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SOC202H1F (LEC0101): Introduction to Quantitative Research Methods Fall 2021 University of Toronto Location: SS 1073

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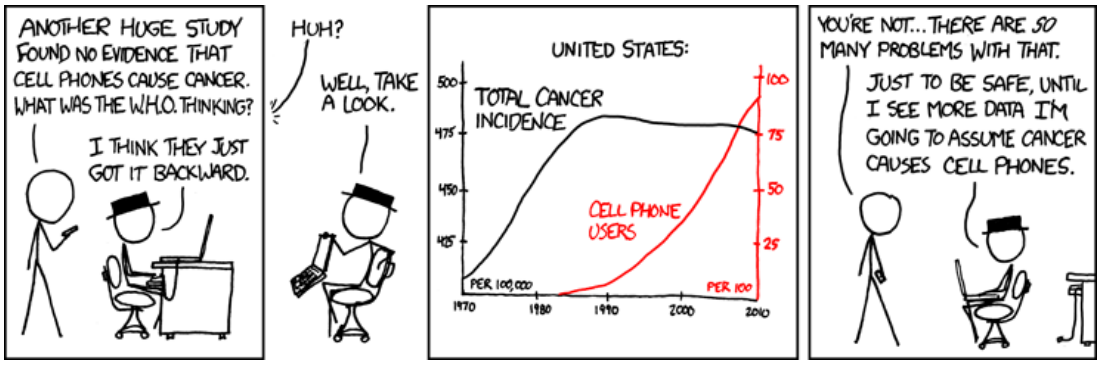
Quercus: https://q.utoronto.ca/courses/235683

HOW WILL THIS CLASS WORK IN FALL 2021?

For both pedagogical and practical reasons related to the pandemic, this will be a "flipped" class. Lectures and labs (tutorials) will be conducted entirely online for the first two weeks of the semester. After the first two weeks, short instructional videos will be available online so that our time together in class can focus on hands-on active learning.

Lecture: Tues 2:10-4pm—Lecture videos and required content will be available for students to review on their own each week. In-person lecture meetings will be opportunities for active and student-driven learning. Students are strongly encouraged to attend in-person—but in recognition of the varying circumstances students may face as we transition out of the pandemic, there will not be marks for in-person attendance.

Tutorials: Wed: 10:30-12:00, 12-1:30, 1:30-3:00: Tutorials will be held in-person in FE 36. During tutorial meetings students will received guidance on how to complete required lab work and time to work independently with TA support available. Video recordings of instructions will be available for students who are unable to attend in-person.



Source: XKCD

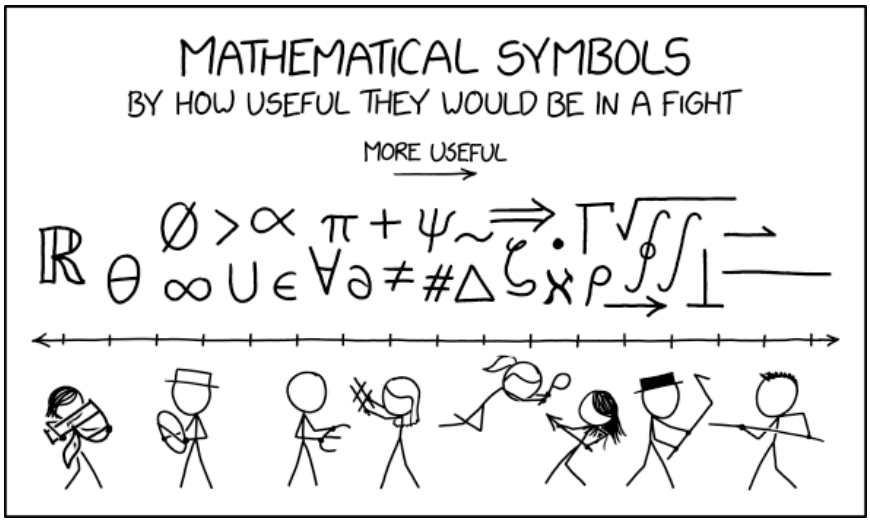
COURSE DESCRIPTION

Welcome to Sociology 202, Introduction to Quantitative Research Methods. This course presents an introduction to statistical techniques used in evaluating data in Sociology. While it's important that you gain an understanding of the mathematical concepts behind the statistical analyses, it is of even greater importance that you leave this course with a conceptual understanding of where quantitative information comes from and how it is produced. This course is designed to teach you to think critically about data and methods. You will learn to use quantitative data to answer sociological research questions and evaluate your results for error, bias, validity, reliability, generalizability, and significance. In other words, you will be doing your own sociological research and, in the process, learning how to use, analyze and evaluate data in the world beyond. Throughout the course we will examine the underlying assumptions, strengths, and limitations of these techniques and focus on how they can help us better understand the social world.

