

**OGLALA LAKOTA COLLEGE**  
Course Syllabus for

**Scientific Literature and Writing (Sci 273)**

**Spring 2010**

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*Instructor:* Alessandra Higa  
*Office Hours:* at the college center on Wednesday after class; at Piya Wiconi on Mondays and Fridays.  
*Class meet:* W 9:00am - 12:00pm (pictel HSCC-PSCC)  
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Course Description

Sci 273 Scientific Literature and Writing: This course will have two foci: (1) reading and interpreting current scientific literature (related to Life Science: ecology, biology, zoology, evolution, and botany) selected from a cross section of mainstream journals, and (2) preparation, written and orally, of research results in accepted scientific style. Research data will be either original student work or a compilation of current information on the topic selected by the student. Students will write one technical manuscript suitable for submission to a refereed journal.

Prerequisites and credits

Freshman English (Engl 103) and Freshman English II (Engl 113)

Required Text

Matthews, J. R. and Matthews, R. W. 2008. *Successful Scientific Writing: a step-by-step guide for the biological and medical sciences*. New York, Cambridge University Press. 240p. (ISBN: 978-0-521-69927-3)

Supplementary Materials

Supplementary materials will be given during the semester, as needed.

Descriptive Reading Load

It is imperative that you read the scheduled chapters and/or the scientific papers before coming to class in order to be prepared for discussion and participation. Reading is an important key to success in this class. Grade 14 reading level.

Research, Writing, and Presentation

You will be required to write and present your research on a scientific format suitable for submission to a refereed journal. Research data will be either original student work or compilation of current information on the topic selected by the student. You will be required to give 15-20 minutes power point presentation/or poster presentation on the elected research project.

### Lakota Perspective Provided Through: Wolakolkiciyapi

Students are encouraged to display the Lakota values of respect, knowledge, generosity, fortitude, truthfulness, and courage, as you perceive such.

### Class Attendance and Course Requirements

1. To succeed in this course, **regular attendance** is imperative, as your presence and participation is critical to your achievement. Part of your grades will be based on participation during class activities. In accordance with OLC policy, you will be dropped from the course if you miss more than three consecutive class periods or if you miss more than five class periods during the semester.
2. If you plan to miss class you must contact the instructor in advance by e-mail. It is **your responsibility** to make sure you receive all assignments and instructions.
3. No *Make-ups exams*.
4. All OLC and Math & Science departmental policies apply to this class.

### Evaluations and Markings

1. **Homework:** read peer-reviewed papers and write your own manuscripts in order to understand research process and its mechanisms.
2. **Class work:** participation on class activities: research, discussion, writing, presentation and more. Professors and researchers will be invited to give a lecture on their field of research. You must present a writing summary on the following week to the instructor.
3. **Research, presentation, and final manuscript:** Keep all your data, notes, and ideas in a notebook. This procedure helps you to organize, analyze data, and write during your research project. Besides your final draft paper, you will be required to give 15-20 minutes power point presentation/or poster presentation on an elected research project. These assignments are multifaceted: (1) you will gain experience in processing data/describe during your research; (2) you will learn how to analyze and interpret data; (3) you will learn how to come to a valid hypothesis according to the collected data and its interpretation; (4) through the above-mentioned steps, you will gain the computer skills to produce a power point presentation or a poster presentation for scientific meetings, and (5) you will develop your public speaking skills.
4. **Exams and grading procedures:** the class grade is equal to lectures (30%) and your research (70%) grades. The lecture grade will rest on *exercises in class*, one *midterm*, and one *final* (not comprehensive). The research grade will rest on your *class* and *homework*, the *final draft paper*, and *presentation*.

## Grading

<b>Grade</b>		<b>The following scale will be used:</b>	
Final Exam	15%	A	90% - 100%
Midterm	15%	B	80% - 89.9%
Class and home work	25%	C	70% - 79.9%
Final scientific paper	25%	D	60% - 69.9%
Presentation	20%	F	below 60%
<i>Total</i>	100%		

## Tentative Schedule

<b>Week</b>	<b>Chapter</b>	<b>Information</b>
1	1	Introduction; How to use library resources
2	1	Preparing to write: search and research
3	1	Preparing to write: Plan to succeed
4	2	Composing a first draft: Productivity tools and pitfalls
5	2	Composing a first draft: follow standard structure
6	3	Visual support for the written word
7	4	Visual support for the spoken word
8	5	<i>Midterm</i> , Revising to increase coherence
9		Improving word choice, and syntax style
10	6	<i>Spring break</i>
11	7	Attending to grammar, numbers, and other mechanics
12	8	The rest of the story
13		Special guest lecture
14		<i>Final Exam</i>
15		<i>Students presentation</i>
16		<i>Students presentation</i>

**\*Note:** Information contained in this syllabus was, to the best knowledge of the instructor, considered correct and complete when distributed for use at the beginning of the semester. The instructor reserves the right to make changes in the syllabus in collaboration with the class with reasonable notice to all concerned.