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ACKNOWLEDGEMENT

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UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on in their culture, history, and traditions from one generation to the next on this site. I would also like to acknowledge that you are joining us for this course from many places, near and far, and acknowledge the traditional owners and caretakers of those lands.

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COURSE INFORMATION

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Course Title	Course Code Number	Credit Value
Research Methods for Sport and Health Sciences	KIN 572	3 credits

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PREREQUISITES

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KIN 515 (Gap Analysis) or KIN 205/373 (Research Methods in Kinesiology or equivalent) or KIN 206/371 (Introduction to Statistics in Kinesiology or equivalent)

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INSTRUCTOR CONTACT INFORMATION

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Learners are always welcome to contact the instructor via email. Learners may also wish to set up an appointment with the instructor if they have any questions or concerns about the course. The instructor is available for online meetings by appointment.

Course Instructor	Contact Details	Office Location	Office Hours
Carolyn McEwen, PhD	Email: <a href="mailto:carolyn.mcewen@ubc.ca">carolyn.mcewen@ubc.ca</a>  Typically, I am able to respond to email inquiries within 48 hours during business hours (Monday-Friday, 9-5).	Osborne unit 2 room 208. I will primarily be taking meetings online.	I am available to meet with learners online through <a href="#">Zoom</a> . Please send me an email ( <a href="mailto:carolyn.mcewen@ubc.ca">carolyn.mcewen@ubc.ca</a> ) with your availability to schedule a time that is convenient for both of us. Once a time has been set I will send the link for the Zoom meeting.

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COURSE DESCRIPTION

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This course examines current issues within sport and health science research. The goal of the course is to develop coaching, technical leadership, and Kinesiology students' research literacy skills to assist them in establishing best coaching, leadership, and Kinesiologist practices. Students should develop a comprehensive understanding of (a) the strengths and limitations of quantitative, qualitative, and mixed methods research designs; (b) interpretation of basic statistics; (c) how to critically evaluate scientific literature; and (d) how to synthesize and communicate research in written and verbal forms.

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COURSE RATIONALE

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The focus of this course is to develop the **research literacy** skills of coaches, technical leaders, and clinical Kinesiologists. The ability to critically evaluate research is essential to fostering innovative and

evidence-based/informed professional practices. Critical evaluation of sport and health science research necessitates an understanding of research design and methods (quantitative, qualitative, and mixed methods designs). Furthermore, an understanding of how to interpret basic statistical analyses is essential for reading and critically evaluating quantitative sport and health research.

### **COURSE LEARNING AIMS AND OUTCOMES**

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The overarching aim of this course is for high performance coaches, technical leaders, and clinical Kinesiologists to develop research literacy skills to foster evidence-based/informed practice in their roles as practitioners (sport coaches/leaders/clinical Kinesiologists).

By the end of this course, learners will be able to:

- Identify different types of quantitative, qualitative, and mixed methods research designs used within coaching, leadership, and health sciences
- Evaluate the strengths and limitations of quantitative, qualitative, and mixed-methods research designs
- Apply knowledge of research designs to critically assess sports coaching, leadership, and Kinesiology research articles
- Understand the role of theory in coaching and health science research
- Understand the application and interpretation of basic statistics in sports coaching and clinical settings
- Use JASP (statistical software) to organize data and analyze and interpret basic statistics
- Read and interpret tables and figures within scientific research articles
- Identify ethical issues involved in coaching and health science research
- Synthesize and communicate research findings and their application in verbal and written form

### **LEARNING ACTIVITIES**

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KIN 572 is a 3 credit course that will be delivered over 1 semester (September - December 2023).

The course content is delivered in 2 formats:

- Synchronous online meetings via Zoom (meeting room link can be found on Canvas) to be held on **Mondays from 9-10:30am (PT)**
- Asynchronous self-paced readings, videos, assessments, and learning activities

Synchronous class time will be centered on discussion of class concepts and critical evaluation of coaching and leadership science literature. Learners will be encouraged to reflect upon their own coaching, leadership, and clinical practices in relation to sport science and coaching research.