Truth claims made with statistics are abundant and often have the quality of facts in social and political life. Unfortunately, because many people do not understand the statistics undergirding these claims, they receive less scrutiny than they deserve. It is my primary goal to ensure that you learn the basic statistical literacy that you need to be a smart consumer of information. Our increasing reliance on statistics to understand the social world means that statistical and analytic skills are marketable skills. In fact, statistics is one of very few classes that sociology majors take that provides them with concretely marketable skills. I believe that teaching statistical tools and techniques is a way of democratizing knowledge and its production.

COURSE GOALS

1. To demystify statistics so you can be a smart consumer of quantitative information.
2. To provide a solid foundation of quantitative skills that could serve as assets in the future.
3. To give you practical computer skills for data analysis.
4. Provide you with experience in working with real world data



Source: XKCD https://xkcd.com/2343/

MIXED FEELINGS ABOUT TAKING STATS?

If you do, you are not alone. Statistics seems like a daunting subject to many students. You might feel apprehensive about taking this class if you haven't practiced your math skills in a while or if you feel like math is not your strong suit.

For this class you are only expected to be familiar with basic algebraic operations. We will not use derivations and advanced mathematical concepts. What is more, statistics is not just about numbers! It includes more generally problem-solving, logic, and developing skills to communicate findings of statistical analyses to a broader audience.

HOW TO SUCCEED

Practice is key for developing your ability to solve problems and getting information out of a group of numbers. Mere memorization of the techniques is not a successful strategy for learning statistical skills. The weekly homework, the lab assignments, and the examples we will be tackling during class will provide many opportunities for you to practice: on your own, together with other students, and with the help of the teaching team.

Learning and mastering statistics (and getting a good grade in the class) requires spending a considerable amount of time outside of class **on a regular basis** working through the material and practicing the techniques. The material from every week builds on the content of previous weeks. It is crucial to **seek help proactively and as soon as possible** should you need clarification (see Communication & Getting Help).

LATE ENROLMENT

If you enrolled late in the class, please get in touch with me as soon as possible so we can make sure that you have all the necessary information.

LEARNING COMPONENTS

Each week, you will find all the materials for the week packaged together on Quercus. This may include lecture videos, tutorial demonstrations, reading either in the text or available online, homework on Mindtap, surveys to complete, outside videos, interactive activities, assignments, or other content. Unless otherwise indicated, all materials assigned are required.

TEXT

Healey, Joseph F. & Steven G. Prus. 2019. Statistics: A Tool for Social Research, 4th Canadian Edition. Nelson Education Ltd.

- Access to Mindtap is also required. with the purchase of the text, you will receive a password for MindTap, the online system this class uses for homework assignments.

  Acquiring the Book:
  The textbook is available at the U of T bookstore:

  Hard copy of textbook & MindTap access bundle for $131.95.

  12-month Digital Book and MindTap access are available for $64.95 The U of T Bookstore provided this link for digital book purchases:
  https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller_id=96

&Course=STG+SOC+202HF+eBUNDLE%3a+STATISTICS%3a+A+TOOL+FOR+SOCIAL+RESEARCH+4E+%2b+MINDTAP+ACCESS+CARD&frame=YES&t=permalink

If you choose to purchase a used textbook, you will need to also purchase MindTap Instant Access ($64.95, includes digital book. At last look, used copies were available on Amazon for about $42, so a used hard copy plus digital access could be as low as $107. This option only makes sense for students who need a hard copy of the text.)

All other required readings, videos, and required content will be available on Quercus.

