CELL 426-01, Principles of Biomedical Writing  
Fall 2009

**Catalog Description:** An examination of various types of scientific literature, scientific writing and presentation. Exploration of scientific databases such as PubMed. Emphasis on critical reading of scientific literature and writing in a scientific style.

**Prerequisites:** CELL 301 or 311 or 401

**Instructor:** Nancy Hopkins  
Office: Stern Hall, Room 4009  
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Office Hours: Tues. 10-11:30 am or by appointment

**Textbook:** *A Short Course to Writing about Biology* by Jan A. Pechenik

**Learning Outcomes:**
- Critically read a scientific journal article
- Competently use scientific literature databases to research the literature of biomedical topics
- Evaluate and discuss the content of journal articles
- Use web based resources appropriately
- Prepare and present a poster presentation
- Prepare and present a scientific platform lecture
- Prepare and revise a scientific literature review
- Understand the ethics of scientific research and writing

**Program Outcomes:** This course addresses the following of the Cell and Molecular Biology Department:

1. Keeping up with the literal explosion of information, and recognizing the need for continued education.
2. Communicating precisely and effectively.
3. Possessing professional and ethical responsibility.

**Program Objectives:** To provide our students with broad knowledge in the cellular and molecular basis of life and the intelligence to apply molecular techniques to medical, technological and environmental issues. Students who graduate from the program will be fully successful in 1) pursuing further education in graduate school or professional school and 2) developing a career in a biomedical research field or pharmaceutical industries.

**Tulane Honor Code:** Students are expected to adhere to the principles of the Tulane Honor Code at all times. Any violations of this code will not be tolerated. Special care will be taken in properly recognizing and citing literature sources that are used. You must report violations to the code as outlined within the code. A copy of the Tulane Honor Code may be obtained from the Newcomb-Tulane College Dean’s office or at [http://college.tulane.edu/honorcode.htm](http://college.tulane.edu/honorcode.htm).

**Attendance:** Attendance is expected at all class meetings.
**Late Papers:** Late papers will carry a penalty of 5% deduction for each 24 hours or fraction thereof past the deadline. No paper will be accepted one week after the deadline. No paper will be accepted after the end of the designated final exam period.

**Tentative Class Schedule:**

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<th>Week</th>
<th>Topic</th>
<th>Reading</th>
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<tr>
<td>1</td>
<td>Introduction &amp; Citation Indices</td>
<td>Chapters 1 &amp; 2</td>
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<tr>
<td>2</td>
<td>Citing References &amp; Reading and Note Taking</td>
<td>Chapter 3-5</td>
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<td>3</td>
<td>Writing Critiques and Summaries; Ethical Issues</td>
<td>Chapter 7</td>
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<td>4</td>
<td>Writing Essays and Review Papers; Ethical Issues; Critiques</td>
<td>Chapter 8</td>
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<td>5</td>
<td>Reading and Writing Research Papers; Critiques</td>
<td>Chapter 9</td>
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<tr>
<td>6</td>
<td>Reading and Writing Research Papers; Ethical Issues; Critiques</td>
<td>Chapter 9</td>
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<tr>
<td>7</td>
<td>Preparing Poster Presentations; Preparing Oral Presentations</td>
<td>Chapter 12 &amp; 14</td>
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<td>8</td>
<td>Revisions; Poster Presentations</td>
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<td>9</td>
<td>Poster Presentations; Writing an Application</td>
<td>Chapter 15</td>
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<td>10</td>
<td>Oral Presentations; Writing a Research Proposal</td>
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<td>11</td>
<td>Oral Presentations; Science Journalism</td>
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<td>13</td>
<td>Oral Presentations; Answering Assay Questions</td>
<td>Chapter 11</td>
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<td>14</td>
<td>Review; Revising</td>
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**Assignments:**
- **Critiques:** There will be several informal paper critiques and three written paper critiques. Each critique will be approximately 1 ½ to 2 pages in length.
- **Poster Presentation:** Each student will present a scientific paper as a poster presentation. The written presentation will be graded as a written assignment. In addition, the oral presentation of the poster will be graded.
- **Oral Presentation:** Each student will present a scientific paper as a power-point presentation. In addition, a short (1 1/2 – 2 pages) summary of the paper will be submitted as a
- **Resume (CV):** Each student will write a resume or curriculum vitae.
- **Review article:** A review of a scientific area of interest will be completed in the style of a Journal of Biological Chemistry Mini-Review article. This is a review of an area of research that is written for scientists who practice outside the field of the paper. At least 25 sources must be referenced and at least nine of these must be published no more than five years previous to the review. This paper will be 12 to 15 pages. The paper will be returned with comments for revision. The revised paper will be due no later than the end of the designated final exam period. Interim deadlines and review meetings will be required.

**Grading:**
Grades will be based on class participation as well as written and oral assignments. Writing assignments will account for 60% of the grade. The poster and oral presentation will count as 25% of the grade and class participation will determine the remaining 15% of the grade.