

GRADUATE COMMUNICATION SKILLS DEVELOPMENT:
SCIENTIFIC WRITING PROJECT
SPRING 2008

Objective:

Improve the written scientific communication skills of the graduate students.

Synopsis:

Graduate students and their advisors will jointly develop a collaborative scientific writing project. The semester long process begins with a draft of a scientific document that is revised once during the semester after critiques are made available to the student. Student revisions will incorporate critiques of scientific content by the mentor, and critiques of the grammar and composition by the writing coach (Josefina Dominguez, JD). Suggested length for PhD students: 4000 (~8 single spaced pages), for MS students 2000 (~4 single spaced pages)

A 200-300 word abstract that summarizes the scope, length and format of the written assignment should be prepared by students and advisors (due February 25). Students and advisors jointly will develop the time table for the semester. The time table should allow for 1 revision by the April 30, 2008 deadline.

Potential projects include fellowship applications, thesis chapters, or manuscripts. Projects that will be used for examinations must be endorsed in writing by the examining person or committee.

Alternative approach if advisor cannot work with the student on the writing project:

In the event that a student's advisor is unable to facilitate their scientific writing for the class by reviewing one draft of the writing project this semester, proceed with the following alternative writing task: Identify a scientific subject of interest to you, then prepare a literature review of at least 3 original scientific papers on the topic.

For the review format, please adhere to the criteria for the journal Science:

http://www.sciencemag.org/about/authors/prep/gen_info.dtl#categories

“Reviews describe new developments of interdisciplinary significance and highlight unresolved questions and future directions. All Reviews undergo peer review. They include an abstract, an introduction that outlines the main point, and brief subheadings.”

Instructions for format:

http://www.sciencemag.org/about/authors/prep/prep_init.dtl#setting

Examples of reviews (login from NMSU-Net)

<http://www.sciencemag.org/cgi/reprint/316/5832/1713.pdf>

<http://www.sciencemag.org/cgi/reprint/314/5799/610.pdf>

Expectations of Participants:

Advisors, coach (JD), and students must commit time to the project. The assignment requires regular meetings between the student and advisor (1X) and the student and JD (1X). The mentor and JD will score the text with a rubric and will critique the work in person at a meeting scheduled by the student.

Assessment:

The advisors, the writing coach (JD), and Dr. Serrano will

- a) score the project using a standard rubric
- b) provide oral feedback at a meeting scheduled by the student.

Students will

- a) assess their scientific writing skills at the beginning and end of the project
- b) assess the efficacy of the critique and revision process

Responsibilities:

Student: project completion; schedule meetings with mentor and coach; submit abstract, drafts and revision according to schedule, respond to critiques

Advisor: work with student to provide oversight for scientific integrity, evaluate project within one week of submission, provide guidance for student in the craft of writing for the specific research field.

Coach: evaluate project within two weeks of submission, provide guidance for student in the improvement of grammar and composition

Abstracts:

Due: February 25 in class.

Content: The writing project abstract (~200 words) should address the format, length and scope of the project. Advisors must endorse the abstract in writing. Projects used for exams must so state in the abstract endorsed by the mentor.

Project Timetable

Abstract due:	February 25, 2008
Draft 1 due to advisors. Serrano, JD	March 19, 2008
Mentor critique due to student:	April 2, 2008
Serrano critique due to student:	April 9, 2008
JD critique due to student:	April 9, 2008
Revision:	April 30, 2008