The online asynchronous self-paced activities include course content, journal articles, recorded videos, self-assessment questions, and completion of workshop assignments to immediately apply course concepts. In the asynchronous portion, you will be posting your final assignment that will be reviewed by at least two peers and you will provide feedback to at least two peers.

You are expected to attend synchronous online meetings (see dates in calendar) and follow the online modules (1-10) to complete the course requirements. Questions during class time are always welcome and student participation in all class formats is essential for success in the course. Please note that it is

expected that you will have completed the online course module prior to attending the corresponding synchronous class to engage with the discussion content. Learners will be expected to contribute to group discussions and complete assignments by the stated completion date.

The expected asynchronous weekly time commitment is 10-12 hours to complete the readings and learning activities.

## LEARNING MATERIALS

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### Course Readings

Academic articles and book chapters will be posted on Canvas and will be used to supplement synchronous and asynchronous learning, demonstrate the application of course concepts, and facilitate class discussion and workshop assignments. Please refer to the list within each course module for required readings. All course readings can be accessed through the 'Library Course Reserves' link located on the Canvas course menu.

### Required Materials

This course requires you to have access to:

1. Reliable high-speed internet connection. During the synchronous online meetings, you will also need to have a microphone/headset and a webcam.
2. JASP (statistical analysis software). Learners will be required to download (free to download and use) and have access to JASP. Download the latest version of JASP here: <https://jasp-stats.org/download/>
3. Microsoft Excel. Learners will be required to open a data file that was created in Microsoft Excel.
4. **Optional:** Canvas (hosts the course website) can be accessed on mobile devices and tablets through an app. Follow the link for more information: [https://canvas.ubc.ca/courses/4318/pages/canvas-mobile-apps-are-great?module\\_item\\_id=369173](https://canvas.ubc.ca/courses/4318/pages/canvas-mobile-apps-are-great?module_item_id=369173)

### Additional Course Resources

A list of academic articles, book chapters, and/or books that correspond to the content contained within each module will be provided as additional resources. These readings are optional and will advance your knowledge of topics discussed within the course and assist you in completing the remainder of your degree (e.g., KIN 596 for MHPC & TL students). Please refer to the list within each course module for optional additional course resources.

## ASSESSMENTS OF LEARNING

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<b>Assessment 1</b>	<b>Tri-council Policy Statement 2 Tutorial</b>
<i>Format</i>	Online research ethics tutorial
<i>Details</i>	Learners will be required to complete the online research ethics tutorial
<i>Due Date</i>	October 27, 2023
<i>Weighting</i>	5%

*Learning Outcomes* To identify ethical issues involved in coaching science research

**Assessment 2 Workshop Assignments (WA)**

*Format* Written responses to applied questions

*Details* Learners will complete 3 workshop assignments throughout the course. The first (Modules 1-3) and third (Modules 8-10) workshop assignments are each worth 15% of the learner's final grade and the second (Modules 4-7) workshop assignment is worth 20% of the learner's final grade (total = 50%). The workshop assignments are designed to reflect the application of course concepts introduced in synchronous and asynchronous learning contexts. For example, learners will have an opportunity to learn how to use JASP to analyze and interpret statistical output. Upon learning this information, learners will be asked to apply their knowledge by conducting a statistical analysis in JASP and answer questions to facilitate their interpretation of the data.