LAB/TUTORIAL SESSIONS

Lab/tutorial sessions will be used to provide demonstrations and support on the statistical analysis software package SPSS, which we will be using to analyze data from two high quality data sets. Lab computers are fully equipped with the required software. While not required, students who miss in-person lab for any reason may want to purchase a personal license for SPSS to complete the work at home. Video guidance to complete lab work will be available for students who miss in-person lab meetings.

HOMEWORK ASSIGNMENTS

To reinforce course material, students will be required to complete seven homework assignments. These assignments will be available at 5pm Tuesdays on the weeks they are assigned and can be completed until 11:59p the following Monday. That is, you will have a 151-hour window in which each assignment can be completed.

You will need to access MindTap for Healey/Statistics in order to complete the homework.

If you purchase the print textbook plus the MindTap printed access code, you will need the course key, MTPN-D3JQ-B8GR, to enter the course. You would then visit the following website to access homework assignments: https://login.nelsonbrain.com/course/MTPND3JQB8GR

When homework assignment is given, you will log in using the ID and password you created during online registration. The website will contain short assignments that correspond with the textbook reading. After answering most questions, you will receive immediate feedback on your performance—i.e., you will know which questions were correct and which ones were incorrect. Most questions allow a total of three takes (please be aware some questions only allow 1 attempt). Your mark for the assignment will be based on the average of your attempts.

Because there is such large window of time during which assignments can be taken and because assignments can be taken anywhere where an internet connection is available, there are no opportunities for make-up assignments.

RESEARCH POSTER PROJECT

The research poster project will be your opportunity to get your hands dirty doing original sociological research. It should reflect your interest in and understanding of the social world, as much as possible in this limited form. You will use real data and tested social science techniques to answer a research question and share the results in a well-designed poster containing visual displays of data and text describing research findings and analysis. For some of you this project may serve as stepping-stone to an

independent study. If nothing else, I hope it will make you excited to come to class and to talk to your classmates and share ideas. Social Science research is not done in isolation; therefore, you will be expected to help each other throughout the process of data analysis and evaluation. Peer collaboration is a cornerstone of knowledge production and you will be expected to engage in this process with each other throughout the semester. This may sound intimidating, but I believe you will find it highly rewarding. You will have the option to work with one or two partners on this project, and we hope you will do so.

Discussion Board

Throughout the semester you will have the opportunity to participate in an online conversation with a group of classmates. The discussion board is intended to help you get to know each other, ask questions, share information, and connect. Guidelines for participating will be posted each week. Discussion board assignments will be worth 1 point each toward your overall grade. You will earn .5 points for each on-time post for up to 2 posts that meet the board's guidelines. This means that 2 posts per assignment are required, though you are welcome to post more if you like. There is no extra credit associated with this assignment so you will only get credit for the first two posts per board. Boards will close at 12pm on lecture meeting days so that the instructor can prepare to address board content during lecture time if needed.

Midterm Test

There will be a midterm test for this class. The midterm will cover content from the first part of the semester up until reading week.

Extra Credit Opportunities

There are 2 opportunities to earn extra credit points in this class worth a total of 3 points toward your final grade. Students may combine elements of both opportunities to earn up to 3 total points.

1) **Engage in Public Sociology**: Write a sociological blog post of 200-300 words and post it to the appropriate spot on Quercus where classmates can discuss it with you. Posts should include a sociological analysis of an object you find, a pop culture event or artifact (TV show, song, magazine cover, etc), a news article or story, an interaction you have, or anything else that you encounter in the social world. You are strongly encouraged – though not required – to include quantitative information in your post along with pictures, videos, links to other blogs, websites, or other relevant digital media (posts that do not include quantitative information will not receive maximum credit). Posts that meet all the guidelines posted before **November 1st** may receive up to 2 extra credit points.

You may also receive up to 1 point for comments of at least 100 words made to other students' posts by **December 1st**. Each comment will be worth as much as .25 points. It is possible to receive a total of 3 points toward your final grade (by writing a blog and commenting on others' blogs) from this extra credit opportunity.

2) **Perform, draw, sing, or otherwise dramatize or depict a concept from the class in a medium that can be shared with your classmates.** This project may be done individually or in small groups. Projects will be shared with the class and must be submitted in a shareable format before **December 13th**. Past projects include songs, videos, poems, and joke books. Up to 3 points may be added to your final grade, all projects accurately conveying a class concept will receive at least 1.5 points. An additional 1.5 points may be awarded for extraordinarily creative engagement with course material. In other words, even if you are not a creative type you can still take advantage of this extra credit opportunity.

