Course Outline	EDKP-605	Research Methods	Fall 2020
General Information			
Course #	EDKP-605		
Section #	001		
Term	Fall		
Year	2020		
Course schedule	Thursday: 1	:05p.m3:55p.m.	
(day and time of class)			
Number of credits	3 credits		
Instructor Information			
Name and Title	William Ha	rvey	
E-mail	william.harvey@mcgill.ca		
Virtual office hours	Thursday: 1	11:00a.m12:00p.m.	
Communication plan	please send		sday mornings. Otherwise, lual virtual or phone meetings. ed response time.

## **Course Overview and Content**

This course provides a critical examination of philosophical issues, current paradigms, and research methodologies related to conducting research in kinesiology and physical education. The purpose of this seminar series is to help you develop the skills needed to generate new knowledge and evaluate current knowledge in research concerning kinesiology and physical education (KPE). The course seminar is designed to highlight key issues in KPE research and to provide you with the opportunity to think constructively about all aspects of scientific research. You will practice constructive and critical thinking by learning to identify, understand, and challenge assumptions made by researchers in the pursuit of new knowledge (or evaluation of current knowledge). You also will be challenged to examine your own assumptions about research and consider a range of methodological issues within the KPE disciplines. Given the move towards multidisciplinary approaches to understanding human behaviour, you will be exposed to research considerations within the diverse fields of KPE. Furthermore, you will be able to critically assess the methods of disseminating research to the public. As such, this course represents a critical examination of philosophical issues, current paradigms, and research methodology related to conducting research in KPE. We will discuss published and ongoing research from a multidisciplinary perspective whereby topics will vary with respect to the current research and expertise of the instructors.

#### **Learning Outcomes**

- 1. To introduce the student to select philosophical issues in KPE research;
- 2. To introduce the student to select methodological issues in KPE research;

- 3. To provide each student with an opportunity to enhance his/her understanding of how theories/methods of science can be used to answer research question(s) within KPE;
- 4. To provide insight into the process of scientific review and opportunities for the development of constructive skills when evaluating knowledge claims;
- 5. To assist the student in the selection of a research problem suitable for scientific inquiry in KPE.

# **Instructional Method**

This course will be conducted through the use of lectures, individual and group class-based activities, especially by lectures from a variety of KPE professors. All classes will be taught through the Zoom meeting function on our myCourses platform.

# **Expectations for Student Participation**

All students are expected to attend each live class if possible. We will address the following issues in our first class so we can develop our supportive learning environment:

- appropriate behaviors in each class,
- the issues of how video, audio and chat will be used in class
- checking emails and myCourses on a regular basis for course updates

## Instructor Message Regarding Remote Delivery

All classes will be taught through the Zoom meeting function on our MyCourses platform. All classes will be recorded through Zoom (fixed) and placed on our course platform for each student's viewing (flexible - when and if needed). We have all been experiencing challenges due to the current pandemic and our teaching team will do our best to provide a supportive learning environment to facilitate your academic success and specific needs. Please consult the McGill University's Teaching and Learning Services (TLS) links to assist you in your online learning needs. Please see <u>https://www.mcgill.ca/tls/students/remote-learning-resources</u> for helpful TLS tips on remote learning and student success.

All lectures will be recorded to try to ensure that all students will be able to see and/or hear each lecture in this course. You will be notified through a 'pop-up' box in Zoom if a lecture or portion of a class is being recorded. By remaining in sessions that are recorded, you agree to the recording, and you understand that your image, voice, and name may be disclosed to classmates. You also understand that recordings will be made available in myCourses to students registered in the course.

Further, please discuss any remote course delivery issues with the course instructor in order to facilitate his understanding of your learning needs (e.g., differing time zones, Internet bandwidth, family responsibilities, etc.).

## **Required Course Materials**

Readings will be assigned and made available by Professors who will teach the different topics of the course. Readings and/or handouts will be posted on MyCourses or relevant links will be provided for each student to gain access to the required readings. I am currently working with the Faculty of Education to place all of our course readings in an e-Course Reserve within the Education library system. Links for readings will usually be provided at least one week before the associated content will be presented in class.

## Supporting Texts

Creswell, J. W. (2008). Research design: Qualitative, quantitative, and mixed method approaches (3rd Ed.). Thousand Oaks, CA: Sage.

Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: From process to product*. New York: Routledge.

Thomas, J. R., Nelson, J. K., & Silverman, S.J. (2011). Research methods in physical activity (6<sup>th</sup> Ed.). Champaign, IL: Human Kinetics.

Vincent, W. J. (2004). Statistics in kinesiology (3rd Ed.). Champaign, IL: Human Kinetics.

