University of Florida
College of Health and Health Professions
PHC 6700: Social & Behavioral Research Methods (3 credits)
Classroom: C1-009 (Communicore), Tuesdays, Periods 6-8 (12:50 PM – 3:50 PM)
Spring 2024
Delivery Format: On-Campus
Course Website: UFL E-Learning

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Preferred Course Communications (e.g. email, office phone): Email
Email Policy: Response within 24 hours to emails received on weekdays (M-F). Emails received during the weekend or after 5pm Friday will be answered by 1pm on the following Monday.

Purpose and Outcome

Course Overview
This course is designed to provide an overview of research design, methods, and ethics for students in public health, with an emphasis on approaches used in the social and behavioral sciences. This course will use a variety of instructional methods to achieve these aims, including readings, discussions, projects, and hands-on research experiences.

Relation to Program Outcomes
The overarching aims for this course are to provide students with: 1) an overview of the types of research methods available; 2) the opportunity to design, conduct, and evaluate research projects; and 3) understanding of key ethical and cultural considerations related to the conduct of research.

Course Objectives and/or Goals

It is expected that, by the end of this course, PHC6700 students will be able to:

1. Characterize the purpose and need for social and behavioral research in the health sciences
2. Distinguish key ethical issues associated with different methods of research
3. Compose research questions and hypotheses
4. Compare and contrast the key features of observational, qualitative, correlational, quasi-experimental, and experimental research designs
5. Integrate basic quantitative and qualitative methods into the design of research in order to align with specific research questions
6. Develop a research proposal that describes a researchable problem, the purpose of the study, the academic context of the study, sampling strategies, methodology, proposed analyses, and implications of potential findings
7. Communicate research designs in written and oral formats
8. Critique the research design, process, and analysis of their own work and the research of others

Description of Course Content

Topical Outline/Course Schedule

Week	Date(s)	Topic(s)	Readings
1	Jan 9	Course Introduction	• RM Chap 1 • APA Chap 1 (pg 3-10) • Raff 2016
2	Jan 16	Formulating Research Questions and Hypotheses; Ethics	• RM Chap 2 & 3 • APA Chap 1 (pg 11-26)
3	Jan 23	Observational Research Designs	• RM Chap 4 & 9
4	Jan 30	Experimental Research Designs	• RM Chap 5 & 10
5	Feb 6	Sampling & Survey Research Pt I	• RM Chap 6 & 13 (pg 367-384) • Heen et al. (2014) • Ledford (2020)
6	Feb 13	Measurement & Survey Research Pt II	• RM Chap 7 & 13 (pg 384-end) • Schaeffer & Presser (2003) • Kelly et al. (2016)
7	Feb 20	Quantitative Data Analysis	• RM Chap 14 • APA Chap 6 (pg 178 - end) & 7
8	Feb 27	Qualitative Data Analysis	• RM Chap 8 & 16
9	Mar 5	Exam	
10	Mar 12	SPRING BREAK!	
11	Mar 19	Rigor & Reproducibility	• APA Chap 3

			• Resnick & Belluz (2018) • LaDonna et al. (2021) • Peng & Hicks (2021)
12	Mar 26	Scientific Communication Pt 1: Writing and presenting to scientific audiences	• APA Chap 4, 6 (through pg 177), & 8 • Thapa et al. (2020) • Brockmann (2020)*
13	Apr 2	Scientific Communication Pt 2: Communicating with lay audiences	• Brownell et al. (2013) • Goldstein et al. (2020)
14	Apr 9	Proposal workshop	• U of Ottawa tips for Peer Review
15	Apr 16	Final Group Project Workshop	
16	Apr 23	Final Project Presentations (in class)	

The above schedule and procedures in this course are subject to change in the event of extenuating circumstances. Any changes will be announced in class and via Canvas, and students are personally responsible for obtaining updated information regarding these changes.

Course Materials and Technology
Required Textbooks:
Salazar, L. F., Crosby, R. A., & DiClemente, R. J. (2015). *Research Methods in Health Promotion* (2nd ed.). San Francisco, CA: Jossey-Bass. ISBN: 978-1-118-40906-0 **[RM]**

American Psychological Association. (2019). *Publication Manual of the American Psychological Association* (7th ed.). Washington, DC: American Psychological Association. ISBN: 978-1433832178 **[APA]**

Additional Required Readings: Posted within each module on the course website.

