
INLS 581

Research Methods Overview

Description

An introduction to research methods used in information and library science, exploring the design, interpretation, analysis and application of published research.

Goals

- To have fun while exploring and learning about research methods.
- Gain an understanding of the concepts and terminology used in ILS research and of the methods used to perform this research.
- Become acquainted with different research specialties and approaches in ILS.
- Improve ability to read, evaluate and appreciate research.
- Improve quantitative, logical and analytical thinking abilities.

Requirements

Read, think, discuss, listen, research and write.

- You are expected to read the assigned readings by the dates listed on the schedule. This is a very reading-intensive course, so please schedule accordingly.
- You should have access to the readings during class.
- Participation is critical. Be prepared to ask questions and discuss the readings in class.
- Please let me know in advance if you will not be able to attend class.

Evaluation

Your major assignments for this course include: Participation (15%), Lab Assignments (25%), Research Review #1 (10%), Research Review #2 (10%), Mid-term Exam (15%) and Final Exam (25%).

Acknowledgement: Thanks to Case Rawson for the original syllabus.

Spring 2018
Fridays 9:00 AM – 11:45 AM
Manning Hall, RM 001

Instructor: Rachael Clemens
E-Mail: rclemens@unc.edu
Phone: 714.926.1098
Office Hours: By appointment

Materials

Readings will be placed in the Sakai site or you will need to obtain them from UNC Library's online collections. The following text is **required**:

Wildemuth, B.M. (2017). *Applications of Social Research Methods to Questions in Information & Library Science* (2nd ed.). Libraries Unlimited: Westport, CT.

This book is available for purchase at UNC Book Stores and online. It is also on reserve in the SILS Library.

Milestones

Jan 19 Lab 1 (Interest Group Intro & RQs)

Feb 2 Lab 2 (Sampling)

Feb 16 Research Review #1 (Video)

Feb 23 Lab 3 (Surveys)

Mar 2 Lab 4 (Content Analysis)

Mar 9 Midterm

Mar 23 Lab 5 (Observation)

Apr 6 Lab 6 (Qual Software)

Apr 13 Research Review #2

Apr 27 Lab 7 (Quant analysis) + CITI ethics course

May 8 Final Exam

Assignments

An overarching goal of any SILS course is to help prepare you to become not only competent professionals, but leaders in your respective fields. While I am happy to meet with you outside of class if you are having trouble with a particular assignment or other aspect of the course, you will be primarily responsible for establishing your own work schedules and internal deadlines and for locating and retrieving information to complete your assignments. Since meeting deadlines is an important professional responsibility, grades on late work will be lowered by a full letter. Any incidence of plagiarism or other academic dishonesty will result in an F for the course.

#1 – LAB ASSIGNMENTS (25%)

At seven points over the course of the semester, you will be assigned take-home “labs” that introduce, reinforce, or extend topics covered in class. The format of these assignments will vary and specific instructions for each will be provided to you at least one week ahead of the due dates (which are listed in the “Class Schedule and Readings” table at the end of this document). These assignments will be graded on a ✓+ / ✓ / ✓- scale, with specific criteria for each assignment to be posted in Sakai. In general, you will receive a ✓ on the assignment if you satisfactorily complete all parts as assigned, a ✓+ if you go *above and beyond* the assignment requirements in some way (please note that it won’t always be possible to do this depending on the nature of the lab), and a ✓- if you do not meet all of the assignment requirements.

#2 – RESEARCH REVIEW #1 (10%)

Regardless of whether you ever conduct a research study after your master’s paper (I hope you do!), in order to be a leader in your chosen career you will need to be able to read, evaluate, and appreciate research in your field. In this course, we will focus on reading research articles with an eye toward describing and evaluating the methods used by the researchers.

You will conduct two research reviews. For the first review, you will work with a group of your classmates to critique one SILS master’s paper from the Dean’s Achievement Award list (<http://sils.unc.edu/about/awards/sils-achievement>). You can find PDF versions of these papers online at: <https://tinyurl.com/nwex4f6>

You will form your group and collectively choose a master’s paper in class on **January 19**. You will then have two weeks to read your chosen paper before meeting with your group during class time on **February 2** to discuss the paper and collaboratively assess its strengths and weaknesses. It is fine if you choose to focus this assessment on the topics we will have covered in class up to that point; it is also fine if you notice and want to discuss other issues with the paper that we have not yet covered.

