

OGLALA LAKOTA COLLEGE
COURSE SYLLABUS & ADMINISTRATION
Fall 2012

Name of Course: JUNIOR RESEARCH METHODS

Course Number: NSci. 393

Department: Math and Science



Credit Hours: 3

Location: OLC-Rapid City College Center

Time & Day: W: 9:00-12:00 PM

Instructor's Name: Deig Sandoval

Phone: 605-455-6134

Office Hours: Monday 9:00-12:00 PM

Email: deig@olc.edu

Office: Math/Science, Piya Wiconi

Course Description:

This course introduces students to fundamental practices of research, including, the scientific method, research design, sampling data analysis and interpretation, manuscript preparation, and professional presentation. Participation in a closely mentored research project is preferred: it may be taken currently with NSci. 493

Prerequisites:

NSci. 273 ("C" or better).

Required Text and Materials: Practical Research, Paul D. Leedy and Jeanne Ellis Ormrod, Ninth Edition, Pearson 2010.

Course Rational/Goal:

Students leaving this course will have an excellent foundation in the fundamentals of research design, sample data analysis and interpretation, manuscript preparation, and professional presentation. Also, it will provide students with the computational skills to request scientific and technical information as well as to analyze it.

Course Objectives

Upon completion of this course students will be able to:

- 1) To carry out peer reviewed literature in the area of the topic in science under study.
- 2) To summarize literature reviews (introduction, data discussion etc.)
- 3) Properly use design and write a research proposal.
- 4) To design a qualitative research. Hypothesis and expected data to be used. Proper scale, space distribution in writing tables and figures for research proposals in a qualitative manner.
- 5) To design a qualitatively research project. Prepare and deliver conference presentations at professional meetings.

Assessment:

a. Assignments:

Weekly homework assignments are based on benchmarks established by the student and the faculty mentor. The purpose of these assignments is to move the research project forward. Each weekly assignment is worth approximately 5 % of the final grade. Handing in the assignment after the due date will result in an automatic **10 point deduction** for each week the assignment is late. The instructor is always available for help on homework via email or through a telephone interview (please email to set-up an interview time).

b. Discussion of assignments:

Discussion of subject portion of the class is very important. This is an opportunity for us to share our perspectives with one another and to learn from one another.

Assignments.....	50%
Final paper.....	40%
<u>Attendance.....</u>	<u>10%</u>
Total.....	100 %

Instructional Methodology:

Instruction will be by means of lecture, classroom discussion and interaction with internet information data bases. Data problem solving demonstration using electronic pages such as excels and mathematical software as Sigma plot.

Reading Load

Students will be expected to read at a Grade14+ level.

Students will read and comprehend scientific literature pertaining to their particular project.

Students will be expected to read all sections covered in lectures before coming to class. Sections on the textbook

Type & Amount of Writing Load

The nature of this course offering requires that a considerable amount of writing to be completed as homework. Students will also be expected to produce graphics (charts, tables, figures) to support their written work. For distance students homework can be submitted using email or fax. The fax number for homework submissions is 605-455-2603.

Homework is an opportunity to practice professionalism. All homework should be completed in paragraph form, which consists of:

- i) A topic sentence.
- ii) 3-5 body sentences
- iii) A conclusion or transition sentence.

Lakota Perspective Provided Through

Conducting this course based on the values of mutual respect and generosity, seeking to advance each individual's knowledge through their continuing hard work (fortitude) and willingness to learn new, challenging information (bravery); all undertaken in an environment of complete truthfulness, trust and integrity. Waunspe wicakiyapi ki iglutanyan ihani unpi kun hena itan waunspe tokeca uha ayin kte. We will do this by embracing the teaching of our ancestors as we learn new ways.

Evaluation and Grading

Grading Criteria

The following scale will be used:

A = 90% - 100%; B = 80% - 89.9%; C = 70% - 79.9%; D = 60% - 69.9%

F = below 60%

Final Exam:

In order to insure that students have obtained the required skills different types of written information will be used for final evaluation. For example, Agency report, peer reviewed publishing paper, a short basic research proposal or an oral professional presentation.

Homework:

Home work will be assigned at a rate of 15 problems per item of chapter covered. Corrected homework will be returned to the students a week later of the due date. Late homework will not be returned as the ones that are handed in on time. **Home work will used to improve the final grade in 10% (if the student scores over 60% of the departmental exam).**

Written exercises

Students will be given assignments to be handed in a written form.

Course Requirements, Expectations or Students:

This course is supported by classroom discussion and interaction. Students are expected to complete weekly homework on time. Making up missed assignments is at the Instructor's discretion.

Class Attendance:

Class attendance will be documented through attendance at Piya Wiconi each week. In accordance with OLC policy, you will be dropped from the course if you miss more than three consecutive class periods. If you miss more than five class periods during the semester, you will also be dropped from the course.

Assignments

Weekly homework assignments are based on benchmarks established by the student and the faculty mentor. The purpose of these assignments is to move the research project forward. Each weekly assignment is worth approximately 5 % of the final grade. Handing in the assignment after the due date will result in an automatic **30 % point deduction** for each week the assignment is late. The instructor is always available for help on homework via email or through fax services. Because OLC offers classes in three-hour blocks once per week, (for everyone's travel convenience), if you are absent from one OLC class session, it's like missing three classes at another college. (See student handbook).

