

YORK UNIVERSITY  
FACULTY OF HEALTH  
SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE  
HH KINE 2049 3.0

**RESEARCH METHODS IN KINESIOLOGY**

Fall 2016

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**

**Exclusions:** PSYC 2030 3.0

**Course Director:**

Merv Mosher  
359 Stong College  
[416] 736-2100 ext. 66922  
[mmosher@yorku.ca](mailto:mmosher@yorku.ca)  
[moodle.yorku.ca](http://moodle.yorku.ca)  
[www.yorku.ca/mmosher](http://www.yorku.ca/mmosher)

**Office Hours:**

Drop-In[or]  
By appointment

**Laboratory**

**Instructors:** (to be announced)

**Lectures:**

Section A - M,W, 10:30, Location: ACW 109  
Section B - M,W, 11:30, Location: ACW 109

**Laboratories:**

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

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

Students with access to a computer with a Web Browser, will be able to complete the lab assignments at home prior to attending the weekly lab.

\*Labs commence the week of September 19, 2016.

**Computer Accounts:**

All students require a **Moodle** account and a "**FAS - File Access Service**" account. It is expected that students will check their Moodle accounts daily. <http://moodle.yorku.ca>

### Course texts:

Lecture Notes, Laboratory Manual & Readings Kit: Research Methods in Kinesiology, York University, 2016.

### Course Evaluation:

Lab Assignments (Optional)	10%	Weekly assignments based on labs.
Mid-term exam 1 (Optional)	20%	Scheduled <b>Nov. 2</b> , during lecture time.
Mid-term exam 2 (Optional)	20%	Scheduled <b>Nov. 30</b> , during lecture time.
Final exam <b>(Required)</b>	50%-100%	During December exam period.
Bonus marks		Students who volunteer, register and participate as subjects in research conducted by faculty members are eligible to earn bonus marks. See Moodle for further details.

***Students who do not write Mid-term 1 waive the right to receive “a specific percentage of graded feedback” prior to the drop date for the Fall term.***

***Students must complete all of the lab assignments to be eligible 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.

***The percentage allocated for any course work not attempted/completed will be added to the final exam.***

\* All exams cover material from the lectures, readings and labs. \*

***In the event a mid-term exam is missed the percentage allocated to the exam will be added to the final. There are no make-up exams in the course.***

**Students who miss the final exam** 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, **dated the day of the final exam.**

**Drop Date:**

The last day to drop a Fall term course without receiving a grade is: **Nov. 11, 2016.**

**Lecture Capture:**

Lectures will be digitally recorded and posted online. 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. 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 formulas and functions to solve 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 2016  
(Lecture Dates/Topics are Approximate)

<b>Week Beginning:</b>	<b><u>Monday</u></b>	<b><u>Wednesday</u></b>	<b>Laboratory</b>	<b>Readings</b>
September 12	Introductory Class – Admin. Details	Topic 1 Introduction to Research Methods	No labs this week	- Chapter 1
September 19	Topic 1 Scientific Process “Gold Standard”	Topic 1 Research Tools - Internet Resources	Lab 1	- Chapter 2 - Intro’ to Excel video
September 26	Topic 1 Research Tools - <b>Excel</b>	Topic 1 Scientific Process	Lab 2	- Chapter 3 - Video: Creating Excel charts
October 3	Topic 2 Types of Research	Topic 3 Disseminating knowledge	Lab 3	- Chapter 4 - Video: Multiple worksheets
October 10	Thanksgiving <b>[University closed No lecture]</b>	Topic 3 Disseminating knowledge	Lab 4 [except Monday labs]	- Chapter 5 - Video: Excel Functions 1
October 17	<b>Excel</b> – Functions [IF]	Topic 4 Literature Review	Lab 5 No Monday labs	- Chapter 5 - Video: Excel Functions 2
October 24	Topic 5 Experimental Research - Ethics	Topic 5 Experimental Research - Sampling Procedures	Lab 5 - only for <b>Monday</b> sections	- Chapter 6 - Video: Excel Functions 3
October 31	Topic 5 Experimental Research - Error Variables	<b>Quiz 1</b>	Lab 6	- Chapter 7 - Video: Excel Database
November 7	Topic 5 Experimental Research - Validity / Reliability	Topic 6 Experimental Design	Lab 7	Review
November 14	Topic 7 Complex experiments	Topic 7 Complex experiments	Lab 8	Chapter 8
November 21	Topic 8 Other types of research	Topic 8 Other types of research	Lab 9	Chapter 9
November 28	Topic 9 The Research Report	<b>Quiz 2</b>	Lab 10	Glossary
December 5	Topic 9 The Research Report	Final Exam period begins	No Labs	Review all chapters
December	<b>Exam period</b> - Dec. 7 – Dec. 22	<b>Exam period</b> - Dec. 7 – Dec. 22	Exam period	<b>Exam period</b> - Dec.7 – Dec. 22