Medical Writing for Clinical Research-Fall 2013

Farrell Teaching-Learning Center  Room 202A/B Weds 5:30p-8:00p

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Objective: To provide student-specific guidance and experience with the process of developing a competitive research grant proposal. Students will engage in practical writing experiences that cover many sections of a research grant application, manuscript writing, and reporting scientific findings to the public.

Structure. This is an intensive writing course for graduate students, aspiring scientists, and research staff involved in a biomedical research program or team. Students must have access to an internet-accessible computer with word processing and reference manager software (e.g., EndNote, Reference Manager, Zotero). Class meetings focus on instruction, guidance, and problem-solving for each aspect of scientific writing. Out-of-class assignments focus on implementing the instruction points and composing a mock NIH grant application, a manuscript, and a scientific report for the public. Students will select and develop their own research topic area. All writing assignments are based on this individually selected research topic area. At the end of the course, each student will have a comprehensive portfolio that includes a grant proposal, manuscript, and press release to the public.

Grading. There are no tests. Attendance and participation in class are strongly encouraged. Grades are based on successful completion of each writing assignment. The Instructor determines whether a submitted writing assignment has been successfully/satisfactorily completed. Writing assignment drafts are submitted electronically to the Instructor, evaluated and edited, and returned to the student for revision/resubmission. This individually-directed guidance is focused on refining and enhancing each student’s scientific writing skills. The Instructor may share submitted drafts with other students to provide examples and to solicit peer review/feedback. Multiple drafts of each submitted document may be required to improve a student’s writing skills, to fine-tune the final document, and to complete the assignment before moving onto the next writing assignment. There are nine writing assignments made over the course of the semester. Missed/incomplete/unsatisfactory writing assignments detract from your final grade.

Satisfactory completion of (8-9) 91-100% of writing assignments = A
Satisfactory completion of (7) 81-90% of writing assignments = B
Satisfactory completion of (6) 71-80% of writing assignments = C
Satisfactory completion of (5) 61-70% of writing assignments = D
Satisfactory completion of (4 or less) <61% of writing assignments = F
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<th>Week</th>
<th>Topic</th>
<th>Goal/Assignment</th>
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| #1 Aug 28 | **Introductions**  
Use of Blackboard  
Student Needs Assessment:  
What are you writing for? | Consider topic for research proposal              |
| #2 Sept 4 | **Selection of research grant topic**  
Guidance and Instruction | Finalize/select a research grant topic area       |
| #3 Sept 11 | **Background and Significance of the topic.**  
- Literature searches  
- Becker Library Information Technology | Compose Background/Significance section for selected topic area |
| #4 Sept 18 | **Using Reference Manager Software and PMCID requirements** | Incorporate Reference Manager citations into Background-Significance section |
| #5 Sept 25 | **Developing an Hypothesis** | Compose 1-2 Hypotheses for selected topic area   |
| #6 Oct 2 | **Specific Aims** | Compose 1-2 Specific Aims for selected topic area |
| #7 Oct 9 | **Letter of Intent**  
Abstract/Description  
Lay Summary | Compose a LOI, Abstract, Lay Summary for selected topic area |
| #8 Oct 16 | **Issues surrounding plagiarism and ‘ghost writing’** | Submit all composed sections to Blackboard plagiarism detection system. |
| #9 Oct 23 | **Research Design/Methods**  
Writing an Investigator initiated proposal for Pharm Industry – Guest Lecture | Compose Research Design/Methods for selected topic area |
| #10 Oct 30 | **Data collection, analysis, presentation & interpretation** | Students are provided with sample raw data and data analysis for their research project |
| #11 Nov 6 | **Converting research data into a manuscript for publication in a scientific journal**  
Selecting an audience/journal | Compose manuscript Introduction and Methods sections |
| #12 Nov 13 | **Incorporating research findings into existing literature** | Compose manuscript Results and Discussion sections |
| Nov 20 | **THANKSGIVING BREAK** | No class                                          |
| #13 Nov 27 | **Manuscript submission-**  
- Instructions for Authors  
- Copyright transfer  
- NIH Clinical Trials-registration  
- Conflict of Interest-Disclosure  
- Acknowledgment/Funding sources  
- Public Access requirements | Compose Abstract section  
Finalize/complete manuscript for submission |
<p>| #14 Dec 4 | <strong>Converting scientific findings/publications into lay press.</strong> | Convert research findings to press release for public consumption |</p>
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| #15 Dec 11 | Informing the public:  
Guest speaker from WashU Public Affairs office |
| #15 Dec 11 | Miscellaneous topics:  
- Adobe Acrobat and pdfs  
- Electronic submissions  
- Progress reports |
| #16 Dec 18 | All documents must be finalized, approved and accepted before Dec 18 @ 5 pm |