YORK UNIVERSITY

FACULTY OF HEALTH

SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE

HH KINE 2049 3.0

RESEARCH METHODS IN KINESIOLOGY

Fall 2022

Acknowledgement of Indigenous Peoples and Traditional Territories:

York University recognizes that many Indigenous nations have longstanding relationships with the territories upon which our campuses are located that precede the establishment of York University. We acknowledge our presence on the traditional territories of the Mississaugas of Credit First Nation, the Huron-Wendat, the Haudenosaunee Confederacy and the Métis Nation of Ontario.

This course is an introduction to the procedures utilized to design and conduct research in the discipline of Kinesiology. Topics covered include research design, ethics in research, information retrieval, data collection methods, subject selection, sources of error, types of research, and presenting results. In addition, students will gain "hands-on" experience using computers as a tool to assist in research.

Prerequisites: N/A

Course Credit PSYC 2030 3.0

Exclusions:

<u>Course Director</u>: Michael Connor Ph.D.

Instructors: Chris Ardern Ph.D.

Nazir Hossain Ph.D.

Course e-mail: kine 2049 @ yorku.ca; all e-mail inquiries *MUST* be sent to this address

Office Hours: TBD

Laboratory Instructors: (to be announced)

<u>Lectures</u>: Section A – M/W: 10:30, Location: ACE 102; asynchronous for Sep12/19

Section B – M: 11:30, Location CLH-L; asynchronous for Sep 12/19

W: 11:30, Location: CLH-I

Laboratories: CB 125A [Section A] or CB 162 [Section B].

See the York University Lecture Schedule for a listing of lab times.

Students will be able to complete the lab assignments at home prior to

attending the weekly lab if they have internet access.

*Labs commence the week of September 19, 2022.

The following statement MUST be included with each lab assignment that is submitted. "I confirm that the assignment I have submitted has been done independently and is my own work. I am aware of York University's policies about plagiarism and the penalties for plagiarism."

<u>Computer Accounts</u>: All students require an eClass account and a "FAS – File Access Service" account. Check via Manage My Services. It is expected that students will check their eClass accounts daily. http://elass.yorku.ca

Course texts:

<u>Lecture Notes, Laboratory Manual & Readings Course Kit: Research Methods in Kinesiology</u> (in eClass).

Course Evaluation:

Lab Assignments (10%) Weekly assignments based on labs.

Mid-term exam 1 (22.5%) Scheduled Oct.24, during lecture time, online/eClass.

Mid-term exam 2 (22.5%) Scheduled Nov. 21, during lecture time, online/eClass.

Reflections from guest lectures (1 \times 5% each); due dates TBA in lab.

Final exam (40%-65%) During December exam period, in person.

Bonus marks (3%): Students who volunteer, register and participate subjects in research conducted by KINE faculty members are eligible to earn bonus marks. See eClass for further details about **KURE**.

Students, who do not write Mid-term 1, <u>waive the right to receive "a specific percentage of graded</u> feedback" prior to the drop date for the Fall term.

Students who complete less than 5 lab assignments may not be <u>eligible</u> for end of term grade adjustments.

N.B. An appeal against a grade assigned to an item of course work must be made in writing to the course director within 7 days of the graded work being made available to the class. The result of an appeal may cause the grade to increase, decrease or remain the same.

Although numerical marks are assigned to each piece of work in this course there should be no assumption that a total number of marks translates directly to a letter grade. Letter grades will be determined by the descriptions in the York University Undergraduate Calendar.

Laboratory Grades: At the end of each lab you will be required to have your assignment graded by your TA to get the 1% allocated for that lab. If you miss a lab, the 1% will be added to the final exam (up to 5 labs missed). Any labs missed above this 5-lab limit will result in a grade of zero for that missed lab.

Missed Quiz: The percentage allocated for any single quiz missed will be added to the final exam (maximum of 1 Quiz). There are no make-up exams in the course. If any student misses both quiz 1 AND quiz 2 they will be required to write a "make-up" exam for the 2 missed quizzes sometime during winter reading week in February 2023 (online).

^{*} All exams cover material from the lectures, readings and labs. *

<u>Students who miss the final exam</u> will only be allowed to write a deferred final exam if the student provides a completed Registrar's Office Attending Physician's Statement showing a physical incapability of writing the final exam, <u>dated the day of the final exam</u>. Note: The format of the deferred final exam may not be the same as the regularly scheduled final exam.

Drop Dates:

The last day to drop a Fall term course without receiving a grade is: Friday November 11, 2022.

The Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript), is **Saturday November 12 – Tuesday December 6, 2022.**

Lecture Topics:

Introduction to Research
The Scientific Process
Sampling and Measurement
Research: Questions and Types
Literature Review
Ethics: Principles and Practice
Experimental Research
Experimental Designs
Complex Experimental Designs
Qualitative Research
Survey Research
Other Types of Research
Disseminating Knowledge

Lecture Capture:

Lectures will be digitally recorded and posted online. The recordings will be <u>available for one (1) week</u> following the lecture.

Please note the York University policy regarding this technology.

The York University Student Code of Conduct specifically prohibits theft of intellectual property, which includes recording a course director's lecture without his/her permission or taking lecture material provided on-line, modifying it, and/or using it for your own personal use or gain (including uploading to websites such as Course Hero). The material provided is only to be used for your personal study when you take the course for which it was created. Use in any other way will result, at the minimum, in sanctions in accordance with the York Code and, at the maximum, will be breaking federal, provincial or municipal laws and will be acted on accordingly.

IMPORTANT COURSE INFORMATION FOR STUDENTS

- All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents)
- York's Academic Honesty Policy and Procedures/Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

Learning Expectations:

After completion of KINE 2049 3.0 [Research Methods in Kinesiology] students will be able to:

- a) describe the "scientific method/process".
- b) compare and contrast a variety of research designs appropriate for the field of Kinesiology and Health Science.
- c) evaluate a research study conducted in the area of Kinesiology and Health Science.
- d) analyze a research article in an academic journal.
- e) apply Excel and other software formulas and functions to answer research questions.
- f) critically reflect upon health science literature in popular media.
- g) define terminology commonly utilized in research.
- h) plan and implement effective Internet search strategies.
- i) design and create a poster presentation on an academic topic related to Kinesiology and Health Science.

KINE 2049 3.0 Research Methods in Kinesiology - Fall 2022 (Topics are approximate)

Week Beginning:	<u>Monday</u>	Wednesday	Laboratory	Readings
September 12	Asynchronous Lecture: Research: Introduction	Identifying the Research question & Study Purposes	No labs this week	Chapter 1& 2
September 19	· Asynchronous Lecture: Measuring tools (Variables)	Classifying Research	Lab 1	Chapter 3 & 4
September 26	. Research process	Reviewing the Literature	Lab 2	Chapter 5 & 6
October 3	Sampling	Ethical principles for Research	Lab 3	Chapter 7
October 10	[Fall Reading Week]	[Fall Reading Week]	No labs this week	Review previous chapters
October 17	Topic TBD	Guest Lecture	Lab 4	Chapter 8
October 24	Quiz 1	Topic TBD	Lab 5	Chapter 9
October 31	Topic TBD	Topic TBD	Lab 6	Chapter 10
November 7	Topic TBD	Topic TBD	Lab7	Chapter 11
November 14	Topic TBD	Topic TBD	Lab8	Chapter 12
November 21	Quiz 2	Topic TBD	Lab 9	Chapter 13
November 28	Topic TBD	Practical Research Design	Lab 10	Chapter 14
December 5	Sharing Your Research		No labs this week	Chapter 15
	Exam period: December 8 – December 23			