

## SYLLABUS

**SEMESTER:** Fall 2016  
**COURSE NUMBER:** KIN 498  
**TITLE:** Senior Research/ Project I  
**CREDIT HOURS:** 3 credits  
**PREREQUISITES:** Senior standing, Enrolled in or complete KIN 381 (A statistics class will be accepted as a completed prerequisite).

<u>INSTRUCTOR</u>	<u>PHONE</u>	<u>E-MAIL</u>
<b>Dr. Clay Robinson</b>	792-2382	clrobinson@lsc.edu

**Office:** Room 119 Activity Center West

**Hours:** Monday – Thursday 10:00-12:00, & Friday by appointment

### COURSE DESCRIPTION

Senior research is a required course for all Senior Kinesiology Majors in non teaching emphasis. This course is designed to be followed by KIN 499 Senior Research/Project II. Students are introduced to basic research methods and current topics in their field of study. Students select a topic and prepare a detailed written review of the related literature and description of the study/project design. This course is writing intensive.

Depending on interests and chosen career path, three options are available to students for completing their research and presentations.

**Option 1:** An independent research project including a review of related literature, collection and analysis of data and a final oral presentation.

**Option 2:** Meta-Analysis: using published research to analyses and input into a combine data set to strengthen current research in the field

**Option 3:** Qualitative research: personal interviews or case studies with detailed control of internal and external validity.

**All three options require a review of literature and a written and oral presentation. Students can work in groups no larger than three (Unless special approval because of depth and time of data collection) to complete senior research projects and presentations. A rubric will be used to assess each individual's contributions to the completed project during Senior Research/Project II.**

## **PURPOSE OF THE COURSE**

This course and Kin 499 are the capstone courses for Kinesiology majors. These courses are designed to prepare graduates for understanding and applying current research to their future careers in kinesiology and health sciences fields.

## **REQUIRED TEXT**

Students will use library resources and the internet to investigate their personal research topic. Additional materials related to study design; methods and statistics will be provided by the instructors.

## **METHODS OF INSTRUCTION**

<b>Lecture</b>	<b>25%</b>
<b>Classroom discussion and activities</b>	<b>25%</b>
<b>One-on-one consultation with students outside of class</b>	<b>20%</b>
<b>Research, lab work, literature reviews</b>	<b>30%</b>

## **COURSE OBJECTIVES**

Senior Research/**Project I** and **II** will assist students in basic research and presentation methods including:

1. Selecting a topic of personal interest for conducting research
2. Determining need for a research study on a particular topic
3. Using the internet and library systems to gather information
4. Demonstrating computer skills in gathering data, writing reports and determining appropriate statistical model
5. Writing a research report in appropriate technical form (**Chapter 1**)
6. Utilizing correct data collection and analysis procedures
7. Developing a thorough internet search and identifying relevant primary research articles
8. Identifying primary dependent and independent variables and measures to account for confounding variables
9. Prepare and submit an IRB approval form if necessary to conduct primary research
10. Obtain Human Subjects training and certification through the National Institute of Health

## **COURSE REQUIREMENTS**

**This syllabus includes the requirements and assignments for the first required research courses (Kin 499-I) to aid students in a better understanding of what needs to be accomplished during the fall semester to complete senior research II in the spring semester. Also included is information for the completion of the individual portfolio.**

**Requirements for the first semester of senior research course to be completed in the fall include:**

1. Identify research design and review of the literature, documentation of sources (APA)
2. Selection and approval of a research topic
3. Draft proposal for a research project
4. In-class discussion
5. Submission and approval of IRB committee if necessary
6. Write a purpose statement
7. Identify dependent and independent variables
8. List terms, delimitations, and limitations
9. Develop both a null and statistical hypothesis as well as sub problems
10. Complete chapter one with reference list.
11. Complete on line Human subjects ethical training

### **Course Schedule for KIN 498 Research/Project I (fall Semester)**

#### **Topical Outline:**

Week 1 - Definition of Kinesiology areas of research and Research Methods  
Unscientific and Scientific Methods of problem solving

**Group activity** (Students can work in groups no larger than three to complete research projects). **Determine who you are a qualitative or quantitative researcher.)**

