



Bringing computational data sciences to your undergraduate ecology classroom

ESA 2019 Workshop. Sunday, August 11, 2019

Morning Session

8 - 8:30 AM: Settle in and meet one another

- Participant introductions

8:30 - 9 AM: Introduction to the Workshop

- Brief Introduction to BEDE Network: Rationale and Goals
- Context: The need for data science education in Biology and Environmental Science
- Method: Backwards Design
- Rationale: Data science, Inclusivity, and Empowerment

9 - 9:30 AM: Data Science for Undergraduate Biology and Environmental Science

- Activity: What is Data Science?
- Mini-lecture: Data Science Fundamentals

Short Break

9:30 - Noon: Basic Lessons

- Activity: Speed Data Science
- **Lesson 1:** Introduction to R/RStudio for Instructors
- **Lesson 2:** Using Markdown/RMarkdown in the classroom

Noon - 1 pm: Lunch

Afternoon Session

1 - 2:30 pm: Afternoon Lessons

- Our materials are now your materials too
- **Lesson 3:** Basics of Github for reproducibility and sharing

2:30 - 4:30 pm: Practice Session - Lesson Development

- Start developing a lesson of your own
- Individually or in small groups - use the tools you want to practice

Current BEDE Network Participants:

- Matt Aiello-Lammens, Pace University (Organizer)
- Sarah Supp, Denison University (Organizer)
- Susy Echeverria-Londoño, Kenyon College (Organizer)
- Drew Kerkhoff, Kenyon College (Organizer)
- Ethan White, University of Florida (Organizer)
- Ellen Bledsoe, University of Florida
- Erica Crispo, Pace University
- Sam Donovan, University of Pittsburgh
- Nathan Emery, Michigan State University
- Kait Farrell, University of Georgia
- Linda Forrester, University of Rhode Island
- Justin Kitzes, University of Pittsburgh
- Joslynn Lee, Fort Lewis College (Remote participant)
- Andy McCall, Denison University
- Jen McMahon, Kenyon College
- Kelly O'Donnell, City University of New York
- Lina Yoo, Denison University

ESA Workshop Participants

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