Sometime between 2/2 and 2/9, you will meet again with your group during class time to record a **video review** of your group’s chosen paper (if you prepare with your group ahead of time, you might be able to record toward the end of the 2/2 class session). This review should be approximately 8-10 minutes in length and all group members must contribute to the review (i.e., everyone must speak on the recording). Start your review by briefly describing the research: what was done, why it was done, how it was done, what was found. This should be a *neutral* description without any commentary or analysis and should take no more than 2 minutes of your video time. Then, discuss the research. (I hesitate to use the word ‘critique’ because sometimes people think that means to shred something!) Your discussion should be balanced, pointing out what you see as the **strengths and weaknesses** of the work. Where you note weaknesses, try to suggest ways the study might have been improved.

You may check out a video camera from the SILS library to record this video if you like, however a cell phone video is also fine (as long as the audio is clear). When you’re done, post the video to our class Sakai site in the Forums area. The easiest way to do this is to upload the video to YouTube and then link it in Sakai (if you do this, you can set your YouTube video privacy to “unlisted” if you don’t want it to show up in public searches). **Videos must be posted no later than 9:00 am on February 16th.**

Finally, I would like you to watch and comment on at least one other groups’ videos (you are not required to read the papers these students reviewed). If someone asks you a question about your group’s review, please respond. Comment on or ask questions about the research presented in the review, not the quality of the review. Your comments / questions / responses should be posted by the beginning of our next class session (**February 23rd at 9:00am**).

#3 - RESEARCH REVIEW #2 (10%)

For this research review, you will work independently to write a two-page (single spaced) review of two articles published in an ILS journal or conference proceedings. Both of these articles should present original empirical research (no literature reviews, position papers, etc.). You might want to choose either two articles that both address a similar topic / research question using different methods, or two articles that address different research questions using the same method (you could choose two totally unrelated papers, but choosing papers that are similar in terms of either topics or methods should make your job easier).

Just as with the group review, you should start by briefly describing the research: what was done, why it was done, how it was done, what was found. This should be a *neutral* description without any commentary or analysis. Then, discuss the research. Your discussion should be balanced, pointing out what you see as the strengths and weaknesses of the work. Where you note weaknesses, try to suggest ways the study might have been improved. If you have chosen studies that are similar in either topic or method, you may compare and contrast their strengths and weaknesses. At the end of your review, on a separate page, please include full citations in APA format for each paper you have reviewed.

Once you've done this, you should **post a message** to the appropriate Forum in Sakai with a **4-5 sentence summary** of your papers and a full citation for each no later than **9:00am on April 6. Attach your full research review to this forum post.** During the course of the week following the due date of the review, you should **read and comment** on **two** other people's reviews (you are not required to read the papers these people reviewed). If someone asks you a question about your review, please respond. Pick reviews that discuss topics that interest you; it is okay if the review you want to read has already been read by many other people. Comment on the research presented in the review, not the quality of the review. Comments and responses should be posted no later than 9:00am on **April 13.**

#4 - MID-TERM (15%) AND FINAL (25%) EXAMS

Exams!?! Yeah, I know...scary. But they don't have to be! It is important that you internalize some of the content of this class – remember, our primary goal is to gain familiarity with a wide variety of research methods, and exams are good assessment methods for evaluating knowledge of a range of topics and issues (versus a paper or project that would only show me what you know about one topic in depth).

You will take the mid-term exam at some point during the 24-hour period from 10:30 am Friday, 3/9 to 10:30 am Saturday, 3/10 and you will have up to 75 minutes to complete the exam once you open it (we'll only have class from 9:00 – 10:30 that day). All exams must be completed by **Saturday, 3/10 at 10:30 am.** The midterm exam will cover material presented through the 3/02 class session.

The final exam will be a three-hour online exam, and you will all take that exam on **Tuesday, 5/8** (the registrar's scheduled exam date for this course). You may take that exam from any location; the exam window will open at 8:00 am and will close at 10:00 pm. The final exam will be cumulative and integrative (it will include material from the entire course).

Both exams will be closed-book and closed-note (that includes communicating with classmates during the exam time).

The format of the exam questions will be varied. I like open-ended questions; in particular, I like to present stimuli (for example, a passage from a piece of research) and ask you questions about the stimuli (for example, what type of sampling was used). You will also have a few multiple-choice questions and statistics problems to work. We will go over sample exam questions in class.

