

**Spring 2018**

**ESCI 547: Introduction to Science Communication for the Earth Sciences**

**Instructor:** Laura Carter (with guest speakers) with guidance from science writer Linda Welzenbach

**Course description:** In a time of climate change impacting everyone's lives through natural disasters, news, policy, it is important for EEPS students to be aware of how and why it is important to be able to communicate their own research and general Earth Science knowledge.

This course will introduce students to Earth Science communication by exposing them to Rice communication professionals and EEPS researchers with various communication experience in the Earth Sciences. They will learn to convey Earth science to the lay audience through a variety of methods such as media reporting, museum programming, and K-12 public outreach. Students will learn about plain language, effective presentation styles and strategies, and conduits to improve their writing and speaking skills. They will explore diverse methods of communication and evaluate their applicability and effectiveness. Students will have the opportunity to apply these directly through various new and existing formats of Earth Science communication in the EEPS department, particularly by practice expressing their own EEPS research in a way the public may understand, enjoy, and share in a final project.

**Grading:** Pass/Fail. Students are expected to attend seminar each week, be an attentive listener to the speaker, participate by asking questions, and produce a final project which they will present to a diverse audience for feedback.

**Course hours:** 1 credit; 1 hour per week; Tuesday 12-1pm, in KWGL 227

**Office hours:** LC--M/W 1-3pm (or email to schedule at [lbc2@rice.edu](mailto:lbc2@rice.edu)); LW-Thu 12-2pm ([lwf2@rice.edu](mailto:lwf2@rice.edu))

**Syllabus:**

1. Class style

Laura Carter with the help of EEPS science writer Linda Welzenbach will present public science communication concepts through lectures and readings on effective communication with diverse audiences and what methods have proven effective for conveying complex information at a lay level. Each week, an EEPS faculty or Rice science communicators will be brought in to talk on a specific method with which they excel: these will vary from Rice public affairs and faculty instructors at Rice who have been involved in various types outreach, to professional communicators in industry. The speakers will answer student questions at the end of their presentation or interaction.

2. Homework

*Voluntary* (but highly recommended) homework may be offered each week to practice the format presented/discussed and receive feedback from the instructors.

3. Final Project

Halfway through the course (just before Spring Break), students will plan their final project and discuss it with the class and instructors for approval. They will choose a format of communication from those presented or one they research independently with which to present their research or an Earth, Environmental or Planetary science topic of particular interest. The final project will be presented during the last class to members of the EEPS department as well as other members of the Rice community and the public, but will be readily and immediately available to the public as more than practice, but actual direct communication experience. Final feedback will be given on how effective the students' final project was at communicating their science.

**Tentative Schedule:**

Week	Date	Topic	Suggested Homework
1	1/8/18	Course overview, syllabus Introduction to Science Communication (Laura Carter)	Check webpage weekly for list of resources and readings
2	1/16/19	Identifying and Connecting with your Audience (Laura Carter)	Write a 1-2 paragraph description of your research as you'd explain it to your mom; Do handout.
3	1/23/18	NO CLASS--Rice Closed	
4	1/30/18	Earth Science Policy and PHD TV (Dr. Laurence Yeung, EEPS Professor)	Find a video of an earth science advisor in the government and identify their plain speaking terminology (& where they don't)
5	2/6/18	Earth Science on Social Media: Reddit AMAs (Jerry Dickens, EEPS professor)	Read a geology Reddit AMA and identify what they do well. Host your own Q&A on any social media!
6	2/13/18	Public Q&A and live interviews: Mini Geology radio and YouTube (Dr. Daniel Minisini, Shell)	Be a guest at our department's monthly visits to Daniel's geologic radio show!
7	2/20/18	Breaking down science: Wikipedia (Dr. Diana Strassmann, Rice professor)	Edit a geologic wikipedia page that you feel comfortable contributing to
8	2/27/18	Imagery and Photography (Dr. Adrian Lenardic, EEPS professor)	Find or take an image or photograph of your research/science that you'd like to submit to the new image blog!
9	3/6/18	Science Writing (Dr. Scott Solomon)	Write a geoscience article for the department's magazine Outcroppings!
10	3/12/18	NO CLASS--Spring Break	(work on project)
11	3/20/18	Geologic Museum curation and exhibitions (Linda Welzenbach, EEPS science writer)	Think of a time you went to a natural science museum (or go now!) and identify 3 things that made it engaging
12	3/27/18	News stories and Press releases (Jake Boyd, Rice NSci press)	Write a press release for your latest paper or research
13	4/3/18	Teaching and Outreach (Dr. Carrie Owens, RSTEM)	Help with EEPS Reach outreach program!
14	4/10/18	Careers and Wrap Up	(work on project)
15	4/17/18	Final Presentations	
16	4/21/18	Final Presentations	