Date	Торіс	Instructor
September 3	Introduction	William Harvey
September 10	Research Ethics	Ilde Lepore Ross Andersen
September 17	Scientific Writing	Charlotte Usselman
September 24	Introduction to Qualitative Research Methods	Gordon Bloom
October 1	Quantitative Research Methods Part 1: Research Design Part 2: Scientific Method, sampling	Dennis Jensen William Harvey
October 8	Part 1: Data collection and analysis Part 2: Statistics, p-values, Q&A	William Harvey David Pearsall
October 15	Part 1: Mixed Methods Research Part 2: Peer review (research proposals, journal articles)	William Harvey Julie Coté
October 22	Part 1: Presenting your research (abstracts, posters) Part 2: Knowledge translation research	Tyler Churchward- Venne Lindsay Duncan

## **Course Schedule**

October 29	Part 1: Working with non-academic research partners Part 2: Research design + methods in high performance sport settings	David Pearsall
November 5	Clinical trials	Jenna Gibbs
November 12	Community based action research	Lee Schaefer Jordan Koch
November 19	Presentations	William Harvey KPE Faculty
November 26	Presentations	William Harvey KPE Faculty

## **Course Evaluation**

Research Proposal Summary and Poster Presentation	(See Appendix A)	50%
Weekly Assignments	(See Appendix B)	50%

## **Research Proposal and Poster Presentation (50%)**

## Overview

A major portion of scientific advancement in kinesiology and physical education is developed through grant-funded programs of research. As graduate students in this area, you will have access to funding opportunities in the form of scholarship, bursaries, grants-in-aid, and perhaps, standard research grants within your own area of academic interest. The purpose of this assignment is to provide you with an opportunity to develop your own research proposal for the purposes of addressing a topic that is of interest to you and to present this proposal in the form of a research poster.

## Format – Research Proposal (35%)

All research proposal submissions will follow the protocol outlined below that is amended from the standard research funding programs at CIHR, SSHRC, and NSERC. Proposals should be for a two-year (MA, MSc) or three-year (PhD) research program. Each submission should not exceed 2 pages in length, use times new roman 12-pt font, 1-inch margins, include single-spaced lines, and where suitable, include headings or subheadings to improve the transmission of information contained in the research plan. No cover page is required. Please include the student identification number in the header along with an abbreviated title for the research proposal. A separate page can be attached that includes only references used in the research summary. Students are asked to submit an electronic copy of this research proposal and a Powerpoint slide of the proposed research methodology for their poster (see below) to the course coordinator. The written proposal will be evaluated by the student's main thesis supervisor using the grading rubric provided in Appendix A of this course outline.

The research proposal should address the following areas within the space allotted:

**1. Background Evidence:** This section can include a brief overview of previous or related studies that inform the development of the research question(s) to be addressed within this plan of study.

**2.** Purpose, Research Question(s), and/or Hypotheses: This section includes a clear and concise statement that illustrates the purpose of the work, the research question(s) to be addressed within the proposed plan of study and expected outcomes (as appropriate).

**3. Description of Proposed Research:** This section includes general and/or specific research objectives as well as the context of the proposed research including links to gaps in the existent knowledge base.

**4. Methods:** This section describes the program of research undertaken to address the objectives outlined in the previous section. Please note the required two to three-year program of study so, therefore, it is advisable to keep this in mind when designing this section of the proposal. This section describes each study comprising the grant in detail including individual study purposes, sub-purposes, instruments, design protocols, and proposed analyses. Timeline should also be included.

**5. Significance:** This section describes what is unique about the investigation and the wider impacts the results of the proposed work are expected to have (e.g., public health, policy, treatment, prevention, etc.)

## 6. References.

Due Date: November 19, 2020

## Format – Research Methods Presentation (15%)

All students will be required to prepare a poster in the format of a conference presentation. The poster should include the research question and objectives of the research, clear description of the proposed methodology, rationale for the selected methodology and significance of the expected results. The poster will serve as a guide for a 10-minute presentation given in one of the final two classes. The verbal presentation of the pertinent information is graded based on the rubric provided (See course outline Appendix A). Both faculty and students will evaluate and grade the research methods presentation.

## **McGill Policy Statements**

## Language of Submission

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de

soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

#### Academic Integrity

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures" (see <u>McGill's guide to academic honesty</u> for more information). (Approved by Senate on 29 January 2003)

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le <u>guide</u> <u>pour l'honnêteté académique de McGill</u>). »

Please note that to support academic integrity, your assignments may be submitted to text-matching or other appropriate software (e.g., formula-, equation-, and graph-matching).