CLASS PARTICIPATION (15%)

The ability to work successfully and communicate effectively with your colleagues will be vital to your career as a professional. Consequently, you must be thoughtful in your interactions with your peers and instructor. Your active participation in class is vital not only for your own learning, but for the learning of everyone in the class.

I believe that each of you has valuable experiences and contributions that will deepen and extend our understanding of the course content, both during class and online. Therefore, I expect you to be engaged in class. This does *not* mean that you need to raise your hand for every question in class - the quality of your participation matters just as much as the quantity, and when a handful of people dominate class discussions it is difficult for other students to fully engage. There are several ways to actively participate in class, and each will factor in to your class participation grade:

- **Attendance:** You are expected to attend class each week and to arrive on time. This is especially important for this course since we only meet once each week. More than one absence or repeated tardiness will result in a lower class participation grade.
- **Preparation:** Full participation in class will require that you have not only completed all readings, but also thought critically about them before coming to class. In your lab assignments, research reviews, and in-class contributions, I will look for evidence that you have engaged in thoughtful preparation for each class session. UNC's definition of one credit hour is "not less than one hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each week." As this is a three credit-hour course, by this standard, you should be spending a minimum of 6 hours of time each week *outside of class* preparing for class and completing assignments.

- **Participation in class activities:** In addition to large-group discussion, this class will include individual, pair, and small-group activities, and I will look for your engagement in all of those activities. I understand that it is not always easy to jump into a large-group discussion; however, without a variety of voices and opinions, the quality of those discussions is significantly lowered. Take notes, ask questions, and above all, actively engage your mind with the ideas we are exploring in class. Your completion of the CITI Ethics course (by last class) will also factor into your class participation grade.
- **Behavior:** Behave professionally. Be courteous to your instructor and classmates by refraining from conversing with others during lecture times, turning off all devices that might interrupt class, and using your electronic devices only to support class activities.

Since class participation grades can often be a “black box,” I will ask you to self-assess your participation near the midpoint of the semester using the same rubric that I will use to grade your participation at the end of the course.

Technology Policy

Research on laptop use in higher education has shown that laptops used for course activities can result in learning gains, but that in-class laptop use also can also lead to distraction and decreased course satisfaction, understanding, and overall performance among students.¹ This course will occasionally require the use of a laptop computer or tablet for class activities, and you may wish to have digital copies of readings accessible to you during class. However, other activities such as checking e-mail, social networking, etc. should be restricted to before and after class and break times. You may find that taking notes on paper is easier and more effective for this course.

Grading Scale

Based on UNC Registrar policy for graduate-level courses:

H	(95-100) “clear excellence”, above and beyond what is required
P	(80-94) all requirements satisfied at entirely acceptable level (note: this is expected to be the median grade for this course)
L	(70-79) low pass; substandard performance in significant ways
F	(<70) failed; performance that is seriously deficient and unworthy of graduate credit

***Undergraduate grading scale: 95-100 (A), 90-94 (A-), 87-89 (B+), 83-86 (B), 80-82 (B-), 70-79 (C, same +/- ranges as above), 60-69 (D, same +/- ranges as above), <60 (F).

University Honor System

The University of North Carolina at Chapel Hill has had a student-administered honor system and judicial system for over 100 years. Because academic honesty and the development and nurturing of trust and trustworthiness are important to all of us as individuals, and are encouraged and promoted by the honor system, this is a most significant University tradition. More information is available at <http://www.unc.edu/depts/honor/honor.html>. The system is the responsibility of students and is regulated and governed by them, but faculty share the responsibility and readily commit to its ideals. If students in this class have questions about their responsibility under the honor code, please bring them to me or consult with the Office of the Dean of Students. The web site identified above contains all policies and procedures pertaining to the student honor system. We encourage your full participation and observance of this important aspect of the University.

¹ Efaw, J., Hampton, S., Martinez, S., & Smith, S. (2004). Miracle or menace: Teaching and learning with laptop computers in the classroom. *EDUCAUSE Quarterly*, 27(3), 10-18.

Fried, C.B. (2008). In-class laptop use and its effects on student learning. *Computers & Education*, 50(3), 906-914.