*Due Dates* October 6, 2023, November 10, 2023, November 27, 2023

*Weighting* WA1 (15%) + WA2 (20%) + WA3 (15%) = 50% Total

*Learning Outcomes* To apply research methods concepts and expand research literacy skills through a series of guided tasks

**Assessment 3 Final Project: A Critical Analysis of Coaching and/or Health Science Literature**

*Format* Paper and Knowledge Mobilization Strategy

**Part A: Summarizing and evaluating research (Paper; 20%)**

Learners will choose a topic related to coaching and/or health science that is of interest to them. They will be required to search for and acquire a minimum of five peer reviewed original research articles related to their chosen topic. Learners should summarize each of the five articles. Summaries should include a) the purpose of the study; b) hypotheses (if applicable); c) a brief summary of the methods; d) a discussion of the strengths and limitations of the methods used; e) identification and interpretation of the findings that reflect the identified methodological strengths and limitations; and f) the implications of the study. Learners should primarily focus on the critical examination of the methods and results section of the paper. The discussion of the strengths and limitations of the research papers should go beyond what is stated in the discussion sections of the papers themselves and demonstrate the learner's knowledge of course content. Each article summary should be no more than 2.5 pages.

Learners should complete their paper in accordance with APA 7<sup>th</sup> edition style guidelines. For more information please refer to <https://guides.library.ubc.ca/c.php?g=713622&p=5086049>. The

*Publication Manual of the American Psychological Association* 7<sup>th</sup> edition is also available through the UBC library.

### **Part B: Synthesize, apply, and communicate research findings**

#### ***Step 1: Synthesize and apply research findings***

Learners will be required to synthesize all five articles and by doing so address the following questions: a) What can we say about the topic based on these five articles?; b) What do we **not** know about this topic based on these five articles?; c) What conclusions can we make about this particular topic? Finally, learners will be required to reflect on how the research findings could be integrated into professional practice based on their critique and synthesis of the research findings.

#### ***Step 2: Knowledge mobilization strategy (15%)***

Learners will be asked to communicate the synthesis and application of research findings (Part B Step 1) by employing a knowledge mobilization strategy. Learners may choose the knowledge mobilization strategy and are welcome to be creative. For example, learners may choose to create an infographic, recorded presentation, recorded choreography, podcast, series of social media posts etc. The knowledge mobilization strategy should be appropriate and engaging for the intended knowledge user while accurately reflecting the strengths, limitations, and application of the synthesized research studies. Learners may select who the intended knowledge user is. Any recorded audio and/or visual content should not exceed five minutes in length.

#### ***Peer Feedback***

Learners will be required to provide feedback on two of their peers' presentations, as well as receive feedback on their own presentation from two of their peers. Learners will be placed into groups of 3 or 4 for the peer review. Learners will be assessed on their ability to reflect on the feedback they received from their peers by critically appraising the feedback and the integration of appropriate feedback into their final paper and knowledge mobilization strategy (see marking rubric for details). This component will be graded by the instructor at the time of the assignment submission. **You must submit your assignment by December 4, 2023 11:59pm PT. You must complete evaluating the peers in your group by December 6, 2023 11:59pm PT.**

Complete the "Peer Feedback Form" and reflect on the feedback you received from two of your peers on your paper and knowledge mobilization strategy. Attach this completed form to the final assignment submission.

<i>Due Date</i>	December 4, 2023 (peer-feedback), December 11, 2023 (paper + knowledge mobilization strategy)
<i>Weighting</i>	20% (paper) + 15% (knowledge mobilization strategy) = 35% Total

**Learning Outcomes** To identify and critically examine the research methods used to address a research question; To accurately interpret results; To identify and communicate the strengths and limitations of research studies; To synthesize research findings and draw conclusions about a topic; To communicate research findings; To identify how research findings may be integrated into their coaching, leadership, or Kinesiology practice.

**Assessment 4****Format****Details****In Class Participation**

Synchronous team discussion

Learners will receive marks for answering questions and engaging in discussion during online synchronous class time. Learners may receive up to a maximum of 10% for their contributions to class discussion. If learners are unable to attend a scheduled synchronous class but wish to receive participation credit then they must a) contact the instructor (carolyn.mcewen@ubc.ca) in advance of the class and b) watch the recorded synchronous class and submit a response to the questions posed in class on the corresponding discussion board titled 'Missed synchronous class participation'.