EVALUATION COMPONENTS

Assignment	Number of occasions	Due Date(s)	Percent Value	Total percent of Final Mark
Homework Assignments	7	Sept 27, Oct 4, 11, 18, Nov 1, Nov 22, 29	4	28
Lab Assignments	3	Oct 1, Oct 29, Nov 28	8	24
Mid-term Test	1	2-Nov	18	18
Discussion Board	6	Sept 21, 28, Oct 12, 26, Nov 16, 30	1	6
Research Poster	1	7-Dec	24	24
				100

Percentage grades will translate to letter grades as follows (standard university grade scale):

Percentage	**Letter Grade**	**Grade Point Value**	***Percentage***	**Letter Grade**	**Grade Point Value**
90-100	A+	4.0	*67-69*	C+	2.3
85-89	A	4.0	*63-66*	C	2.0
80-84	A-	3.7	*60-62*	C-	1.7
77-79	B+	3.3	*57-59*	D+	1.3
73-76	B	3.0	*53-56*	D	1.0
70-72	B-	2.7	*50-52*	D-	0.7
			0-49	F	0.0

COURSE POLICIES

LATE WORK AND MISSED DEADLINES

Homework assignments can be completed from anywhere with an internet connection and anytime between 5pm on Tuesdays and 11:59p on the following Monday, so there are no make-ups offered for these assignments.

Lab assignments are due at the day and time specified. Discussion board posts are due by 12pm before scheduled lecture times. The only exception for either deadline is a legitimate, documented reason beyond your control (e.g., illness, family emergency). In cases where there is no legitimate reason for being late, a 5% penalty will be added for each 24-hour period. Penalties are automated within Quercus and begin the minute after the assignment is due—a paper submitted and 5:01pm for a 5:00pm deadline will subject to penalty. Plan ahead to avoid late submissions due to technical issues or slow internet. Make-up tests will only be given for legitimate, documented absences.

Please notify me promptly if you must miss a deadline and provide official documentation as soon as possible. Under university regulations I am not required to give make-up tests or provide extensions if the student informs me of her/his circumstance more than 7 days after the missed test or assignment due date.

Three types of documentation are considered "official" when it comes to late work and missed assignments:

1) If you are unable to turn in an assignment/or miss the test for medical reasons, you will need to **email me** the instructor, not the TA, **and also** declare your absence on ACORN. Please note that it is your responsibility to work ahead on your assignments, so a minor short illness days before the due date is not an excuse for lateness.
2) For other reasons, such as family or other personal reasons, please contact your college registrar and have them email me. A letter from Accessibility Services. This documentation is useful for ongoing medical issues that require special accommodation.

ACADEMIC INTEGRITY

Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.
Familiarize yourself with the University of Toronto's Code of Behaviour on Academic Matters. This is the rule book for academic behaviour at the U of T, and it is your responsibility to read this material and comply fully with it: http://www.governingcouncil.utoronto.ca/policies/behaveac.htm
The University of Toronto treats academic integrity and academic misconduct very seriously. Academic misconduct includes, but is not limited to:

- Sharing answers to assignments, including on social media, email, or in person
- Copying material word-for-word from a source (including, but not limited to the textbook, lectures, or study group notes), not placing the words within quotation marks and citing the source
- Submitting your own work in more than one course without the permission of the instructor
- Making up sources or facts
- Obtaining or providing unauthorized assistance on any assignment including having someone re/write or add material to your work
- Lending your work to another student who submits it as his/her own
- Letting someone else look at your answers on a test
- Falsifying or altering any documentation required by the University, including doctor's notes
- Submitting an altered assignment/test for re-grading

GRADE APPEALS

Students who commit an academic offense face serious penalties. University policy requires cases of academic dishonesty to be reported to the department chair and the university.
You find additional information on the university's rules and expectations about academic integrity here: http://www.artsci.utoronto.ca/osai/students

We do our very best to grade work fairly, consistently, and accurately. Nevertheless, one of us may unintentionally err in our grading duties. If you believe that your assignment or test has been mismarked, please adhere to the following rules:

- For simple mathematical errors, simply alert your TA of the mistake.