Wurst, C., Smarkola, C., & Gaffney, M.A. (2008). Ubiquitous laptop use in higher education: Effects on student achievement, student satisfaction, and constructivist measures in honors and traditional classrooms. *Computers & Education*, 51(4): 1766-1783.

SILS Diversity Statement

In support of the University's diversity goals and the mission of the School of Information and Library Science, SILS embraces diversity as an ethical and societal value. We broadly define diversity to include race, gender, national origin, ethnicity, religion, social class, age, sexual orientation and physical and learning ability. As an academic community committed to preparing our graduates to be leaders in an increasingly multicultural and global society we strive to:

- Ensure inclusive leadership, policies and practices;
- Integrate diversity into the curriculum and research;
- Foster a mutually respectful intellectual environment in which diverse opinions are valued;
- Recruit traditionally underrepresented groups of students, faculty and staff; and
- Participate in outreach to underserved groups in the State.

The statement represents a commitment of resources to the development and maintenance of an academic environment that is open, representative, reflective and committed to the concepts of equity and fairness.

~The faculty of the School of Information and Library Science, Dr. Barbara B. Moran.

Students with Disabilities

"The Department of Disability Services (DDS), a part of the Division of Student Affairs, works with departments throughout the University to assure that the programs and facilities of the University are accessible to every student in the University community. Additionally, DDS provides reasonable accommodations so students with disabilities who are otherwise qualified may, as independently as possible, meet the demands of University life." Visit their website at <http://disabilityservices.unc.edu/> for more information.

Class Schedule & Readings

A NOTE ON THE READINGS

All PDF readings will be downloadable from the Sakai resources folder for that day's class session. If you encounter a link that won't work or a file that won't download, please contact me as soon as possible; you should also take the initiative in that case to search for the article yourself using the UNC Library's website. [Please have readings accessible during class](#) (via your laptop / electronic device or in print). **We'll spend significant time in class discussing the readings indicated with a star (*) - be sure you read these extra carefully!**

Date	Topic	Readings	Assignments Due
Jan 12	Introduction to the course (and each other)		
Jan 19	Overview of research in ILS; Research Questions	<p>Wildemuth, Chapters 1-3 (available via Sakai while you get your textbook)</p> <p>Wilson, V. (2016). Conducting your own research: Something to consider. <i>Evidence Based Library and Information Practice</i>, 11(1(S)), 18-21.</p> <p>Read EITHER: <i>[If you're interested more in quantitative research]</i> Bron, M., Van Gorp, J., & de Rijike, M. (2016). Media studies research in the data-driven age: How research questions evolve. <i>Journal of the Association for Information Science and Technology</i>, 67(7), 1535-1554.</p> <p><i>[If you're interested more in qualitative research]</i> Agee, J. (2009). Developing qualitative research questions: A reflective process. <i>International Journal of Qualitative Studies in Education</i>, 22(4), 431-447.</p>	<p>Lab 1: Interest group intros & RQs</p> <p>In class: Form interest groups for Research Review #1 (master's paper review)</p>
Jan 26	Grounding your study; Sampling	<p>Wildemuth, Chapter 6 & 14-16</p> <p>Bates, M.J. (2005). An introduction to metatheories, theories and models (Ch. 1). In K.E. Fisher, S. Erdelez, & L.E.F. McKechnie's (Eds.) <i>Theories of Information Behavior</i>. ASIST Monograph series, Information Today, Inc.: Medford, NJ.</p> <p>*Ward, J. (2017). What are you doing on Tinder? Impression management on a matchmaking mobile app. <i>Information, Communication, & Society</i>, 20(11), 1644-1659.</p> <p>Daniel, J. (2012). Choosing between nonprobability sampling and probability sampling. In <i>Sampling essentials: Practical guidelines for making sampling choices</i> (pp. 66-80). Thousand Oaks, CA: SAGE.</p> <p>OPTIONAL: Rioux, K.S. (2010). Metatheory in library and information science: A nascent social justice approach. <i>Journal of Education for Library and Information Science</i>, 51(1), 9-17.</p>	

