liberal Arts and Sciences Dean's List Recipient Spring 2020, Fall 2020, Spring 2021, Fall 2021

Recipient of the New American University Scholarship (Provost's Award) Spring 2018 - Fall 2021

Bridgeton Township Sportsmen's Association (BTSA) Scholarship Spring 2018 - Fall 2021

## COMPUTATIONAL SKILLS

Python & R

Adobe Illustrator