

University of Victoria
School of Exercise Science, Physical and Health Education
EPHE 573 - Research Methods in Kinesiology

Mondays 4:30 – 7:30 pm McKinnon 155

Instructor

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Office Hours: By appointment

Course Calendar Description

An overview of the qualitative and quantitative research approaches specific to the various disciplinary areas in the School of Exercise Science, Physical and Health Education. Underlying assumptions of both qualitative and quantitative research are discussed and the respective research processes are reviewed. Other topics include: the role of the researcher, selecting and developing a research problem, reviewing the literature, developing research hypotheses, research designs, issues in measurement, data collection, writing research proposals, research ethics and communicating the results of research.

Expectations

I believe that learning extends beyond knowledge of facts to the development of skills such as critical thinking, writing, and problem solving. I believe that teaching and learning are interactive processes and expect that students will come to class as partners in the process, prepared to engage in discussions and other activities on the topic of each class. At the graduate level I expect students to be willing and eager to actively pursue the knowledge, skills and experience in research that will underpin their graduate program and research.

Students will be expected to:

- Prepare for class appropriately - reading the assigned text chapters and articles
- Participate fully in class activities and exercises
- Present and discuss their work with their peers

Students can expect me to:

- Employ a variety of teaching methods to accommodate different learning styles
- Be available for individual consultation on topics
- Provide opportunities for experiential learning (working with the content)

Required Texts

None. However, if you feel you need a book...

Thomas, J. R. and Nelson, J. K. (2004) Research methods in physical activity (5th Ed.) Champaign, IL: Human Kinetics

Suggested Text

APA Style Manual (latest edition)

Required Readings

These readings will be assigned during the course and will be provided during the lecture time.

Course Website

www.krigolsonteaching.com

Purpose of the Course

This course is designed as a thorough introduction for first year graduate students in the School of Exercise Science, Physical and Health Education to the multiple ways of reading, designing, conducting, and communicating research in the diverse areas that comprise physical education, exercise and sport science, and recreation and health education. In addition, the course will deal with ethical, logical, and resources issues associated with the research process.

Learning Outcomes

1. Students will understand the underlying assumptions associated with both quantitative and qualitative research and be able to discuss the characteristics of both approaches
2. Students will be able to describe the methodologies associated with both qualitative and quantitative approaches.
3. Students will be able to read both qualitative and quantitative research and respond to the research in a critically constructive fashion.
4. Students will be able to write about the research in the various disciplinary areas of physical education, exercise and sport sciences, and leisure services administration in a critical manner and with the style appropriate to the disciplinary area.
5. Students will understand the ethical issues associated with doing human and animal research and will be able to make informed decisions regarding the appropriate treatment of participants involved in their research.
6. Students will be able to communicate research in both an oral and visual manner.
7. Students will be able to write a comprehensive review of the literature in the area of their choice.
8. Students will be able to formulate research hypotheses/propositional statements based on their review of the research literature and other sources of information.

9. Students will understand how to make informed choices about procedures, instrumentation and data analysis appropriate to their area of research and the approach taken in their research area.
10. Students will be able to construct and communicate, in writing and in a poster form, a research proposal in the area of their choice that is appropriate for the basis of the research that they will complete in their Masters program in the School of Physical Education.

Course Assignments and Evaluation

- 25% Written Thesis Proposal and Thesis Proposal Presentation
- 25% Ethics Proposal
- 25% Research Methods Exam
- 25% Thesis Defense

1. Thesis Proposal and Presentation

Students will write a thesis proposal and given a thesis proposal presentation. The written thesis proposal must contain the following sections:

1. *Title page*
2. *Abstract*
3. *Table of contents*
4. *Introduction*
5. *Thesis statement*
6. *Methods*
7. *Preliminary / predicted results and discussion*
8. *Work plan including time table*
9. *Implications of research*
10. *Reference list*

See the following website for more details:

http://www.ldeo.columbia.edu/~martins/sen_res/how_to_thesis_proposal.html

The thesis proposal presentation will consist of a 10 to 15 minute talk to the class following which the student will be expected to answer questions / defend their proposal.

2. Ethics Proposal

Students will complete an ethics proposal for a research project of their choosing. We will use the standard UVic ethics package unless your research requires approval by a difference ethics board. See <http://www.uvic.ca/research/conduct/home/regapproval/humanethics/> for the ethics package. Note, students that receive an approval notification from an approved ethics board will automatically receive 100% on this assignment.

3. Research Methods Exam

You will write an in class exam on all course content up to the exam date. The exam will consist of both short and long answer questions.

4. Thesis Defense

Students will select an academic paper in their area and “defend” it. The defense will consist of a 15 to 20 minute presentation followed by questioning from the thesis panel (3 professors from our department). Your grade on this assignment will be dependent on your presentation and your ability to successfully answer the questions asked of you.

