

**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.

YORK UNIVERSITY

FACULTY OF HEALTH

SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE

HH KINE 2049 3.0

**RESEARCH METHODS IN KINESIOLOGY**

Fall 2021

\*\*\* Please note that this is a course that depends on remote teaching and learning. There will be no in-class interactions or activities on campus for this course. All times in the course outline or elsewhere related to this course are in local time (Toronto, Ontario, Canada). \*\*\*

This course is an introduction to the procedures utilized to design and conduct research in the discipline of Kinesiology and Health Science. 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.

**Take Care of Yourself:**

We are all dealing with a tremendous amount of stress, anxiety, fear, and uncertainty because of the COVID-19 pandemic. Please be kind and gentle with yourselves and others during this difficult period. There are several online free resources available to help support you. If you need help, the following list of websites may be a good place for you to start, (this is not an exhaustive list):

<https://good2talk.ca/>

<https://counselling.students.yorku.ca/>

<https://coronavirus.info.yorku.ca/>

<https://yorkinternational.yorku.ca/>

**Prerequisites:** None. **Course Credit Exclusions:** PSYC 2030 3.0

**Course Director:** Professor **Merv Mosher**  
359 Stong College  
[mmosher@yorku.ca](mailto:mmosher@yorku.ca)

### **Student-Hours (Online Office-Hours):**

Regular online student-hours will be held throughout the term. The exact schedule will be posted on the course eClass site. The times will be listed are times for you. I can answer questions you may have about the course or other or we can discuss other topics if you want. The time is yours. If needed, a virtual office-hour appointment can be arranged.

### **Email correspondence:**

Email communication should be reserved primarily for personal issues that need to be resolved immediately. Questions that arise related to course content or procedures should be posted on the Discussion Boards (eClass) or discussed during the regularly scheduled online student-hours.

Please ensure that email messages are professional, clear, and coherent. Assume that your email will be the factor determining whether you are accepted into a professional program or hired at your dream job. Avoid text messaging terms, inappropriate language, emoticons, and poor spelling, punctuation, and grammar. I can only respond to emails that I understand. I generally review and respond to course-related student emails quite promptly except for emails sent on weekends. These will likely be answered on the first business day of the following week.

**Course Website:** <https://eclass.yorku.ca/eclass/course/view.php?id=56044>

**Professor's web site:** <http://mmosher.info.yorku.ca/>

### **Course texts:**

<p><u>Course Kit: Research Methods in Kinesiology and Health Science</u>, York University, 2021. Published by Northview Print and Copy. There are several options to purchase the Course Kit including eBook. These options are explained in detail on eClass.</p>
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### **Course Materials Copyright Information**

These course materials are designed for use as part of this course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this material for distribution (e.g., uploading material to a commercial third-party website) may lead to a violation of Copyright law. [Intellectual Property Rights Statement](#).

### **Technical requirements for taking the course:**

Since the entire course will be delivered remotely, two platforms will be used, (i.e., eClass and Zoom), through which students will interact with the course materials, the course director, Teaching Assistants, as well as with one another. Therefore, a computer or smart device with a camera and microphone is required to complete the course.

Please review this syllabus carefully to determine how the course content will be delivered, how office hours will be conducted and how assignments will be submitted. Students must make every effort to arrange adequate internet connection.

Students should note the following:

- Zoom is hosted on servers in the U.S.A. This includes recordings done through Zoom. • If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