Required Technology
Please bring your laptops to each class period. Laptops and other electronics should only be used when appropriate for taking notes or completing in-class activities. This course will use the Canvas CMS. Class announcements will be sent via the announcements tool in Canvas. Depending on your Canvas notification settings, you may or may not be notified via email; you are responsible for all information in these announcements, whether or not you see them in your email.

For technical difficulties, please contact the instructor or Academic Technology:
    Email: learning-support@ufl.edu
    Phone: (352) 392-HELP – select option 2
    Web: https://lss.at.ufl.edu/help.shtml

Additional Academic Resources

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.
Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.
On-Line Students Complaints: View the Distance Learning Student Complaint Process.

Academic Requirements and Grading

Description of In-Class Activities and Class Assignments:

In-Class Activities & Professionalism (Preparation, In-Class Contributions)
This class is heavily project based, with content taught via in-class activities; thus, attendance and completion if in-class activities is necessary to meet course learning objectives. Completion of in-class activities will contribute toward this grade. Moreover, all students will be expected to make informed contributions during in-class activities and team-based problem-solving tasks. This means that you need to come to class **prepared** to discuss the readings, contribute to or lead discussions, and display a command of the topics at hand. In doing so, you are expected to display professional courtesy to your peers when providing feedback and constructive criticism. Finally, since research is most often done in teams, your contributions to your assigned research team will also count toward professionalism. Teams should use the "group" pages available in Canvas for project communication, and peer review of team-member contributions will also be collected at the end of the semester.

Individual Research Proposal
You will complete an individual research proposal that outlines justification for and methods of a proposed research study. Early in the semester, you will be asked to select a topic and develop your own research question that explores a social/behavioral sciences topic. You will be asked to submit this project in stages to receive feedback from the instructor/TA along with peers. The final paper should follow APA format guidelines and should include the following sections:
Introduction: This section should include a brief overview of the problem and purpose, and include definitions of major constructs. The background literature should be reviewed in a manner that provides rational justifying the conduct of the current study.
Current Study: This section should start with a brief overview of your proposed study and include specific research questions/aims along with specific hypotheses.
Methods: This section should include details on your study design, including descriptions of all methods/measures, details regarding how you will acquire your data, and a specific analysis plan.

Discussion: This section should include potential interpretations/implications of your results along with strengths/limitations of your study design.

Group Research Project Presentation

You will be assigned to a group based on your research interests (as assessed via the course poll). You will work with this team throughout the semester, applying course concepts to in-class activities and toward your group project. For the final project, each group will be asked to develop a research question, conduct a secondary analysis of existing public health data, and deliver a final presentation describing the project. You will be asked to submit portions of this project in stages in order to receive feedback from the instructor/TA. Class time will also be available on March 7 and April 18 to work on group projects and receive feedback/assistance from the instructor/TA. Final presentations should include the following:

Introduction: The introduction should include a brief overview of the problem and purpose, and include definitions of major constructs. The background literature should be reviewed in a manner that provides rational justifying the conduct of the current study.

Research Question/Hypotheses: This section should start with a brief overview of your current study and include specific research questions/aims, along with specific hypotheses.

Methods: This section should include details on study methods/measures and statistical tests employed.

Results: This section should describe your included study sample, provide descriptive summaries of relevant variables, and present results of statistical tests.

Discussion: Briefly recap your overall results, and discuss whether findings were consistent/inconsistent with your hypotheses and the previous literature. Discuss strengths/limitations of your study, and then end with key implications for research/clinical practice.

Future Research/Alternate Approaches: Given that your group had no control over initial data collection procedures, describe at least one (1) alternative study design that could inform your research question/provide further evidence to support your hypotheses.

See the course Canvas site for more details and structured rubrics for each of these assignments.

Grading:

Requirement	Due date	Points or % of final grade
Weekly In-Class Activities, Attendance, & Professionalism	Ongoing	20%
Exam 1	March 5 (in class)	30%
Research Proposal	Topic and annotated bibliography due January 23. Part 1 draft (introduction) due February 20. Part 2 draft (methods) due March 19. Full draft for peer review should be submitted via Canvas	30%

	by 10:00AM EST on April 9 (peer-review will be conducted during class time). Final proposal due April 16.	
Group Project Presentation	Group workplan due January 30. Proposal outline (including research question, hypotheses, and planned analyses) due March 5. Final Group Project Presentations will occur in class on April 23 (slides should be posted via Canvas prior to class start). Final contribution statements due April 24.	20%

Grading Scale: The final grade will be computed based on the following:

Percentage	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	Below 60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

NOTE: Percentages are **not** rounded up at the end of the semester, and grades are not curved.