Please note: All written assignments will be graded on academic writing style as well as content. Reference techniques and style used will be APA (as per thesis requirements). Ungraded assignments will be given throughout the course and students are expected to complete them all.

Grading

Effective May 1, 2012, all course instructors were required to use the Senate-approved percentage grading scheme (below) in the assignment of letter grades to students. The School of Exercise Science, Physical and Health Education used a different percentage grading scheme previously but **that has now been replaced with the following.**

A+	90-100	B+	77-79
A	85-89	B	73-76
A-	80-84	B-	70-72

Descriptors for Letter Grade Designations

%	Grade	Description
90-100	A+	This grade reflects the work of a student who is self-initiating and whose work far exceeds course expectations regarding understanding, critical thinking, and communication, in writing and orally. The student’s work indicates an insightful grasp of the subject matter and exhibits a superior level of critical thinking. A+ is reserved for a very few outstanding students
85-89	A	This grade reflects the work of a student who is self-initiating and who meets all expectations in the course regarding understanding, critical thinking, and communication, in writing and orally. This student produces excellent graduate level work demonstrating insight, understanding and engages in independent analysis and synthesis. There is evidence of application of course content and extension of course expectations.
80 - 84	A-	This grade reflects the work of a student who is self-initiating and who meets the expectations in the course regarding understanding, critical thinking, and communication, in writing and orally. This

		student produces superior graduate level work which demonstrates depth of knowledge and analytical ability. Typically, the A- grade is given when the student demonstrates some weakness in one of the areas of understanding, critical thinking or written/oral communication
77 - 79	B+	This grade reflects the work of a student who demonstrates some initiative in completing the requirements of the course. The student produces very good graduate level work reflecting a clear understanding of course concepts and the capability to critically reflect on these concepts. Analysis and synthesis are consistent with class instruction. This grade indicates a very good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area. Typically, a B+ grade is given when there is a clear weakness in one of the areas of understanding, critical thinking or written/oral communication.
73 - 76	B	This grade reflects the work of a student who fully completes the requirements of the course with occasional support/assistance. The student produces good graduate level work reflecting understanding of most course concepts and the capability to critically reflect on these concepts. Analysis and synthesis are consistent with class instruction. Typically, a B grade is given when there is a clear weakness in one of the areas of understanding, critical thinking or written/oral communication.
70-72	B-	This grade reflects the work of a student who completes the requirements of the course with occasional support/assistance. The student produces adequate graduate level work reflecting understanding of most major course concepts and the capability to critically reflect on these concepts. Analysis and synthesis are consistent with class instruction but support in this process is needed. Typically, a B- grade is given when there are clear weaknesses in one or two of the areas of understanding, critical thinking or written/oral communication.
	N	Did not write examination or otherwise complete course requirements* by the end of term or session. This grade is intended to be final.
	INC	Incomplete (requires "Request for Extension of Grade" form)

Please note that all assignments/examinations must be completed in order to receive a passing grade in this course. Failure to do so will result in an N grade, a grade that is equivalent to a failure in the course. Late assignments will not be accepted.

Course Overview

September 14 th , 2015	Introduction Introduction to Research Exercise
September 21 st , 2015	Developing a Research Question Developing Experimental Hypotheses Grounding a Research Question in Literature
September 28 th , 2015	Writing a Literature Review The Scientific Method
October 5 th , 2015	Quantitative versus Qualitative Research Independent versus Dependent Variables
October 12 th , 2015	THANKSGIVING
October 19 th , 2015	Between versus Within Designs The Logic of Statistical Inference
October 26 th , 2015	Qualitative Research Designs Other Types of Research Designs
November 2 nd , 2015	Research Proposal Presentations
November 9 th , 2015	READING BREAK
November 16 th , 2015	Why We Need Research Ethics (Dr. Vivienne Temple)
November 23 rd , 2015	Why We Need Research Ethics (Dr. Vivienne Temple)
November 30 th , 2015	Ethics in Practice Research Ethics Assignment Handed Out Written Proposal Due
January 4 th , 2016	Sampling Distributions Selection of Defense Paper
January 11 th , 2016	Statistical Assumptions
January 18 th , 2016	Reliability and Validity
January 25 th , 2016	Describing Data
February 1 st , 2016	Showing Data

February 8 th , 2016	READING BREAK
February 15 th , 2016	Statistical Inference I: T-Tests
February 22 nd , 2016	Statistical Inference II: Correlations and Causations
February 29 th , 2016	Qualitative Data Analysis
March 7 th , 2016	Research Methods Exam
March 14 th , 2016	Giving a Research Presentation
March 21 st , 2016	Mock Thesis Defense
March 28 th , 2016	EASTER MONDAY
April 4 th , 2016	Thesis Defense