**[Technology requirements and FAQs for eClass can be found here](#)** –

**Useful links describing computing information, resources and help for students:**

<u><a href="#">Student Guide to Moodle</a></u>	<u><a href="https://thelp.yorku.ca/student-guide-to-moodle">https://thelp.yorku.ca/student-guide-to-moodle</a></u>
<u><a href="#">Computing for Students Website</a></u>	<u><a href="https://student.computing.yorku.ca/">https://student.computing.yorku.ca/</a></u>
<u><a href="#">Student Guide to eLearning at York University</a></u>	<u><a href="http://elearning-guide.apps01.yorku.ca/">http://elearning-guide.apps01.yorku.ca/</a></u>
<u><a href="#">Learning Skills Services</a></u>	<u><a href="https://www.yorku.ca/sclcd/learning-skills/">https://www.yorku.ca/sclcd/learning-skills/</a></u>
<u><a href="#">Zoom@YorkU User Reference Guide</a></u>	<u><a href="http://staff.computing.yorku.ca/wp-content/uploads/sites/3/2012/02/Zoom@YorkU-User-Reference-Guide.pdf">http://staff.computing.yorku.ca/wp-content/uploads/sites/3/2012/02/Zoom@YorkU-User-Reference-Guide.pdf</a></u>
<u><a href="#">Zoom@YorkU Best Practices</a></u>	<u><a href="https://staff.computing.yorku.ca/wp-content/uploads/sites/3/2020/03/Zoom@YorkUBest-Practicesv2.pdf">https://staff.computing.yorku.ca/wp-content/uploads/sites/3/2020/03/Zoom@YorkUBest-Practicesv2.pdf</a></u>

Students are responsible for being actively involved in the course, and for checking eClass regularly and frequently to ensure you have the latest information about the course. “I did not know because I was not online” or “because I did not check eClass” are not excuses that will be accepted under any circumstances for the course.

**Organization of the course:**

KINE 2049 is being delivered remotely via eClass and Zoom; **there will be no in-class interactions or activities on campus for this course.** KINE 2049 involves a blend of asynchronous (participate on your own and at times you choose) and synchronous (students are expected to attend and participate at a specific time in live virtual/online sessions) modes of teaching.

**Lectures:** (Asynchronous mode)

Course lectures are scheduled as follows: Section A - M, W, at 10:30 am; and Section B - M, W, at 11:30 am. The 12-weeks of lecture material will be available on eClass in the form of pre-recorded videos which will be posted at the beginning of each week. You can watch the recordings at the scheduled lecture time or any other time you choose. This is referred to as asynchronous delivery. It is imperative that you watch the lecture material during the week the lecture is posted if you want to be successful in the course.

**Laboratories:** (Synchronous mode)

Each week, commencing September 20<sup>th</sup>, you will meet via Zoom with your Teaching Assistant (TA), during the scheduled lab time in which you enrolled. It is during this 2-hour lab time that your weekly lab assignment will be marked. You will be participating in the marking process, so attendance is mandatory. This is the synchronous portion of the course and **requires that you are available at the same time each week to meet with your Teaching Assistant**. The Teaching Assistant may record the synchronous Zoom lab-sessions to assist with record keeping. Students are NOT granted permission to record Zoom sessions.

You are required to complete and submit the lab assignments prior to attending the weekly lab. To receive credit for completion of a lab, any corrections required must be completed prior to the end of your assigned lab time. Late labs will not be marked.

\*Labs commence the week of September 20, 2021.

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."

**Course Evaluation:**

The assessment method used in this course will likely be completely new to you, so **read this section carefully please**.

Quiz 0 must be completed with a score of 100% before any work can be submitted to earn marks in this course. Quiz 0 is based upon information found in the Course Syllabus.

This course will use a process termed Mastery Grading, combined with Flexible Assessment. Mastery Grading/Flexible Assessment is about students actively participating in their own learning. It's about learners making choices on the manner and form of their performance that demonstrates how well they have learned, and how well they can apply that learning in a variety of contexts. All assignments/lab reports/quizzes will be graded as either "Mastery Met" or "Mastery Not Met". A grade of "Mastery Met" on an assignment/lab report/quiz will require work equivalent to "A" level work.

There will not be any exams in the course. Instead, the time that you normally spend preparing for exams will be directed to other activities throughout the course, as described below. Do not underestimate the amount of effort required to be successful in this course. Just like with a course that uses a traditional assessment model (i.e., tests), a great deal of time and effort is required to earn a top mark. However, you have a much greater level of control over your final grade, based upon the time/effort you invest to learn the course material.