#### Week 2 - **Types of research**

Historical Research

Meta-Analysis

Descriptive Research

Experimental and Quasi-Experimental Research

Qualitative Research

Quantitative Research

**Assignment 1- Choose Topic** (each group will select a topic of personal interest or research). Groups must receive approval of the topic from the instructor

**On line 1 : Obtain your Human subjects ethics certificate 25 points**

Week 3 - Developing the problem

Identify the Research Purposes

Stating the Research Problem

Presenting the Research Hypothesis (both statistical and null hypothesis)

Independent and dependent variables (need 20-30 participants for every independent variable)

**Assignment 2 – Write the research problem statement and include both the statistical and null hypothesis as well as identify dependent and independent variables**

Week 4 – Introduction and Literature Review

Literature Search Strategies

Reading Research reports

Evidence Based articles

**Assignment 3 – Identify four evidence based articles addressing your group's research problem**

Week 5 – Continuation of the Introduction and Literature Review

Writing the Introduction

Justifying the Significance of the Study

**Assignment 4 – Write the introduction including your Literature Review  
Minimum of two pages**

Week 6 – Presenting the Problem

Choosing the Title

Terms

Basic Assumption, Delimitations, and Limitations

**Assignment 5 – Choose a title for your study; define terms, assumptions, and limitations**

Week 7 – Formulating the Methods

Describing Population and Participants

Describing Procedures

Sample and Sampling

**Assignment 6 – Describe the subjects and procedures**

Week 8 – Instruments

Describe the instruments

**Assignment 7 – Describe your instruments**

Week 9 – Ethical Issues in Research

Scientific Dishonesty

Human Subjects

IRB – who, what, where, when, and how

**On line 2– Write an IRB proposal for your study 50 points**

Week 10 – Instrument’s validity and reliability

Validity

Reliability

Controlling for internal and external validity – test at the same time, same temperature, same procedures, etc.

**Assignment 8 – Describe your instrument’s validity and reliability**

Week 11 – Continuing with Formulating the Methods

Describing Research Design and Analysis

Establishing cause and effect

**Assignment 9 – Describe your research design and analysis**

Week 12 – Choosing Statistical Concepts

Random Sampling

Basic Concepts of Statistical Techniques

Correlations

Multiple Regression

t-tests

Analysis of Variance

Analysis of Covariance

Multivariate Analysis of Variance

Multivariate Analysis of Covariance

**Assignment 10 – Determine which Statistical analysis your research project will use**

Week 13

**Writing an abstract 25 points**

Week 14

**Complete chapter one 100 points**

**Week 15 Submit paper**

## **Assignments for KIN 498 Research/Project I**

### **Draft Proposal for Your Research Project**

Following approval of your topic, use the WEB and the Library to investigate your topic. By the official due date you must submit your typed draft review of literature in the format below:

#### **Title Page**

Your title page must include:

- ❖ Your name
- ❖ address, phone, e-mail
- ❖ The Draft title of the project

#### **Introduction should include:**

- Statement of the Problem: A topic sentence stating the problem you will be investigating
- Purpose of the Study: State your project's objectives and what you would like to demonstrate
- Need for the Study: Include the potential impact of the project or how the project will be helpful to society, the school, the profession, etc.
- Definition of Terms: Define any terms you believe would be useful in understanding your research. Be sure to site sources.

#### **Review of Literature**

Using the library and the internet, prepare a summary of the information relevant to your research project. Include past research on your topic or closely related to your topic. You might want to include research that uses the same type of methods for collecting data that you plan to use.

Your review must be logically organized and the theoretical framework must make sense.

Depending on your topic, you will probably have enough information to fill at least 6 pages, double spaced.

#### **Methods and Procedures**

Explain the methods you plan to use to collect your data. (These may change as you learn more about data gathering techniques next semester)

#### **References**

Each review of literature must have of 10 total non-Internet citations and Internet citations.

