

# Research Methods and Inquiry in Kinesiology and Health Sciences – KNES 209 Kinesiology Program

### **Course Outline**

COURSE IMPLEMENTATION DATE:
OUTLINE EFFECTIVE DATE:
COURSE OUTLINE REVIEW DATE:

September 2018 September 2023 March 2028

#### **GENERAL COURSE DESCRIPTION:**

This course introduces students to research methods and design related to the areas of kinesiology, health and wellness. Focus is on understanding the scientific method, interpretation and evaluation of research literature, and issues related to research practices. Students will explore current research topics and develop their critical thinking skills to promote their understanding of quality research activities.

**Program Information:** This course can be used as either a required course or an elective in the Kinesiology Diploma Program (prerequisites may be required).

**Delivery:** This course is delivered face to face.

**COTR Credits:** 3

Hours for this course: 45 hours

**Typical Structure of Instructional Hours:** 

Instructional Activity		Duration
Lecture Hours		45
Seminars / Tutorials		
Laboratory / Studio Hours		
Practicum / Field Experience		
Other Contact Hours		
	Total	45

## Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-Job Experience	N/A
Formal Work Experience	N/A
Other	N/A
Total	N/A

Course Outline Auth Jodie Pickering, Instr								
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APPROVAL SIGNATU	IRES:							
Department Head Sandi Hill E-mail: shill@cotr.k	oc.ca	Dean of Health a Heather Hepwor E-mail: <u>hepwort</u>						
Department Head Signatur	re	Dean Signature						
EDCO								
Valid from: Septem	nber 2023 – March 2028							
Education Council Approva	ıl Date							
COURSE PREREQUIS	ITES AND TRANSFER CREDIT:							
Prerequisites:	Successful completion of at least	Successful completion of at least 18 credits of first year courses.						
Corequisites:	None							
Recommended:	STAT 106							
Flexible Assessm	ent (FA):							
Credit can be aw	arded for this course through FA	<b>☑</b> Yes	□ No					
	Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor formore information.							
Transfer Credit:	For transfer information within British Columbia, Alberta and other institutions, please visit <a href="http://www.cotr.bc.ca/Transfer">http://www.cotr.bc.ca/Transfer</a> .							
	Student should also contact an academic advisor at the institution where they want transfer credit.							
Prior Course Nur	mber: N/A							

#### **Textbooks and Required Resources:**

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use (please note that these are open education resources textbook which can be downloaded at no cost):

Bhattacherjee, A. *Social Science Research: Principles, Methods, and Practices. 2<sup>nd</sup> Ed.* Textbook Collections, 3. 2012. ISBN 13: 978-1475146127

Illowsky, B., Dean, S. Introductory Statistics. OpenStax, 2017. ISBN 13: 978-1-938168-20-8

Please see the instructor's syllabus or check COTR's online text calculator <a href="https://textbook.cotr.bc.ca/">https://textbook.cotr.bc.ca/</a> for a complete list of the currently required textbooks.

#### **LEARNING OUTCOMES:**

Upon the successful completion of this course, students will be able to

- explain and apply the scientific method;
- explain the ethical issues involved in kinesiology & health research;
- describe the basic elements of research design;
- explain how to develop and test a hypothesis;
- explain basic statistical analysis and its use in kinesiology & health research;
- read and evaluate journal articles;
- describe the difference between qualitative, quantitative & mixed-method research designs;
- explain the strengths and limitations of common research techniques; and
- apply critical thinking to research literature relevant to Kinesiology and Health Sciences.

#### **COURSE TOPICS:**

Introduction to Research in Kinesiology and Health

- Overview of current topics
- How to use online research databases
- APA formatting
- Research terminology

Introduction to the scientific method

Creating and testing a hypothesis

### Research Design

- Sampling methods
- Qualitative research study design
- Quantitative research study design
- Mixed methods design

#### Measurements

- Data collection methods
- Reliability of measurements tools
- Validity of measurement tools
- Independent and dependent variables

#### **Ethics**

- Ethical standards
- Approval process

## **Evaluating research**

- Critical analysis of research
- Statistical analysis
- Literature reviews

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

## **EVALUATION AND ASSESSMENT (Face-to-Face Delivery):**

Assignments	% of Total Grade		
Assignments	50%		
Midterm	20%		
Final Exam	<u>30%</u>		
Total:	100%		

Please see the instructor's syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.

#### **EXAM POLICY:**

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the schedules exam.

Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

### **COURSE GRADE:**

Course grades are assigned as follows:

Grade	A+	Α	A-	B+	В	B-	C+	С	C-	D	F
Mark (Percent)	≥ 90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	< 50

A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

### **ACADEMIC POLICIES:**

See <u>www.cotr.bc.ca/policies</u> for general college policies related to course activities, including grade appeals, cheating and plagiarism.

#### **COURSE CHANGES:**

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.