



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

Health and Human Services

Effective Term & Year: Fall 2023  
Course Outline Review Date: 2028-03-01

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**Program Area:** Health

**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.

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**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 Methods:** On-campus (Face-to-Face)

**Credit Type:** College of the Rockies Credits

**Credits:** 3

**Course type/s:** Sciences, Social Sciences

**Instructional Activity and Hours:**

Activity	Hours
Classroom, Directed Studies or Online Instruction	45

Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	
Other	
<b>Total</b>	<b>45</b>

### Course Requisites:

- Completed at least 6 courses from the following:
- arrow\_drop\_downKinesiology
  - **KNES103** – Introduction to Biomechanics (3)
  - **HLTH104** – Introduction to Personal Health And Wellbeing (3)
  - **KNES102** – Introduction to Motor Skill Acquisition (3)
  - **KNES104** – Introduction to Personal Health And Wellbeing (3)
  - **KNES110** – Foundations of Exercise and Physical Fitness (3)
  - **KNES163** – Physical Literacy for Life (3)
  - **KNES190** – Basic Human Anatomy (3)
  - **KNES200** – Functional Anatomy & Physiology 1 (3)
  - **KNES201** – Sport and Health Policy in Canada (3)
  - **KNES202** – Physical Growth and Human Development (3)
  - **KNES203** – Introduction to Athletic Injuries (3)
  - **KNES204** – Psychology of Sport and Exercise (3)
  - **KNES205** – Nutrition (3)
  - **KNES206** – Introduction to Exercise Physiology (3)
  - **KNES209** – Research Methods and Inquiry in Kinesiology and Health Sciences (3)
  - **KNES210** – Functional Anatomy and Physiology 2 (3)
  - **KNES270** – Exercise Testing & Prescription (3)

### Flexible Assessment: Yes

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

### Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

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### **Textbook 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):

Bhattacharjee, A. *Social Science Research: Principles, Methods, and Practices. 2nd 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*  
<https://textbook.cotr.bc.ca/>  
*for a complete list of the currently required textbooks.*

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### **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.
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### **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.*

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## Evaluation and Assessments

### Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Assignments	50%
Midterm	20%
Final Exam	30%
Total	100%

### Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

**Evaluation Notes:** A grade of “D” grants credit, but may not be sufficient as a prerequisite for sequential courses.

**Exam Attendance:**

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

**Academic Policies:**

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

**Course Changes:**

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.