**Course Overview**

This 7-week course is designed to introduce students to basic scientific writing skills and is ideal for second year graduate students preparing for qualifying examinations. Participants will review the general principles of clear, persuasive writing, and will apply these principles to writing for a scientific audience. Particular emphasis will be placed on conveying the significance of your research, outlining the aims, and discussing the results for scientific papers and grant proposals. The course will also provide an overview of the structure and style of research grant proposals and scientific manuscripts. Classes are highly interactive, and the majority of class time will be spent discussing student scientific writing. The goal of the course is to encourage active and open interaction among students. Ideal endpoints include improved self-editing, and development of effective strategies for offering and receiving editorial recommendations among peers.

**Course Directors:**

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**Required or Recommended Reading Materials:**

1. The Course Syllabus, including Five Principles of Clear Writing  
The syllabus will be distributed at the first session, as will other short reading materials.

**Class Organization:**

The whole class will meet on **Friday January 13 at 1 pm in BRB251** for a discussion about the class organization and an introduction to principles of clear writing. The small groups will start meeting the following week on Wednesday, Thursday, or Friday from 1 – 2:30 pm. Each group will be lead by at least two instructors

**Specific Writing Assignments:**

Writing assignments will be designated within each section. Students should email writing assignments to their instructors and students in the section in advance of class (due dates tabulated below), allowing instructors and students to read them in advance of the in-class critique. Students whose samples are not discussed in a particular week will be read and critiqued by instructors only. Students can also arrange to meet with instructors individually to discuss their writing.

<table>
<thead>
<tr>
<th>Section meeting day</th>
<th>Assignment Due date</th>
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<tbody>
<tr>
<td>Wednesday</td>
<td>Sunday, 3 PM</td>
</tr>
<tr>
<td>Thursday</td>
<td>Monday, 3 PM</td>
</tr>
<tr>
<td>Friday</td>
<td>Tuesday, 3 PM</td>
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**Grading Policy:** Grades are based on attendance, completion of assignments, and participation in class, not on the quality of the writing itself. While most students receive an A in this course, grade decrements will certainly result from 1) failure to meet due dates and times, 2) lateness to class by more than 20 min. or 3) missed class, without prior approval of instructors.
2012 Course Overview

- **Week 1: Introduction**
  - **Large group meeting – January 13, 1 – 2:30 pm, BRB251**
    - Discuss Course goals
      - Weekly topics
      - Logistics (required reading, assignment deadlines, grading policy)
    - Introduce key terms that students will encounter in first assignment
  - **Homework assignment for next week**
    - Read “Five Principles of Clear Scientific Writing” in Syllabus
    - Read “The Science of Scientific Writing” by Gopen and Swan

- **Week 2: Principles of Clear Scientific Writing**
  - **Small group session – January 18-20, 1 – 2:30 pm**
    - Review “Principles of Clear Scientific Writing”
    - Discuss Re-writing Exercises
  - **Homework assignment for next week**
    - Read “Parts of a Grant Proposal and Significance and Innovation”, with examples
    - Write a one page narrative comprising Significance and Innovation and a Title placing your research in context

- **Week 3: Parts of a Grant Proposal – Significance and Innovation**
  - **Small group session – January 25-27, 1 – 2:30 pm**
    - Discuss “Significance/Innovation” write-ups
  - **Homework assignment for next week**
    - Read “Parts of a Grant Proposal – “Preliminary Data (for grants) Results” in syllabus
    - Write 1-2 paragraphs of Results text with an accompanying Figure and Legend. You can use your data, a colleague’s data, or made-up data. Again, use a title.

- **Week 4: Parts of a Grant Proposal – Preliminary Data**
  - **Small group session – February 1-3, 1- 2:30 pm**
    - Discuss Results text, Figures and Legend
    - Discuss questions regarding “Parts of a Grant Proposal - Preliminary Data”
  - **Homework assignment for next week**
    - Read “Parts of a Grant Proposal – Specific Aims and Research Design” in syllabus
    - First group of students ONLY: Write a Specific Aims page describing your research

- **Week 5: Parts of a Grant Proposal – Specific Aims 1**
  - **Small group sessions – February 8-10, 1 – 2:30 pm**
    - Address questions regarding “Parts of a Grant Proposal – Specific Aims, Research Design”
    - Discuss Specific Aims from first group of students
  - **Homework assignment for next week**
    - Read “How to write Approach (grants) and Discussion (papers)
    - Second group of students ONLY: Write a Specific Aims page describing your research

- **Week 6: Parts of a Grant Proposal – Specific Aims 2**
  - **Small group sessions – February 15-17, 1 – 2:30 pm**
    - Discuss Specific Aims from second group of students
  - **Homework assignment for next week**
    - Read “How to write an Abstract (grants and papers)”
    - Third group of students ONLY: Write a Specific Aims page describing your research

(Continued…)
• **Week 7: Parts of a Grant Proposal – Specific Aims 2**
  o **Small group sessions – February 21-24, 1 – 2:30 pm**
    ▪ Discuss Specific Aims from third group of students

### Section Leaders

**Section 001**  
**Wednesday**  
1 – 2:30 pm  
Stellar-Chance 204  
Anna Malykhina  
Anna.Malykhina@uphs.upenn.edu  
Vickas Patel  
patelv@mail.med.upenn.edu

**Section 002**  
**Thursday**  
1 – 2:30 pm  
Stellar-Chance 104  
Jonathan Katz  
jpkatz@mail.med.upenn.edu  
Sparky Lok  
jlok@vet.upenn.edu

**Section 003**  
**Thursday**  
1 – 2:30 pm  
Stellar-Chance 204  
Phillip Mason  
MasonP@email.chop.edu  
Hansell Stedman  
hstedman@mail.med.upenn.edu

**Section 004**  
**Friday**  
1 – 2:30 pm  
Stellar-Chance 204  
Dennis Kolson  
dennis.kolson@uphs.upenn.edu  
Struan Grant  
grants@email.chop.edu  
Andrew Wells  
adwells@mail.med.upenn.edu