## Course Evaluation: Summary

There are three (3) Required Components to the course evaluation and one (1) Optional component.

### **Required Components**

1. Lab component (20%)
2. Weekly Quizzes (29%)
3. Weekly Mini Projects (29%)

### **Optional Component**

4. Digital Tutorial Project (22%) Only required by students attempting to earn an A or A+.

The three **(3) Required Components** are:

1. Weekly Lab component (20%) A lab must be completed at the “Mastery Met” level to receive credit for completion of the week’s lab.
2. Weekly Quizzes (29%) 12 Weekly Quizzes – assessing your knowledge of readings and lectures.
3. Weekly Mini Project (29%) See description below.

The one **(1) Optional Component** is:

4. Digital Tutorial Project (22%) Only required by students attempting to earn an A or A+ grade. Further details are provided below in the Digital Tutorial Project section below. **Due date: Dec. 7, 2021.** No extensions will be granted.

Grading Rubrics are posted on eClass for the Mini Projects and the Digital Tutorial Project.

While each assignment/report/quiz will be evaluated, the letter grade you receive at the end of the course will be determined by the “bundles” of assignments and requirements you have satisfactorily accomplished in the class. **The letter grade you receive will indicate how much you demonstrate that you have learned in this course.**

## **Bundles Overview**

The table below indicates the components required to earn letter grades in the course. You must complete all components at a specific letter grade level to earn the corresponding letter grade.

For example, assume you want to earn a “B” in the course. You need to successfully complete 8 Lab Components, 9 Quizzes and 9 Mini Projects.

### **How do I earn my letter grade?**

Letter Grade	Required Components			Optional Component
	Lab Assignment Fully Completed (Mastered)	Quizzes Completed with a Minimum Of 80% Correct	Weekly Mini Projects Completed	Digital Tutorial Project
<b>E or F</b>	Less than 6	Less than 5	Less than 5	Not required
<b>D</b>	6	5	5	Not required
<b>D+</b>	6	6	6	Not required
<b>C</b>	7	7	7	Not required
<b>C+</b>	7	8	8	Not required
<b>B</b>	8	9	9	Not required
<b>B+</b>	9	10	9	Not required
<b>A</b>	10	11	10	<b>“Excellent” work Required</b>
<b>A+</b>	10	12	10	<b>“Exceptional” work Required</b>

Because sometimes things happen in life that might prevent you from completing one of the components in a particular week, each student will be granted one (1) token that can replace one (1) of the Required components on the chart (except Lab #10 and not the Optional component). For example, assume you want to earn a “B” in the course. According to the table, you are required to successfully complete 8 Labs, 9 Quizzes and 9 Mini Projects, however, the token allows you to earn a B if you only completed 7 Labs, 9 Quizzes and 9 Mini Projects, or 8 Labs, 8 Quizzes and 9 Mini Projects.

## **Course Evaluation: Detailed**

### **Quiz 0:** (0%)

Based upon the Course Syllabus – **you must complete this** with a **score of 100%** before you can attempt the Weekly Quizzes and submit any projects or Lab Assignments!

### **Lab Assignment:**

Each week, prior to the start of their lab, students are required to submit the week’s Lab Assignment. During the lab, your lab will be assessed as Mastery Met or Mastery Not Met. If your lab does not meet the level of Mastery required, you are able to correct the errors during the lab time to receive credit for completing the lab. The Lab Assignment must be completed by the end of your lab period for that week.

## **Weekly eClass Quizzes based on the Readings and Lectures:**

Each week an eClass quiz, based upon the weekly readings and lectures, is to be completed. A minimum mark of 80% is required for successful completion of the weekly quiz. You will be given two (2) attempts to achieve this level of Mastery. Questions are selected randomly from a test bank for each attempt and for each student. Quizzes completed on eClass, will utilize the **free navigation** method of questioning.