- All requests for re-grading tests or course assignments should be made to the person who graded your work. Please **wait for 24 hours** after the assignment has been returned to the class and submit your request **within two weeks of that date**. Requests submitted at a later date will not be considered.
- A **short memo** that clearly states specific reasons to justify the request and backs up these reasons with evidence from your assignment must be submitted to the person who graded your work.

If your appeal is deemed appropriate, the entirety of your test/assignment will be re-graded. Please note that upon re-grade your mark may go down, stay the same, or go up.

ELECTRONIC COMMUNICATIONS AND QUERCUS

The University of Toronto Quercus system will contain the course syllabus, assignments, discussion board, and course announcements. Students are responsible for the content of all course materials and for checking their official utoronto.ca email address regularly. Emails sent to the utoronto.ca email address on file are deemed to have been received.

STUDENT RESPONSIBILITY

You are expected to know the contents of the syllabus. Please consult the syllabus before emailing the TA and the instructor. And you are responsible for all the material covered each week, as well as announcements posted on the course website (make sure to turn on the notifications of your choice on Quercus).

All written work must be typed, double-spaced, with normal (approximately 1-inch) margins using 11-12 point Times New Roman, Calibri, or Cambria font. When you submit files, they should be in PDF, doc(x), txt, xls(x) files or another format that can be read by a text editor or word processing program. Written work will be submitted via the course website. On-line submission makes any formatting abnormalities painfully obvious.

All writing assignments should be submitted on the course website of Mindtap according to the deadlines outlined out for each assignment (see Course Schedule).

Students can expect work to be returned within two weeks unless extenuating circumstances dictate otherwise. Please consider that TAs, who grade much of the work, are unionized workers with rights, lives, and other demands on their time. Protecting their rights as workers requires giving them the longest reasonable grading windows practical within confines of the semester.

ACCESSIBILITY

The University of Toronto is committed to accessibility. If you require accommodations or have any accessibility concerns, please visit http://studentlife.utoronto.ca/as as soon as possible. If you are registered with Accessibility Services, please forward your accommodations paperwork to the instructor within the first two weeks of the course so that arrangements can be made.

For help with accommodated testing, please use this link https://lsm.utoronto.ca/ats/

EMAIL

Please use your University of Toronto email to communicate with me with regard to personal matters. Please feel free and encouraged to contact the instructor and TAs using the contact information provided on the syllabus. Please also include "SOC 202" and a brief description in the subject line. I will typically answer emails within 24 hours, during the workweek (i.e. Monday through Friday, between 9 a.m. – 5 p.m.). Keep in mind that for simple questions, email is the preferred method of communication. However, for longer questions, students should come to office hours.

OFFICE HOURS

Office hours will be held Tuesdays from 4:15-5:15. You are welcome to attend office hours either in person or on Zoom—please let me know if I should expect you in person. If you wish to schedule an appointment with the instructor, please use the appointment slots on Quercus Calendar: Click on the "Calendar" in the menu on the left-hand side, then go to "Find Appointments" on the right-hand side. Each slot is 10 minutes. If you need more time, you can book more than one adjacent slot and you may also book appointments as small groups. You can also leave a note about what you would like to talk about in the "comments" box.

Should all the slots for a given week be taken, please email me (sharla.alegria@utoronto.ca). Please include details about the nature of your meeting request and a list of dates/times when you are available in your message.

TECHNOLOGY REQUIREMENTS

SOFTWARE

IBM SPSS: Base Edition

SPSS is the statistical software package you will need to use to complete lab assignments. You can purchase an SPSS license through the UofT's Licensed Software office (https://onesearch.library.utoronto.ca/ic/licensed-software). UofT has negotiated a special student price for a 12-month SPSS license, if you purchase through the link above. An SPSS license on your own computer is the easiest and most reliable way to access SPSS. You have **two alternatives**, however, if you choose not to purchase a license. First, as long as public health conditions allow for in-person access, you can work on campus computers in the library or Sociology lab. It is possible, though not guaranteed, that you will be able to complete the necessary work in SPSS during our tutorial meetings. Second, you can access SPSS through the University of Toronto Libraries Remote Lab (https://cafstatus.icicle.utoronto.ca/remotelab/). This lab allows for up to 17 users at a time to connect to remote desktops using the U of T VPN. While this resource will provide access, it has yet to be seen how heavily used it will be—accessing a computer may be challenging since it can support only 17 users at a time.