#### **Additional Statements**

Please note that this format for the delivery of this course is unusual. It is explained by our current extraordinary circumstances, and aims to allow you, as students, to complete this term with the requisite knowledge for this course, and to succeed in your assessments. I ask for everyone's collaboration and cooperation in ensuring that that videos and associated materials are not reproduced or placed in the public domain. This means that each of you can use them for your own personal purposes, but you cannot allow others to use them, by putting them up on the internet or by giving them or selling them to others who will copy them and make them available. Thank you very much for your help with this.

© Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

McGill University is on land which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous people whose footsteps have marked this territory on which peoples of the world now gather.

L'Université McGill est sur un emplacement qui a longtemps servi de lieu de rencontre et d'échange entre les peuples autochtones, y compris les nations Haudenosaunee et Anishinabeg. Nous reconnaissons et remercions les divers peuples autochtones dont les pas ont marqué ce territoire sur lequel les peuples du monde entier se réunissent maintenant.

# Appendix A

# Grading Rubric: Written Research Proposal

Section	Poor	Excellent	Total
Title	Complex, unclear, uses unnecessary words, longer than 12 words, doesn't include the focus of the study	Brief, uses only important words, is drafted as single or double title, uses 12 words or less, includes the focus of the study	/1
Торіс	Not feasible, resources would be difficult to gather, participants may not want to volunteer (benefits do not outweigh costs), not interesting to others	Feasible, participants would be willing to participate, resources are available, researcher is knowledgeable (or interested) in the topic, feasible, interesting to others	/2
Review of literature	Doesn't limit scope of inquiry, no scientific sources, no mentioning of other studies that address the problem, no deficiencies in previous literature highlighted, no importance of the study, the merits of quantitative and/or qualitative research methods are not considered, review does not focus on the major independent and dependent variables	Limits scope of inquiry, scientific sources are used and are complimentary, the problem is framed, integrative, Research problem identified, inclusion of studies that address the problem, deficiencies of previous research outlined, the importance of the study is made clear, review is appropriate based on the weight of the qualitative and/or quantitative components, is related to the major independent and dependent variables	/6
Purpose statement	Intent of study not clear, the "why" and "what" are not addressed, has no match to literature review, no indication of strategy of inquiry, type of methods approach is not mentioned, no theory or conceptual approach	Clearly identifies intent of study and explains the "why" and the "what", clearly stated, action verbs are appropriate for methods, participants are mentioned, strategy of inquiry is mentioned, type of methods approach is identified, theoretical/conceptual approach addressed	/4
Research questions, objectives, hypotheses	Inconsistent with topic, purpose, and/or method; language inconsistent with method	Consistent with topic, purpose, and method; language consistent with method	/4
Methods	Not clear, not consistent with purpose/strategies/methods, no identification of measures, procedures not feasible, population not described, sampling technique not clear, research design not clear, analysis strategies not appropriate	Clear progression, consistent with purpose/strategies/methods, identification of measures, procedures are feasible (and ethical), population and sampling clearly described, research design clear and appropriate, analysis strategies are logical and consistent with methods/topic	/8
Analyses	Not consistent with hypotheses or research questions; not Appropriate	Consistent with research questions and hypotheses; appropriate for method and research questions	/5
Writing style	Limited flow, no direction, spelling and grammar errors; inconsistent terminology used throughout, no coherence, few empirical references	Clear flow and direction, thoughts are easy to follow and link well between paragraphs, no spelling and grammar errors, consistent terminology used throughout proposal, coherent, many appropriate academic references	/5

Total marks: /35 (proposal)

# Grading Rubric: Presentation (total 15 marks)

	Poor	Excellent	Total
Material	No important information given, no summary, no focus, format unclear, not audience- specific	Important information presented and synthesized well, summarizes paper content, clear format, focused, easy to follow, audience-specific	/5
Topic knowledge	Demonstrates little understanding of the topic, little understanding of research methods; does not answer questions	Clear understanding of the topic, research methods are discussed appropriately; answers questions clearly and provides justification	/5
Presentation style	No time spent preparing, too long/too short, no visuals, too fast/too slow	Appropriate length, preparation evident, visual representation of the paper topic, appropriate speed	/2
Poster	No information provided in poster, poor design, no flow of ideas	Pertinent information is provided in poster, well-designed, clear and consistent with research proposal; flow of ideas	/3

Total marks: /15

#### Appendix B: Weekly Assignments (50%)

At the end of each weekly lecture, the professor teaching the class will provide you with an assignment. Each assignment will be graded out of 10 by the professor who assigns it. The grades will be tabulated at the end of the course resulting in a mark out of 50. Each assignment is due at the beginning of class the following week. If you expected to miss a class, are unable to attend due to illness or emergency, then the assignment must be emailed to Professor Harvey before the class begins. You must complete the assignment even if you are away for the lecture.