- Unannounced graded in-class exercises will be given; content can include any course material assigned, up to and including the current session.
- Your homework assignments must be turned in on the dates due to get full credit. Late homework will be taken as 30% of whole value.
- You are expected to participate in class discussion; this provides evidence of your interest in and preparation for the class. It also helps gauge the effectiveness of the instruction and everyone's level of comprehension of the material presented.

- Most importantly, fellow class members benefit from your opinions and insights; in addition, the questions you ask may be about the same topic with which other students are having difficulty, so by helping yourself you also help them.
- If the Instructor is not present at the beginning of the class, and the College Center Staff has not heard from the Instructor, you should wait at least 30 minutes past the normal start-time and then if the Instructor has still not arrived, you may leave.

Attendance and Tardiness

http://www.olc.edu/~wwhitedress/studentervices/Docs/OLC_Handbook.pdf see pages 6 and 7

College Policy on Grading and Change of Grades:

http://www.olc.edu/~wwhitedress/studentervices/Docs/OLC_Handbook.pdf see page 9 and 10

Policies on Academic Honesty:

http://www.olc.edu/~wwhitedress/studentervices/Docs/OLC_Handbook.pdf see page 38

Standards of Conduct Policy:

http://www.olc.edu/~wwhitedress/studentervices/Docs/OLC_Handbook.pdf see page 32

ADA Policy:

http://www.olc.edu/~wwhitedress/studentervices/Docs/OLC_Handbook.pdf see page 32

Course/Instructor Evaluations:

http://www.olc.edu/~wwhitedress/studentervices/Docs/OLC_Handbook.pdf (will be added this spring)

Class Schedule

<i>Date</i>	<i>Objectives by Chapter</i>	<i>Assignments</i>
Oko Wanci 08/29/2012	Sections on Text book: Chapter 1, pages 1-11 To introduce students to the important terms definitions and implementation to be used in the course	Select the one of the following format: Agency report, peer review research paper, professional oral presentation and short project proposal.
Oko Nunpa 09/05/2012	Sections on Text book: Chapter 2, pages 12-43 To introduce students to the use of different tools of research and their use in the material of their interest	Five questions to be answered at home related to chapter two.
Oko Yamni 09/12/2012	Sections on Text book: Chapter 3, pages 44-65 To introduce the student to the axis around the problem which the whole research efforts revolves	Five questions to be answered at home related to chapter three.
Oko Topa 09/19/2012	Review of chapters 1-3 and class test	A review discussion of chapters 1, 2 and 3 and a written test on these chapters.
Oko Zaptan 09/26/2012	Sections on Text book: Chapter 4, pages 66-84 To introduce the students to a deeper review of the literature and understand findings to make it easier to find solution to the research problem	To hand in a summary of literature reviewed for their final test
Oko Sakpe 10/03/2012	Sections on Text book: Chapter 5, pages 85-115 To introduce the student to the planning of the process of	To answer and hand in a take home test of nine questions

	research.	whether a proposed research project is realistic and practical
Oko Sakowin 10/10/2012	Sections on Text book: Chapter 6, pages 116-134 To introduce the student to communication of the planning of their research using the mechanisms of research dialogue as a precision instrument throughout the writing.	To answer and hand in a take home test of twelve questions whether a proposed research project is realistic and practical
Oko Saglogan 10/17/2012	Review of chapters 4-6 and class test	
Oko Napcinyunka 10/24/2012	Sections on Text book: Chapter 7, pages 135-163 To introduce the student to the skill of going deeper into answering the research question that led to the formulation of the hypothesis.	To answer and hand in a take home test of twenty six questions to evaluate the quality of your research study
Oko Wikcemna 10/31/2012	Sections on Text book: Chapter 9, pages 182-222 To introduce the student to the skill of going deeper into more quantitative approach to analyzing the data available by being more descriptive.	To answer and hand in a take home test of 9 questions to evaluate the quantitative data of your research study
Oko Ake Wanci 11/07/2012	Sections on Text book: Chapter 10, pages 223-252 To introduce the student to the skill of going deeper into more quantitative approach to analyzing the data available by being more descriptive.	To do an exercise by downloading public domain data from the internet (sites will be given) and analyzing such data
Oko Ake Nunpa 11/14/2012	Sections on Text book: Chapter 11, pages 253-290 To introduce the student to the skill of useful strategies for analyzing quantitative data	To answer and hand in a take home test of eight questions to evaluate the quantitative data of your research study and showing the strategy used to accomplish you analysis.
Oko Ake Yamni 11/21/2012	Review of chapters 4-6 and class test	
Oko Ake Topa 11/28/2012	First draft of your final paper due.	To make corrections and consider suggestions.
Oko Ake Zaptan 12/5/2012	Final paper due as final evaluation	

Disclaimer: 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. However, this syllabus should not be considered a contract between Oglala Lakota College and any student. The instructor reserves the right to make changes in course content or instructional techniques without notice or obligation. Students will be informed of any such changes. Additional student rights and responsibilities are outlined in the Student Handbook.

http://www.olec.edu/~wwhitedress/studentservices/Docs/OLC_Handbook.pdf