The online quizzes may be written at any time during the week that is convenient for students. However, please note that if technical difficulties are encountered during the last 2 hours of the weekly quiz, no remedial action will be possible. In other words, don't wait until the last 2 hours to complete the weekly quizzes.

Weekly quizzes are open-book quizzes which means you may refer to notes, summaries, or the readings. However, it is very easy to run out of time on an open-book quiz. Keep in mind that students who place too much emphasis on their reference materials often underestimate how long it will take them to locate the information in their reference materials. It is important that students do the Weekly Reading and review the lecture material prior to starting the quiz and only rely very minimally on reference materials.

## **Weekly Mini Project: (Visual component and analytical reflection)**

There are two (2) requirements for this component.

### **1. Visual component.**

Create and submit on eClass either:

a) A short video in which you pretend you are being interviewed for television about a topic you want to discuss. Record a short video, (maximum of 90 seconds), of yourself answering a question about a topic that you found interesting during the lecture topics for the week.

OR

b) Social Media content. Assume that you are a social media influencer, (Tik Tok, Twitter, Instagram, WhatsApp, Snap Chat, Facebook, etc.), and your followers want information about this course. Create "content" that you could post on a social media platform to explain a concept that you found interesting from the past week's lectures. This "content" can be in the form of a meme, short video, or any other form that might be of interest to your followers. You do NOT need to post the content on the social media platform. Submit the content you have created to eClass.

### **2. A short analytical reflection paper/video.**

In this reflection, you are to: a) explain why you found the concept that you chose above for your visual component, interesting, (why it is meaningful to you?). The reflection should be about 5 - 6 sentences in length. An example of an analytical reflection is posted on eClass. Note the format and components as you write your reflection. The reflection is to be saved as a PDF file and submitted on eClass.

If you chose to do a social media post, then your reflection must be done as a video. If you chose to do a short video recording, then your reflection can be either typed or a video.

**Weekly Mini Project Summary:**

Mini project - Option A	Mini project - Option B
Visual component = Video answering a question	Visual component = Social media post
Analytical reflection = Typed (or video reflection)	Analytical reflection = Video reflection

A Grading Rubric for the Weekly Mini Projects is available on eClass.

**Digital Tutorial Project:**

Completion of the Digital Tutorial Project **does not guarantee** an A or A+ grade. For example, not completing the three primary components of the course or submitting a trivial, relatively unskilled and/or unoriginal major project will be considered grounds for not assigning an A or A+.

The project must be of outstanding quality. There are no part marks awarded. Either the submission meets the requirements of an “A” or “A+” or it does not. To earn an “A”, the Digital Tutorial Project must be Excellent, demonstrating thorough knowledge of concepts together with a high degree of skill and some elements of originality in satisfying the requirements of the assignment. An “A+” project must be Exceptional, demonstrating thorough knowledge of concepts and great originality in the use of those concepts in satisfying the requirements of the assignment. It is expected that students will work on this project throughout the term. It will not be possible to create an acceptable project in a few days prior to the due date!

The major projects will be graded based on the skill and originality demonstrated in the submission. Students submitting major projects will be expected to make themselves available for a video conference interview to describe and discuss their project if requested by the Course Director.

The **digital tutorial project** requires you to create a tutorial in the form of a digital presentation, (maximum length for an “A” level project of 7-8 minutes and an “A+” level of 10 minutes). The tutorial presentation is to explain, to a classmate, how you would design a study to answer a research question from the field of kinesiology and health science. You can choose any research question that interests you. For example, “how does physical activity affect grade point average?”, or “Does intermittent fasting help Type II diabetics manage their blood glucose levels?” An “A” level project must explain how you would use two (2) different research designs to answer the research question you have selected. An “A+” level project must explain how you would use three (3) different research designs to answer the research question you have selected. In other words, demonstrate to the viewer that you can apply the content you learned in this course to a “real-world” situation.