Feb 2	Research Quality; Qualitative Approaches to Research	<p>Thyer, B.A. (2001). Reliability and validity in quantitative measurement. In Thyer, B.A. <i>The handbook of social work research methods</i> (pp. 52-67), SAGE.</p> <p>Gorman, G.E. & Clayton, P. (2005). Evaluating qualitative research. In Gorman, G.E. & Clayton, P., <i>Qualitative Research for the Information Professional</i>. London: Facet Publishing, pp. 20-33.</p> <p>Wilson, V. (2016). Research Methods: Triangulation. <i>Evidence Based Library and Information Practice</i>, 11(1(S)), 66-68.</p> <p>Sandelowski, M. (2004). Qualitative research. In Lewis-Beck, M.S., Bryman, A., & Futing Liao, T. (eds.). <i>The SAGE encyclopedia of social science research methods</i>: SAGE.</p> <p>*Harviainen, J.T. (2015). Information literacies of self-identified sadomasochists: An ethnographic case study. <i>Journal of Documentation</i>, 71(3), 423-439.</p> <p>Emary, L.R. (2015). Librarians are already in the field: How and why to begin ethnographic fieldwork. <i>Bibliothek – Forschung und Praxis</i>, 39(2), 138-142.</p>	<p>Lab 2: Sampling</p> <p>In class: Come prepared to work with your group on Research Review #1 (master's paper review video)</p>
Feb 9	Mixed methods research; Research Review #1 group work time	<p>Creswell, J.W. (2009). <i>Research Design: Qualitative, Quantitative, and Mixed Methods Approaches</i>. Thousand Oaks, CA: SAGE. (Chapter 10).</p> <p>*Tufecki, Z. Beyond the deficit model: Gender schemas, computing preferences, and I.T. career choices (grant application).</p> <p>Wyllys, R.E. (2002). Evaluating reports of research. Retrieved from https://www.ischool.utexas.edu/~wyllys/IRLISMaterials/evaluatingres.html</p>	
Feb 16	Case studies; Experiments and hypotheses	<p>Wildemuth chapters 5, 7, 11, and 12</p> <p>O'Kelly, M., Scott-Webber, L., Garrison, J., & Meyer, K. (2017). Can a library building's design cue new behaviors? A case study. <i>Portal: Libraries and the Academy</i>, 17(4), 843-862.</p> <p>Neuman, W.L. (2005). <i>Social research methods: Qualitative and quantitative approaches (6th Edition)</i>. Allyn and Bacon Publishing, pp. 160-166: The Language of Variables and Hypotheses.</p> <p>Shachaf, P. & Horowitz, S. (2006). Are virtual reference services color blind? <i>Library & Information Science Research</i>, 28(4), 501-520.</p>	<p>Research Review #1 (video) due by start of class today</p>

Feb 23	Surveys	Wildemuth, Chapter 28 Dillman, D.A., Smyth, J.D., & Christian, L.M. (2009). <i>Internet, mail and mixed-mode surveys (3rd Edition)</i> . John Wiley & Sons, Inc.: Hoboken, NJ. Chapters 1-2 & 4-5. Franks, T.P. (2017). Should I stay or should I go? A survey of career path movement within academic, public, and special librarianship. <i>Journal of Library Administration</i> , 57(3), 282-310.	Lab 3: Surveys Comment on at least two other group's reviews. Respond to comments on your review.
Mar 2	Existing Content	Wildemuth, Chapters 17-18 & 31 Williams, A. & Gonlin, V. (2017). I got all my sisters with me (on Black Twitter): Second screening of How to Get Away with murder as a discourse on Black womanhood. <i>Information, Communication, and Society</i> , 20(7), 984-1004. Segesten, A.D. & Bossetta, M. (2017). A typology of political participation online: How citizens used Twitter to mobilize during the 2015 British general elections. <i>Information, Communication, and Society</i> , 20(11), 1625-1643. Wilson, V. (2016). Research Methods: Bibliometrics. <i>Evidence Based Library and Information Practice</i> , 11(1(S)), 50-52.	Lab 4: Content Analysis Due
Mar 9	[Half class] Interviews and Focus Groups [Time out of class for midterm]	Wildemuth, chapters 25-27 Agosto, D.E. (2002). Bounded rationality and satisficing in young people's Web-based decision making. <i>Journal of the American Society for Information Science and Technology</i> , 53(1), 16-27. Greyson, D. (2013). Information world mapping: A participatory, visual, elicitation activity for information practice interviews. <i>Proceedings of the 76th ASIS&T Annual Meeting: Beyond the Cloud: Rethinking Information Boundaries</i> . Silver Springs, MD: American Society for Information Science. [Read the brief paper AND look over the research poster, both in Sakai].	Mid-term exam completed by 3/10 @ noon Exam will be posted at 11:30 am at end of class; take the exam during any 75-minute period.
Mar 16	SPRING BREAK		