## **GRADING**

<b>Component</b>	<b>Points</b>
Assignments (10)	100
Abstract	25
Draft proposal for a research project (Chapter 1)	100
In-class discussion (Participation in presentations)	25
On line training	25
On line IRB proposal	50
<b>Total Available Points</b>	<b>325</b>

The grading scale shall be:

### **GRADE RANGES:**

93%- 100%	=A	Exemplary
90%- 92.9%	=A-	
87%- 89.9%	=B+	Proficient
83%- 86.9 %	=B	
80%- 82.9 %	=B-	
77%- 79.9%	=C+	
74%- 76.9%	=C	Good, Average
70%- 73.9 %	=C-	
65- 70%	=D	Below Average,
0- 64.9	=F	Failing, No academic Credit

## LEWIS-CLARK STATE COLLEGE Syllabus Addendum

### Consumer Information

In 2008, the federal government required all post-secondary institutions offering federal financial aid programs to provide key data to both prospective and current students. To comply with this requirement, Lewis-Clark State College has developed a consumer information page, which may be accessed at <http://www.lcsc.edu/consumer-information/>

### Disability Accommodations

Students requiring special accommodations or course adaptations due to a disability and/or a health-related issue should consult their course instructors and the LCSC Student Counseling Center immediately (RCH 111, 792-2211). Official documentation may be required in order to provide an accommodation and/or adaptation.

### Student Rights and Responsibilities

Students have the responsibility for knowing their program requirements, course requirements, and other information associated with their enrollment at LCSC. Students should review the LCSC General Catalog (<http://webdev.lcsc.edu/catalog> and the LCSC Student Handbook (<http://www.lcsc.edu/media/2157659/Student-Handbook.pdf>) for more information.

### Accidents/Student Insurance

Students participating in LCSC classes normally must look to their personal health insurance policy (Student Health Insurance Plan or comparable private coverage) should an accident occur. In the event of an accident, please seek medical help, if necessary, and report the incident to LCSC Security (792-2226). Fieldtrips or other special student activities may also require students to submit a signed participation waiver (forms can be obtained from the supporting Division Office).

### Enrollment Verification/Attendance

Students who are not actively pursuing their classes may have to repay part or all of their financial aid awards depending upon the circumstances.

### Academic Dishonesty

Academic dishonesty, which includes cheating and plagiarism, is not tolerated at LCSC. Individual faculty members may impose their own policies and sanctions regarding academic dishonesty after offering the student an opportunity to explain his or her actions. Sanctions imposed by the faculty member are limited to grades on the assignment(s) in question and/or on the course grade. On matters of academic dishonesty, faculty members do not have the authority to dismiss a student from class indefinitely nor to disenroll a student from a program without corroboration from a Division Chair (or program ethics committee where applicable), the appropriate instructional dean, and the Vice President for Student Affairs. Students who are accused of being academically dishonest may be referred to the VP for Student Affairs for official disciplinary action.

### Illegal File Sharing

Students using LCSC's computers and/or computer network must comply with the college's appropriate use policies and are prohibited from illegally downloading or sharing data files of any kind. Specific information about the college's technology policies and its protocols for combating illegal file sharing may be found on the VP for Student Affairs' web page (<http://www.lcsc.edu/student-affairs/student-code-of-conduct/>).

### Diversity Vision Statement

Regardless of race, color, age, sex, religion, national origin, disability, veteran status, or sexual orientation, you will be treated and respected as a human being.

### Disclosures



During this course, if you elect to discuss information with me which you consider to be sensitive or personal in nature and not to be shared with others, please state this clearly. Your confidentiality in these circumstances will be respected unless upholding that confidentiality could reasonably put you, other students, other members of the campus community, or me in danger. In those cases or when I am bound by law to report what you have told me, such as incidents involving sexual assault or other violent acts, I will submit a report to appropriate campus authorities.

#### Student Feedback

Students shall be provided the opportunity to formally evaluate each course in which they are enrolled. Notification of student feedback opportunity and timelines will be made through the official LCSC student email (currently LCMail) or online course learning management (currently Blackboard Learn) systems.

#### Student Work

Student work for this course (assignments, quizzes, exams, projects, etc.) may be copied and retained for program assessment or accreditation purposes. For more information, speak with the instructor or division chair.

Approved by VP for Student Affairs & Provost 7/07/2016