Your presentation should clearly explain a) the research question and b) the components of the research designs you select to answer the research question.

You have the freedom to choose how to produce your tutorial, providing the final product is a digital object suitable for sharing with other class members, (e.g., PowerPoint, video, Prezi, Vlog, Easelly,



Powtoon, video, etc.). The presentation must be submitted as a stand-alone presentation, meaning the viewer simply must click "Start/Play" and the presentation begins.

Further details about the Digital Tutorial Project are available on eClass as well as a Grading Rubric and samples presentations from other courses.

### **Course Marks**

Marks will be posted on eClass under the topic heading of Grades. These will be updated as the course progresses. The eClass gradebook is not the official record of grades. The official record of grades in the course will be kept by the Course Director on a spreadsheet.

\*\* An appeal against any 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.

Final course letter grades may be adjusted to conform to Program or Faculty grades distribution profiles. Letter grades will be determined by the descriptions in the York University Undergraduate Calendar.

### **Academic Honesty And Integrity:**

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's [Academic Integrity module](#) at the beginning of the course. Breaches of academic integrity range from cheating (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.) to aiding and abetting (helping someone else to cheat). All breaches in this course will be reported to the appropriate university authorities, and can be punishable according to the [Senate Policy on Academic Honesty](#).

To promote academic integrity in this course, students may be required to submit their written assignments to Turnitin (via eClass) for a review of textual similarity and the detection of possible plagiarism. In so doing, students will allow their material to be included as source documents in the Turnitin.com reference database, where they will be used only for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin service are described on the [Turnitin.com](#) website.

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."

## **Test Banks**

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the [Senate Policy on Academic Honesty](#). In particular, buying and attempting to sell banks of test questions and/or answers may be considered as “Cheating in an attempt to gain an improper advantage in an academic evaluation” (article 2.1.1 from the Senate Policy) and/or “encouraging, enabling or causing others” (article 2.1.10 from the Senate Policy) to cheat.

## **Drop Dates:**

The last day to drop a Fall term course without receiving a grade is: **Nov. 12, 2021.**

The Course Withdrawal Period (withdraw from a course and receive a grade of “W” on transcript), is **Nov. 13 - Dec. 7, 2021.**

## **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

## **Recorded Lectures:**

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 online, 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 Information For Students:**

All students are expected to familiarize themselves with the following information, available on the [Senate Committee on Academic Standards, Curriculum & Pedagogy](#) website.

[Senate Policy on Academic Honesty](#) and the [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](#)

## **Policy on Free Speech:**

York University reaffirms its commitment to provide an environment conducive to freedom of enquiry and expression where all members of the community may learn, teach, work and live, free from prejudice, inequality and discrimination based on race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, religion, sex, sexual orientation, gender identity, gender expression, age, marital status, family status or disability.

## **Disruptive and/or Harassing Behaviour in Academic Situations Policy:**

York is committed to policies that support the teaching and learning of controversial subject matter. Students and instructors are, however, expected to maintain a teaching and learning environment that is physically safe and conducive to effective teaching and learning for all concerned, and to be always civil and respectful within the learning environment, including within classrooms, laboratories, libraries, study halls and other places where academic activities are conducted and in areas proximate to those where academic activities are taking place.

## **Course 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 a variety of research designs appropriate for the field of Kinesiology and Health Science.
- c. evaluate a research study conducted in Kinesiology and Health Science.
- d. analyze a research article in an academic journal.
- e. apply Excel 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.

## **School of Kinesiology and Health Science Undergraduate Degree Level Expectations**

### *Depth and Breadth of Knowledge*

- Demonstrate knowledge of the terminology and nomenclature in Kinesiology and Health Science.
- Critically reflect on physical activity and health from individual to societal and local to global contexts.
- Integrate and critically analyze the bio-science, behavioural, and sociocultural aspects of physical activity and health.
- Critically evaluate and discuss current issues relating to Kinesiology and Health Science.
- Demonstrate a breadth and depth of knowledge in Kinesiology and Health Science in one or more specialized areas.