Mar 23	Observation, Think-Alouds, and Diaries	Wildemuth, Chapters 21-24 *McKechnie, L.E.F. (2000). Ethnographic observation of preschool children. <i>Library & Information Science Research</i> , 22(1), 61-76. Hertzum, M. (2016). A usability test is not an interview. <i>Interaction</i> , 23(2), 82-84. Toms, E.G. & Duff, W. (2002). "I spent 1 ½ hours sifting through one large box...diaries as information behavior of the archives user: Lesson learned. <i>JASIST</i> , 53(14), 1232-1238.	Lab #5: Observation
Mar 30	NO CLASSES		
April 6	Qualitative data analysis / Coding	Wildemuth, Chapter 32 Zakaria, N. & Zakaria, N. (2016). <i>Qualitative content analysis: A paradigm shift from manual coding to computer-assisted coding using ATLAS.ti</i> . London: SAGE. Crawford Barniskis, S. (2013). Embedded, participatory research: Creating a grounded theory with teenagers. <i>Evidence Based Library and Information Practice</i> , 8(1), 47-58. Prescott, J. & Mackie, L. (2017). "You sort of go down a rabbit hole...you're just going to keep on searching": A qualitative study of searching online for pregnancy-related information during pregnancy. <i>Journal of Medical Internet Research</i> , 19(6), e194.	Lab 6: Qualitative Coding Software
April 13	Quantitative data analysis 1: Hypotheses, errors, types of variables Quantitative data analysis 2: Descriptive statistics	Wildemuth, Chapter 35 Banerjee, A., Chitnis, U.B., Jadhav, S.L., Bhawalkar, J.S., & Chaudhury, S. (2009). Hypothesis testing, type I and type II errors. <i>Industrial Psychiatry Journal</i> , 18(2), 127-131. Newman, W.L. (2005). <i>Social research methods: Qualitative and quantitative approaches (6th Ed.)</i> Allyn and Bacon Publishing, pp. 160-166: The Language of Variables and Hypotheses (re-read); pp. 181-188: Conceptualization and Operationalization; pp. 198-200: Levels of Measurement.	Research Review #2
April 20	Quantitative data analysis 3: Statistical significance, Chi-square tests Quantitative data analysis 4: T-tests and ANOVAs Quantitative data analysis 5: Correlation and regression Quantitative data analysis 6: Sample sizes and review	Wildemuth, Chapters 36, 38, & 39 Daniel, J. (2012). Choosing the size of the sample. In <i>Sampling essentials: Practical guidelines for making sampling choices</i> (pp. 236-253). Thousand Oaks, CA: SAGE SKIM: Brennan, K., Kelly, D., & Arguello, J. (2014). The effect of cognitive abilities on information search for tasks of varying levels of complexity. <i>Proceedings of the Information Interaction in Context Conference (IliX)</i> , Regensburg, Germany.	Read and comment on at least 2 other reviews by start of class today; respond to comments on your review.

		SKIM: Adler, R.F. & Benbunan-Fich, R. (2013). Self-interruptions in discretionary multitasking. <i>Computers in Human Behavior</i> , 29, 1441-1449.	
April 27	Research Ethics; Review & Wrsp-up	<p>Punch, K.F. (2014). Ethics in social science research. In Punch, K.F. <i>Introduction to Social Research: Quantitative and Qualitative Approaches</i> (pp. 35-56. Los Angeles, CA: SAGE. (Hint: read this before you take the CITI Ethics Course.)</p> <p>Complete the CITI Ethics course: http://research.unc.edu/human-research-ethics/getting-started/training/ (only complete Social and Behavioral Research Module)</p> <p>Williams, P., Block, L. G., & Fitzsimons, G. J. (2006). Simply asking questions about health behaviors increases both healthy and unhealthy behaviors. <i>Social Influence</i>, 1(2), 117-127.</p>	<p>Lab 7: Quantitative data analysis</p> <p>CITI ethics course (please send Rachael a PDF or screenshot of your completion page)</p>
Tuesday May 8	Final Exam		