

# New Graduate Class for Spring 2021

## Scientific Writing and Data Presentation for Peer-reviewed Journals

**A writing class designed to help graduate students develop their writing skills and publish research that will get cited**

Many graduate students are trained to be scientific professionals, and while writing is an essential part of communicating scientific results, students are often given little formal instruction to develop their writing skills. **This 3-credit course is designed to help future scientists write at a professional level.** Students will learn to view scientific writing as storytelling and to map the essential components of scientific manuscripts onto the story structure. You will learn how to write effective objective statements and abstracts, and individual attention will be given to writing the manuscript introduction, materials and methods, results and discussion, and conclusion. We will focus on data presentation techniques, deciding which data to present and how to present them. This class will be most beneficial for graduate students who have datasets or simulation results related to their projects and are in the initial stages of writing. The goal is for each student to have a manuscript that is ready, or nearly ready, for submission to a peer-reviewed journal at the conclusion of the class. Specifically, this course will cover:

- Telling your story: Scientists as professional writers
- Good stories have a beginning (**introduction**), middle (**materials and methods**), and end (**results**)
- From words, to sentences, to paragraphs: how to maintain flow
- How to write clear, concise, and thorough **objectives** statements
- Writing an **abstract** as a microcosm of the manuscript
- Deciding which **data** to present, and how best to present them
- **Conclusions**: the moral of the story
- Editing and condensing
- “Major revision”: Responding to reviewer comments
- Understanding writing myths: **Rules you don’t have to follow**
- Back to basics: Do(‘)s and don’t(‘)s of punctuation

### Instructors

Dr. Erik Krueger, Research Associate, Plant and Soil Sciences, Oklahoma State University, [Google Scholar Profile](#)

Dr. Tyson Ochsner, Professor, Plant and Soil Sciences, Oklahoma State University

### Textbook

Writing Science, Joshua Schimel, [link](#)

### Class number, format, and schedule

Problems and Special Study - 24001 - SOIL 5110  
Online, synchronous  
M,W,F 10:30-11:20 a.m.; Limited to 12 students