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0. in all 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if a sufficient number of credits in courses numbered 5000 or higher have been earned with a B+ or higher.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

More information on UF grading policy may be found at:
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

Exam Policy
There will be one exam in this course. This exam will cover content addressed in the readings (textbook readings and additional assigned readings posted on Canvas) as well as content discussed in class during lectures and activities. The exam will be completed in class, during the first half of the regularly scheduled course time (the remainder of the course time this week will be used for working on group projects), using Canvas and the LockDown Browser. Please download the LockDown Browser and review the LockDown Browser overview (see link on Canvas) prior to the exam. The exam will be **closed book**; however, you may bring one (1) single page of notes (maximum paper size = 8.5 x 11"; front size of page only, notes must be hand-written).

Policy Related to Make up Exams or Other Work
If you have a scheduling conflict that prevents you from fulfilling a certain course requirement, please contact the course instructor as soon as possible. **Late assignments will not be accepted** without an approved arrangement with the course instructor. Failure to complete work prior to the deadlines outlined in this syllabus may result in a zero grade for that assignment.

Please note: Any requests for make-ups due to technical issues MUST be accompanied by the UF Computing help desk (http://helpdesk.ufl.edu/) correspondence. You MUST e-mail the instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance
This class is heavily project based, with content taught via in-class activities; thus, attendance is necessary to meet course learning objectives. Moreover, class attendance is part of the Professionalism component of this course. It is expected that you will notify the instructor in advance when you know you will need to miss or be late to class. Illness, family emergencies, and other extenuating circumstances are reasons for missing or being late to class, as long as you follow-up with the instructor in a timely, professional manner. You should request notes/details on in-class activities from a fellow classmate.

Excused absences must be consistent with university policies in the Graduate Catalog (https://catalog.ufl.edu/graduate/regulations/#text). Additional information can be found here: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Policy Related to Plagiarism
Plagiarism, as defined in the UF Student Honor Code (https://regulations.ufl.edu/wp-content/uploads/2018/06/4.040-1.pdf), will not be tolerated. Plagiarism detection software (e.g., TurnItIn) and other resources may be used to detect plagiarism. Assignments where the instructor deems that plagiarism has occurred may receive a zero grade, and may be reported to the Dean of Students office as a Student Honor Code violation. The APA publication manual (assigned textbook) provides guidelines on avoiding plagiarism; for more details you can also reference the Purdue Online Writing Lab website (https://owl.purdue.edu/owl/purdue_owl.html).

Policy Related to Extra Credit
For student evaluations of teaching, all members of the class will be awarded one (1) bonus point toward their exam grade if at least 80% of the enrolled class completes evaluations, and two (2) bonus points if 100% of the enrolled class completes evaluations.

Student Expectations, Roles, and Opportunities for Input

Expectations Regarding Course Behavior
To maximize use of class time, you are expected to:

1. Look at the Canvas site for notes and announcements <u>prior</u> to each class

2. Read assigned readings <u>prior</u> to each class, and come to class prepared for discussion
3. Bring your laptop/textbook to course meetings.

The use of computers and other electronic devices in class is limited to class related activities. Students who are being disruptive (e.g., using electronic devices when not appropriate for class activities, talking over the instructor/other students, or otherwise disrupting the learning environment for other students) will be asked to leave class. Students who are asked to leave for disruptive behavior will lose all in-class activity/professionalism points for that day.

Communication Guidelines
Please email the instructor directly (email address listed on the first page of the syllabus) rather than using the messaging tool in Canvas. Please communicate with your project group using the provided Canvas resources.

For digital communication, please see the following Netiquette Guidelines:
http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Academic Integrity
Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

 "**We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity**."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

 "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:
https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/
http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Recording Within the Course:

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication of recordings (or transcripts of recordings) without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Policy Related to Guests Attending Class
Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers. Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety. Link to full policy:
http://facstaff.phhp.ufl.edu/services/resourceguide/getstarted.htm

Online Faculty Course Evaluation Process
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

SUPPORT SERVICES

Accommodations for Students with Disabilities
If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The **Counseling and Wellness Center** 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.

