

UNIVERSITY OF UTAH COLLEGE OF NURSING

Gerontology Interdisciplinary Program

Course Number and Title

GERON 5003/6003- Research Methods in Aging

Cross Listing

This course is crosslisted as GERON 5003 (Undergraduate) and GERON 6003 (Graduate) as Please be sure you are registered for the right class.

Prerequisites

None

Credits

Total Credits: 3

Didactic Credits: 3

Clinical Credits: 0

Meeting Time & Location:

This course is fully online and mostly asynchronous except for 3-4 selected time slots throughout the term. See modules for specific dates and times.

Academic Term Offered: Spring

Faculty

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Description

This class examines the essential issues involved in designing and implementing social/behavioral research projects while emphasizing the unique features of those investigations using older participants as well as any area that falls within the realm of social gerontology. The course specifically focuses on issues pertaining to the formulation of hypotheses and research

questions, sampling and recruitment, study design, measurement, and data collection and management. Examples relevant to aging are incorporated throughout the class.

Objectives

At the conclusion of this course, the student will be able to:

1. Construct a gerontological research problem statement.
2. Design and evaluate approaches used in identifying and recruiting participants for aging-related research studies, particularly rare or special subpopulations.
3. Evaluate the features of different study designs and modes of data collection typically associated with them.
4. Select standardized scales and other measurement tools suitable for one's particular gerontological research problem.
5. Construct data collection instruments and coding schemes.
6. Understand and apply the principles involved in the ethical conduct of gerontological research.
7. Evaluate existing data-based publications in order to be a more informed consumer of gerontological research.

AGHE Competencies

3.8 – Engage in research to advance knowledge and improve interventions for older persons

1.6 – Distinguish factors related to aging outcomes, both intrinsic and contextual, through critical thinking and empirical research

2.2 – Adhere to ethical principles to guide work with and on behalf of older persons

Required Course Material

R.A. Singleton & B.C. Straits, *Approaches to Social Research (6th Ed.)*, NY: Oxford Univ. Press, 2018

Additional readings specifically selected for this course are available on designated course modules on Canvas.

Teaching Methods

Lectures, discussions, assigned readings. Teaching allows me to fulfill what I believe to be a fundamental responsibility of gerontologists: to communicate information to individuals so they can better understand and make informed decisions regarding our aging society. I am a proponent of active learning and use a variety of methods to encourage discussion and interaction on the issues the course presents. Students are also empowered to take responsibility for their own learning and growth instead of regurgitating information on exams. Allowing students to express themselves informally through discussions and other forms of writing affords

me the opportunity for a more complete assessment of a student's ability than would be possible by relying only on a combination of formal examinations.

Evaluation

Evaluation includes the quality and depth of participation in discussions, assigned exercises, and written assignments. On line attendance is gauged by CANVAS analytics, where individual student participation is evaluated by such means as participation in discussion boards and accessing CANVAS modules. Participation may be evaluated in additional ways as described in the syllabus. Dismissal from a course and/or the college can result from unprofessional behavior.

Topics Covered:

Overview of the research process
Positivist and interpretivist approaches to science
Unique features of aging research
Role of theory in research
Formulating problem statements, hypotheses, and research questions
Searching and critiquing the literature
Sampling, recruitment, and retention
Rare populations
Surveys
Cross-sectional vs. longitudinal designs
Experiments, quasi-experiments, and intervention research
Qualitative methods
Measurement and instrument construction
Data coding
Overview of analytical methods
Ethical issues

Grading Scale

A 93-100
A- 90-92
B+ 87-89
B 83-86
B- 80-82
C+ 77-79
C 73-76
C- 70-72
D+ 67-69
D 63-66
D- 60-62
E 0-59

Grading Criteria

The grade you earn in this course is based on the points you earn for the assignments. Your final grade will be determined by the percentage of the overall points available in the course, and correspond to the grading scale in the syllabus.

Late Assignments

Assignments are due the dates and times specified in the syllabus. The student is responsible for contacting faculty prior to the due date if he or she believes an extenuating circumstance exists to request an exception to this policy, or after an unforeseen emergency. It is the faculty's discretion to decide if an extension will be granted.

