Principles of Scientific Writing

FES/FW 505 (1 credit) Winter 2019

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Office hours by appointment

Course overview:

Writing is a critical part of science. This course explores the writing process as laid out by Dr. Joshua Schimel in his book: *Writing Science*. This book examines different components of a scientific paper or proposal, beginning with how ideas are framed and concluding with specific grammatical tips on writing well. We will emphasize features of effective writing and the analysis and review of scientific writing. We will focus in particular on how the concepts presented in *Writing Science* apply to editing. Editing is a key part of writing that can be overlooked as students begin their academic work. But, editing your own work and the work of others is a crucial part of the writing process. This course is indented to provide students with skills to help with scientific writing and editing at any stage in their program. While material in this seminar has obvious application to ongoing writing efforts, this course does **not** guide you through writing a specific paper, and you *do not need to be working on a manuscript to take this class*.

Learning outcomes:

By the end of the class, students will be able to do the following:

- Identify the writing structure for papers and proposals.
- Identify common mistakes in writing and potential ways to fix them.
- Review scientific writing to improve clarity and flow of ideas.

Assignments:

- We will be reading two chapters per week in the book "Writing Science" by Josh Schimel.
- Each week students will apply lessons from that week's chapters in the analysis of a piece of scientific writing that they have chosen from their field.
- We will have weekly discussions in class that focus on the analysis prompt from each chapter and how each student's chosen paper does or does not fit within the writing framework suggested by Dr. Schimel.
- Each week we will have a follow-up to the in-class discussion online (optional participation).

Evaluation:

Grades will be pass/fail and will be based on attendance and on participation in class and/or online discussions.

We will read Writing Science by Josh Schimel (see below). We will follow writing analyses
suggested in this book at the end of each chapter in which each student will also be expected to
find and evaluate a piece of published writing from their field for each week's discussion.

Learning resources:

Schimel, J. 2012. Writing Science: How to write papers that get cited and proposals that get funded.

Oxford University Press. New York, NY. 221p.

Schedule

Week	Date	Topic/chapters
Week 1	Week of 1/7/18	Introduction
Week 2	Week of 1/15/18	Chapter 1 – Writing in Science
		Chapter 2 – Science Writing as Storytelling
Week 3	Week of 1/22/18	Chapter 3 – Making a story Sticky
		Chapter 4 – Story Structure
Week 4	Week of 1/29/18	Chapter 5 – The Opening
		Chapter 6 – The Funnel: Connecting O and C
Week 5	Week of 2/5/18	Chapter 7 – The Challenge
		Chapter 8 – Action
Week 6	Week of 2/12/18	Chapter 9 – The Resolution
		Chapter 10 – Internal Structure
Week 7	Week of 2/19/18	Chapter 11 – Paragraphs
		Chapter 12 – Sentences
Week 8	Week of 2/26/18	Chapter 13 – Flow
		Chapter 14 – Energizing Writing
Week 9	Week of 3/5/18	Chapter 15 – Words
		Chapter 16 – Condensing
Week 10	Week of 3/12/18	Chapter 17 – Putting it all together
		Chapter 18 – Dealing with Limitations
NO FINAL	NO FINAL	NO FINAL