- **U Matter We Care** website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.

- The **Student Health Care Center** at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/

- Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

- **University Police Department**: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu

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Additional Readings/Resources (Preliminary List, Subject to Change):

Week 1:

Raff, J. (2016). *How to read and understand a scientific paper: A guide for non-scientists.* London School of Economics Impact Blog. https://blogs.lse.ac.uk/impactofsocialsciences/2016/05/09/how-to-read-and-understand-a-scientific-paper-a-guide-for-non-scientists/

Optional follow-up: this author also gave an example of applying this method to an article about vaccine safety. Read more here: https://violentmetaphors.com/2013/09/08/an-example-of-how-to-read-a-vaccine-safety-study/

Week 2:

Department of Health, Education, & Welfare (1979). The Belmont Report: Ethical principles and guidelines for the protection of human subjects in research. Access at: https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html

Week 5:

Heen, M.S.J., Joel D. Lieberman, and Terence D. Miethe (2014). *A Comparison of Different Online Sampling Approaches for Generating National Samples* (Report CCJP 2014–01). Las Vegas: University of Nevada, Las Vegas, Center for Crime and Justice Policy

Ledford, H. (2020). Social scientists battle bots to glean insights from online chatter. Nature. https://www.nature.com/articles/d41586-020-00141-1

Week 6:
Kelly, P., Fitzsimons, C., & Baker, G. (2016). Should we reframe how we think about physical activity and sedentary behavior measurement? Validity and reliability reconsidered. *International Journal of Behavioral Nutrition and Physical Activity, 13,* 32. https://doi.org/10.1186/s12966-016-0351-4

Schaeffer, N. C., & Presser, S. (2003). The science of asking questions. *Annual Review of Sociology, 29,* 65–88.

Week 11:

Resnick, B., & Belluz, J. (2018, October 24). A top Cornell food researcher has had 15 studies retracted. That's a lot. *Vox.* https://www.vox.com/science-and-health/2018/9/19/17879102/brian-wansink-cornell-food-brand-lab-retractions-jama

LaDonna, K. A., Artino, A. R., Balmer, D. F. (2021). Beyond the guise of saturation: Rigor and Qualitative Interview Data. *Journal of Graduate Medical Education, 13,* 607-611. https://doi.org/10.4300/JGME-D-21-00752.1

Peng, R. D. & Hicks, S. C. (2021). Reproducible research: A Retrospective. *Annual Reviews of Public Health, 42,* 79-93. https://doi.org/10.1146/annurev-publhealth-012420-105110

Optional: Wilkinson, M. D., Dumontier, M., Aalbersberg, I. J., Appleton, G., Axton, M., Baak, A., ... & Mons, B. (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data, 3(1),* 1-9. https://doi.org/10.1038/sdata.2016.18

Optional: Ioannidis, J. P. A. (2005). Why most published research findings are false. *PLoSOne, 8,* e124. https://doi.org/10.1371/journal.pmed.0020124

Week 12:

Thapa, D. K., Visentin, D. C., Hunt, Glenn E., Watson, R., Cleary, M. (2020). Being honest with causal language in writing for publication. *Journal of Advanced Nursing, 76,* 1285-1288. https://onlinelibrary.wiley.com/doi/full/10.1111/jan.14311

Brockmann, A. N. (2020). Bidirectional association between stress and physical activity in adults with overweight and obesity. ***As you read this paper, pay attention structure and format;

understanding the content (research findings) is not the goal here. We will use this paper as an example during class this week.

Week 13:

Brownell, S. E., Price, J. V., & Steinman, L. (2013). Science communication to the general public: why we need to teach undergraduate and graduate students this skill as part of their formal scientific training. *Journal of Undergraduate Neuroscience Education, 12(1),* E6.

Goldstein, C. M., Murray, E. J., Beard, J., Schnoes, A. M., & Wang, M. L. (2020). Science communication in the age of misinformation. *Annals of Behavioral Medicine, 54(12),* 985-990.

Week 14:

Academic Writing Help Center, University of Ottowa. (2007). Peer Review: Reading Critically and Giving Constructive Criticism. Retrieved March 28, 2023 from https://people.forestry.oregonstate.edu/meg-krawchuk/sites/people.forestry.oregonstate.edu.meg-krawchuk/files/grad-peer-review.pdf