**Due Date**

All scheduled synchronous classes

**Weighting**

10%

**Learning Outcomes**

To critically appraise and debate the strengths and limitations of different research approaches; To be able to discuss the link between methodologies, methods, findings, and applications of a research study.

**Grading**

Assessment	%	Due Date
Tri-council Policy Statement 2 (TCPS 2) Tutorial	5%	October 27, 2023
Workshop Assignments	50%	A1 (15%): October 6, 2023 A2 (20%): November 10, 2023 A3 (15%): November 27, 2023
Final Project: A Critical Analysis of Coaching and/or Health Science Literature	35%	Peer feedback: December 4, 2023 Assignment Due: December 11, 2023
In Class Participation	10%	All scheduled synchronous classes

**Assignment Due Date Policy**

All extensions, rescheduling, or other concessions are at the discretion of the instructor. If you miss a due date because of an emergency, you must contact your instructor as soon as possible. If you do not contact your instructor, your assignment will be considered late. Late assignments will be deducted at a

rate of 10% per day. Deductions will commence from the date and time the assignment is due, and will accumulate for each subsequent 24-hour period, including weekends. Assignments are not accepted after 6 days past the deadline.

## **UNIVERSITY POLICIES**

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UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on [the UBC Senate website](#).

### **Inclusivity**

Education is a multidisciplinary field that brings together faculty, students and others from diverse academic and personal backgrounds. UBC's Faculty of Education is committed to creating a respectful workplace and learning environment that supports inclusion based on the principles of equity, diversity and social justice in order to create an environment that supports its community members' full participation. The Faculty of Education is committed to providing accessible, usable, and welcoming spaces for faculty, staff, students, and visitors who have disabilities, are members of racialized communities, Indigenous, transgender, two-spirit and gender-diverse people, regardless of their age, sexual orientation, social status, religion, ethno- linguistic, nationality and/or citizenship status.

Faculty of Education courses take place in learning environments that are inclusive of gender identity, gender expression, sex, race, ethnicity, class, sexual orientation, ability, age, etc. Learners and educators expect to be treated respectfully at all times and in all interactions. Non-sexist, non-racist, non-homophobic, non-transphobic and non-heterosexist language is expected in Faculty of Education classes, course content, discussions and assignments.

*Please feel welcome to e-mail your instructor your name and pronoun and how you would like these to be used.*

### **Academic Integrity**

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept to monitor and prevent recurrences. All submitted assignments become the property of the University of British Columbia and electronic copies of submitted assignments will be stored and used to check against future, present, or past cases of academic misconduct.

### *Artificial Intelligence (AI) Tools Policy*

Using Chat GPT and/or generative AI tools for any component of an assessment is **prohibited** in this course, and will be treated as academic misconduct, per the guidelines which are outlined via [UBCs policy on academic misconduct](#). The exception to this policy is that students are **permitted** to use generative AI technology such as [Goblin Tools](#) to assist in the creation of to do lists to complete assessments and coursework. Please do hesitate to reach out to the instructor (Carolyn) if you have any questions or require clarification.

## **OTHER COURSE POLICIES**

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### **LEARNING ANALYTICS**

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Learning analytics includes the collection and analysis of data about learners to improve teaching and learning. This course will be using the following learning technologies: Canvas, Mentimeter, Zoom, and H5P. Many of these tools capture data about your activity and provide information that can be used to improve the quality of teaching and learning. In this course, I plan to use analytics data to:

- View overall class progress
  - Review statistics on course content being accessed to support improvements in the course
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### **COPYRIGHT**

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All materials of this course (course handouts, lecture slides, assessments, course readings, instructor recorded videos etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline.

Students are not permitted to record classes or take photographs during class unless they are granted prior permission from the instructor.