IMPORTANT: If you choose not to purchase an SPSS license and instead rely on remote access alternatives, be sure to start your assignments early. Remote resources may be busy and technical issues can arise. Ultimately, **you are responsible for completing your assignment on time**.

CALCULATOR

You may find it helpful to have a simple calculator for this class, though you will have access to a

computer during all assignments. I like the TI-30Xa, personally. It's available for $13.29 on Amazon.

COURSE SCHEDULE AND ASSIGNED READINGS

**Please note that the course schedule may be subject to change at the discretion of the instructor and as necessary to meet public health and safety recommendations. Please be flexible and attentive to course announcements.*

Week	Class Meeting Date	Topic	Activities	Notes
Week 1	**Sept 14**	Introduction, level of measurement, basic descriptive statistics pt. 1	**Read:** Healey et al. reading: Chapter 1 and Chapter 2 up to (not including) section 2.6 (pg. 52) **Complete:** • Discussion Board 1 Opens (Due Week 2)	**Online only**
Week 2	**Sept. 21**	Basic descriptive statistics, pt. 2; central tendency and dispersion	**Read:** et al. reading: Chapter 2 (section 2.5 and onward) and Chapter 3 **Complete:** • Discussion Board 1 Due Sept 21, 12pm • [Optional Due Sept. 20] Chapter 1 Homework (practice working in Mindtap) • Discussion Board 2 Opens (Due week 3)	**Online only**
Week 3	**Sept. 28**	The normal curve, z-scores, and probability	**Read:** Healey et al. reading: Chapter 4 **Complete:** • Discussion Board 2: Due Sept 28, 12pm. • Homework 1: Sept 27, 11:59pm	
Week 4	**Oct. 5**	From Description to Inference	**Read:** Healey et al. reading: Chapters 5 **Complete:** • Homework 2 Due: Oct 4, 11:59pm • Lab 1 due Oct 1, 11:59pm • Discussion board 3 opens (Due week 5)	
Week 5	**Oct. 12**	Sample distributions, and confidence intervals	**Read:** Healey et al. reading: Chapters 6 **Complete:** • Discussion Board 3: Due Oct 12, 12pm • Homework 3: Due Oct 11, 11:59pm.	
Week 6	**Oct. 19**	Introduction to hypothesis testing	**Read:** Healey et al. reading: Chapter 7 up to (not including) section 7.5, section 7.10, and Chapter 10 **Complete:** • Discussion Board 4 Open (Due Week 7)	

			• Homework 4: Due Oct 18, 11:59pm	
Week 7	**Oct. 26**	Two sample hypothesis tests for means and proportions	**Read:** Healey et al. reading: Chapter 11 **Complete:** • Discussion Board 4: Due Oct 26, 12pm • Lab 2 Due Oct 29, 11:59pm	
Week 8	**Nov. 2**	**Mid-Term Test**	• Discussion Board 5 Open (Due Week 10) • Homework 5: Due Nov 1, 11:59pm	
Week 9	**Nov. 9**		**Reading week: No New Content**	
Week 10	**Nov. 16**	Measures of association and hypothesis-testing at the nominal level	**Read:** Healey et al. reading: Chapter 7 (section 7.5 and onward) and Chapter 8 (up to 8.10) Healey et al. reading: Chapter 7 (section 7.5 and onward, but not 7.10) and Chapter 8 **Complete:** • Discussion Board 5 Due Nov 16, 12pm	
Week 11	**Nov. 23**	Hypotheses and measures of association at the interval/ratio level	**Read:** Healey et al. reading: Chapter 13 **Complete:** • Homework 6: Due Nov 22, 11:59pm • Discussion Board 6 Open (Due Week 12) • Lab 3 Due Nov 28, 11:59pm	
Week 12	**Nov. 30**	Testing hypotheses with multiple regression	**Read:** Healey et al. reading: Chapter 14 **Complete:** • Discussion Board 6: Due Nov 30, 12pm • Homework 7 Due Nov 29, 11:59pm	
Week 13	**Dec. 7**	Wrap-up	**Review and Final Poster support** **Submit posters by 11:59pm Dec 7**	