### *Knowledge of Methodologies for Inquiry*

- Describe the process of research that is used to develop knowledge in the field of Kinesiology and Health Science.
- Apply research methods to kinesiology and human health topics and solve problems using their knowledge of research methods in the discipline.
- Evaluate information about physical activity and human health that is disseminated via popular media and discipline related research journals.

### *Application of Knowledge*

- Apply multi-disciplinary knowledge of physical activity and health to life situations.
- Use knowledge and skills to advocate for the fundamentals of physical activity and health from general to specific situations.
- Apply subject-based theories, concepts or principles to solve problems.

### *Communication Skills*

- Access Kinesiology and Health Science information from a variety of sources.
- Use appropriate academic terminology and notation when preparing and presenting information.
- Present ideas and arguments in a well-structured and coherent manner using appropriate communications formats.

### *Awareness of Limits of Knowledge*

- Understand and appreciate the dynamic nature of information in Kinesiology and Health Science.
- Be aware of the limits in knowledge and methodologies when analyzing, evaluating, interpreting and disseminating information.

### *Autonomy and Professional Capacity*

- Be able to identify areas for personal and professional development.
- Be able to think independently, problem solve and set tasks.
- Have developed mutually beneficial peer relationships for the purposes of mentoring and networking.

KINE 2049 3.0 Research Methods in Kinesiology - Fall 2021  
(Lecture Dates/Topics are Approximate)

<b>Week Beginning:</b>	<b><u>Monday</u></b>	<b><u>Wednesday</u></b>	<b>Lab Assignment</b>	<b>Readings</b>
September 6	Labour Day <b>University closed</b>	Introductory Class – Admin. Details	No labs this week	Text - Chapters 1 & 2
September 13	How Not to be Ignorant About the World	How do we know what we know?	No labs this week	Text - Chapters 3 & 4 Intro' to Excel video
September 20	Heroes & Villains in the Scientific Process	Spin Doctors & the Scientific Process	Lab 1	Text - Chapters 5 & 6 Video: Creating Excel charts
September 27	“Facts” and other Terms in Research	Nature and Purpose of Research	Lab 2	Text - Chapter 7 Video: Multiple worksheets
October 4	Types of Research	Getting started: Sampling Procedures; Literature Review	Lab 3	Text - Chapter 8 Videos: Excel Functions 1
October 11	<b><u>Fall Reading Week</u></b>	<b><u>Fall Reading Week</u></b>	No labs this week	Text - Review previous chapters
October 18	What could possibly go wrong? Ethics in Research	“Big Bang” - Theories and other terms	Lab 4	Text - Chapter 9 Videos: Excel Functions 2
October 25	Is It Real? Measurement in Research - Validity & Reliability	Experimental Research - Design	Lab 5	Text - Chapter 10 Videos: Excel Functions 3
November 1	Experimental Research - Design	Experimental Research Cont'd	Lab 6	Text - Chapter 11 Video: Excel Database
November 8	Experimental Research Cont'd	Complex experiments – Factorial Design	Lab 7	Text - Chapter 12
November 15	Complex experiments Interpreting Results	How can we study that? Other types of research	Lab 8	Text - Chapter 13
November 22	How can we study that? Other types of research	How can we study that? Other types of research	Lab 9	Text - Chapter 14
November 29	Presenting Your Research	Presenting Your Research	Lab 10	Text - Chapter 15
December 6	Summary – Q & A session	<b>Dec. 7<sup>th</sup> - Due date for Digital Tutorial Project</b>	No Labs	Review all chapters
December	<b><u>Exam period</u></b> - Dec. 9 – Dec. 23	<b><u>Exam period</u></b> - Dec. 9 – Dec. 23	Exam period	<b><u>Exam period</u></b> - Dec. 9 – Dec. 23