# Data + Computing = Discovery!

National Science Foundation Research Experience for Undergraduates

#### **Research Methods Seminar**

Summer 2022

Instructor Information Anna Thonis PhD Candidate, Ecology & Evolution Stony Brook University anna.thonis@stonybrook.edu

<u>Seminar</u> Every Wednesday from 3:00 – 4:00 pm EST, from June 8 – July 27.

Join Zoom Meeting https://stonybrook.zoom.us/j/92745886185?pwd=RWk5aSttT0JpRThkM1BkRFNmdjNaUT09 Meeting ID: 927 4588 6185 Passcode: 152510

<u>Seminar office hours</u> Every Tuesday from 4:00 – 5:00 pm EST, or by appointment.

Join Zoom Meeting https://stonybrook.zoom.us/j/91062893811?pwd=VldXWjdmQ2ZrcGJkYlhqZlNETXFtQT09 Meeting ID: 910 6289 3811 Passcode: 725813

#### Seminar description

This seminar aims to aid students in developing their communication skills (e.g., presenting, writing, networking), technical reading comprehension, and coding proficiency as professionals in their respective fields. Because students in this seminar are coming from a range of backgrounds with a wide breadth of interests, students are encouraged to think about how lessons learned during this seminar will allow them to grow and progress as scientists, science communicators, and professionals in their fields of interest.

#### My teaching philosophy

It is my hope that I am able to act as a resource for you as you grow as people and as scientists through the course of this seminar. I recognize that you are all NSF REU students on large projects and with many items on your to-do lists. Acknowledging this, if you are feeling particularly overwhelmed one week or if you need a mental health break, please let me know – I understand if you need to miss a seminar. That said, I think this summer will be a lot of fun, and I am excited to get to know each and every one of you!

## Tentative Syllabus

Date	Торіс	Assignments*
June 8	Python/Computing Bootcamp Guest lecturer	
June 15	Literature searches and reading papers	Be prepared to introduce yourself and tell everyone about your interests, future goals, and what you hope to gain from this seminar.
June 22	Writing papers for scientific publication and the peer review process	Find a paper that piques your interest and read it, following the steps we covered last week.
June 29	Latex and Unix: lesson 1 <i>Guest lecturer</i>	
July 6	Preparing and delivering effective presentations	Watch this TED talk on "The 3 Magic Ingredients of Amazing Presentations"
July 13	Building and maintaining a professional website; networking	Explore the websites of scientists/researchers – what do you like or dislike?
July 20	Latex and Unix: lesson 2 Guest lecturer	
July 27	Career panel	Prepare 2-3 questions that you are interested in asking those on our career panel.

\*Assignments are due the week they are listed (i.e., the assignment listed for our June 15 seminar is due ON June 15).

### Zero Tolerance Policy

In order to promote meaningful and constructive dialogue throughout the seminar, we must foster a safe and inclusive environment that welcomes open discussion and personal growth. This seminar encourages viewpoints from a breadth of backgrounds; however, we must always share these viewpoints with a high degree of respect for one another. Use of any language or behavior that disrespects of discriminates against those of any race, ethnicity, religion, sexual orientation, gender identity, age, mental or physical disability, or political beliefs will not be tolerated. Such behavior will be immediately reported to the NSF REU organizers (Drs. Matthew Reuter and Alan Calder) and appropriate action will be taken.