

SYLLABUS: Scientific Writing for the JSMC

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Informal Course Website: <http://www.bouwmadesign.com/resources/resources.html>

Course Description: While all scientists are required to conduct research for publication in peer-reviewed scientific journals, few of us get much formal instruction on how to do this effectively. Although all scientists learn how to write in this style over time, through trial and error, the process does not need to be so difficult. In this course we will provide insight into the scientific writing process, hopefully cutting down both the time and effort required to produce a quality piece of work for submission to the journal of your choice.

- **Objective 1:** To improve your written communication skills, specifically in regards to papers intended for peer-review and publication in journals.
- **Objective 2:** Improve your English writing skills through instruction and practice.

How will we do this? The best way for you to learn how to write a better paper is to practice; therefore, we will be doing some practicing. Since I don't expect you to be writing experts before we start, I will first provide a set of guidelines on how to write better papers. After this, you will do some writing of your own, critical reading other people's writing, try your hand at editing, and we will talk about all of it together in class.

- **Lecture:** I will give a series of lectures detailing how to write a paper from conception to submission.
- **Writing:** You will prepare a paper, or as much of a paper as is possible to write in a few weeks (I suggest starting immediately after the first class period and working on sections as we talk about them). If you have something you are already working on, you can modify or edit it based on my lectures. Whatever you turn in for critique, it should be your writing only, not something that has already been edited by an advisor or colleague. Each of you will need to sign up for a time when we will look at your paper in class and provide a detailed critique.
- **Critiques:** You will read papers by your classmates and answer a set of questions in preparation for an in-class critique. I will choose sections of each paper that need the most work and we will look at them in detail together.
- **Editing:** For each paper, two of you will provide a more detailed written critique instead. Using MS Word or an equivalent program, you will turn on the "track changes" function, suggest whatever edits you feel are appropriate, and make comments on the writing.

Sign-in Sheet: There will be a sheet for you to sign-in during each class period to get credit for attending - please don't forget to sign it each week!

1: Introduction, Story, and Planning Part 1 - *12 Apr, 2011*

1. What is scientific communication?
2. What is a scientific story?
3. Writing style
4. Planning your manuscript part 1 - Preparing and choosing your figures

2: Planning Part 2, Style, Methods, and Results - *19 Apr, 2011*

1. Planning your manuscript part 2 - Determining your questions, hypotheses, and objectives
2. General writing style
3. Writing your methods
4. Finishing your results

3: Introduction, Discussion, and Referencing - *26 Apr, 2011*

1. Writing an introduction to your study
2. Writing your discussion and conclusions
3. Referencing your work

4: Abstract, Submission, In-Class Critique #1- *10 May, 2011*

IMPORTANT: CLASS WILL MEET TODAY IN ROOM E013a AT AUGUST-BEBEL-STR. 4, NOT AT THE GRADUATE ACADEMY!

1. Writing and abstract
2. Submitting your paper, writing a cover letter
3. In-class critique #1

5: In-Class Critique #2 - *17 May, 2011*

1. Student paper critiques

6: In-Class Critique #3 - *24 May, 2011*

1. Student paper critiques

7: In-Class Critique #4 - *31 May, 2011*

1. Student paper critiques