

# Writing A Scientific Paper

ENV 410B

Spring 2015

Instructor: Professor Richard F. Ambrose  
pm

46-078 CHS  
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Class meeting: Tuesdays 5-7

Location: 46-060 CHS  
Office hours: By appointment

Course website: <https://ccle.ucla.edu/course/view/15S-ENVIRON410B-1>

**Overview:** The goal of this course is to teach the fundamentals of writing a scientific paper. Students will complete a manuscript that is ready to submit for publication in a peer-reviewed journal by the end of the quarter. The exercises will focus on the student's master's or doctoral research. Although there may be considerable variance in the amount of data collected (for example, for ESE students during their Problems Course), all students must prepare all sections of a manuscript, using "example" data and analyses if necessary. Specific aspects of technical writing and manuscript preparation will be reviewed and discussed. Each section of the manuscript will undergo peer review and this process will be discussed. The manuscripts will then be revised to respond to the reviewers' comments and re-submitted for evaluation.

This course is designed for doctoral students in Environmental Health Sciences and Environmental Science and Engineering; master's students and doctoral students from other departments should only register for the course after consultation with the course instructor. Students should only take the course if they are at a point in their doctoral careers when they have made sufficient progress to be ready to write a peer-reviewed publication.

**Text:**

Required: Writing Science: How to write papers that get cited and proposals that get funded – Joshua Schimel (ISBN 978-0-19-976024-4)

*Read relevant section before each class meeting.*

Optional: How to Write and Publish a Scientific Paper – Robert A. Day (ISBN 0-89774-865-6)

**Course Structure:** The class meets two hours per week and is in the format of an interactive discussion. Students must complete the weekly writing assignment and read all required reading prior to coming to each class so that they can participate in the small group writing discussions in class. Reading assignments are listed in the course schedule; any updates will be posted on the course website.

**Assignments:**

Assignments from Schimel's book will be due by the class meeting on the days indicated in the schedule. Submit the assignments through the course CCLE site.

Writing assignments for the sections of your manuscript are to be submitted to the entire class via email. The due dates are noted in the schedule. In general, a draft is due on the Sunday before class. Two students will be assigned as "peer reviewers" of your manuscript. They must submit their reviews by the class meeting on Tuesday.

**Note about file names:** Do not name your files with a generic name such as "assignment 1.docx". There may be files from many different students named the same! Your file names should include your last name, a descriptive title, and often the date (to keep track of versions, such as "Smith Chap 3-4 exercises 4-9-15").

Course Schedule  
Spring 2015

Date	Lecture topic	Reading	Assignment
Apr 7	Course Overview Elements of a scientific paper Using Microsoft Word	Chap 1-2	Meet with advisor; select journal and obtain Instructions to Authors Chapter 2 exercises due by 4/7
Apr 9	Conceptualizing the paper Writing fundamentals	Chap 3-4	Title Page and outline due by 4/9 Chapter 3-4 exercises due by 4/9
Apr 14	Introduction	Chap 5-7	Chapter 5-7 exercises due by 4/14
Apr 21	Peer reviewing Methods section	Chap 8	Introduction due Sunday 4/19 Peer reviews due by class meeting on 4/21 Chapter 8 exercises due
Apr 28	Results section Tables and figures	Chap 10-16	Methods section due Sunday 4/26 Peer reviews due by class meeting on 4/28
May 5	Discussion section	Chap 9, Chap 18	Results section due Sunday 5/3 Peer reviews due by class meeting on 5/5
May 12	Revising Abstract and Conclusions; Acknowledgments; References	Chap 17	Discussion section due Sunday 5/10 Peer reviews due by class meeting on 5/12
May 19	Peer reviewing	Nicholas and Gordon 2011	<b>Draft Manuscript due by class meeting on 5/19</b>

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May 26	Discuss peer review comments		<b>Peer review due</b>
Jun 2	Final discussion Writing a dissertation		Complete All Editing and Polishing of Manuscript;  <b>Final Manuscript Due 6/9</b>