Incomplete Policy

An Incomplete grade can be given for work not completed due to circumstances beyond your control. You must be passing the course and have completed at least 80% of the required coursework. Arrangements must be made between you and the instructor concerning the completion of the work. You may not retake a course without paying tuition. If you attend class during a subsequent term, in an effort to complete the coursework, you must register for the course. Once the work has been completed, the instructor submits the grade to the Registrar's Office. The "I" will change to an "E" if a new grade is not reported within one year. If you graduate before a new grade is reported, the "I" remains on your record and will not count towards graduation or the calculation of your grade point average. see <http://registrar.utah.edu/handbook/incomplete.php>

Continuing Education Student Requirements

Students seeking to earn a Gerontology Certificate of Completion (whether as a matriculated student or through Continuing Education) must demonstrate a body of knowledge and skill set commensurate with the Gerontology Interdisciplinary Program (GIP). As such, all Gerontology Certificate students should be advised of the following standards:

- Attendance and active participation in each course is an expectation. Course faculty and academic advisors from Student Services track both attendance and participation for all students. On line attendance is gauged by CANVAS analytics, where individual student participation is evaluated by such means as participation in discussion boards and assigned on-line groups. Participation may be evaluated in additional ways as specified by the individual faculty's syllabus.
- Although Continuing Education certificate students are not required to take quizzes or tests, they are expected to complete all of assigned reading in the course in order to participate in class discussion in a meaningful and informed way.

Syllabus Changes

This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced and posted on Canvas under Announcements.

Online Guidelines

There are unique responsibilities that come with taking an online course.

Electronic or Equipment Failure

It is your responsibility to maintain your computer and other equipment needed to participate in online forums. **Equipment failures are not an acceptable excuse for late or absent assignments, quizzes, or exams.**

Computer Literacy

You will need to gain access to a computer and to the Internet at least twice a week, as well as to MS Word®, & PowerPoint®. It is assumed that you have a basic knowledge of computers, including but not limited to how to navigate the Internet, attach a document to an email and send the email with the attachment, and use basic software packages (e.g. MS Word®).

Assignment Archiving

To prevent problems involving corrupt or lost files, each assignment should be saved in at least two places (e.g. on hard and flash drive; and on drive or as attachment to an email message you send to yourself). Each student is responsible for making sure assignments (including attachments) are submitted before the deadline, via the Assignment Dropbox, using the requested software in the required version, with the required extension. This generally means a MS Word® (.doc or .docx) or MS PowerPoint® (.ppt or .pptx) files.

Naming Files for Submission

When submitting individual assignments, name files with your last name followed by an underscore and the assignment name (e.g., Harrison_endnote1.docx). **Do not put spaces in the file names** as Canvas inserts a %20 where the space is and may lead to assignment confusion. **Incorrectly named files will not be accepted and returned ungraded.**

Classroom Equivalency

Discussion threads, e-mails, and chat rooms are all considered to be equivalent to classrooms, and student behavior within those environments shall conform to the Student Code. Specifically:

- Posting photos or comments that would be off-topic in a classroom are still off-topic in a discussion thread.

- Off-color language is never appropriate.
- Using angry or abusive language is called "flaming", is not acceptable, and will be dealt with according to the Student Code.
- Do not use ALL CAPS, except for titles, since it is the equivalent of shouting online, as is overuse of certain punctuation marks such as exclamation points !!!! and question marks ?????.
- E-mail, e-journals, and other online communications in the course are part of the classroom and as such, are University property and subject to GRAMA regulations and the Student Code. Privacy regarding these communications between correspondents must *not* be assumed and should be mutually agreed upon in advance, in writing.
- Instructors are required to respond to e-mails in a "reasonable" amount of time. If you have not received a reply to an email communication within 3 business days (Monday through Friday), please contact the instructor again - emails occasionally do not reach the intended recipient.
- Many students learn better by using computers during synchronous sections of class. However, when used for non-class purposes they can distract fellow students and/or the instructor. Therefore, laptops/tablets/smartphones may be used in this class **only** for class information. If a laptop/smartphone is used for non-class purposes, your privilege may be revoked for the balance of the semester.

Email Correspondence

- Email communication is the official communication medium of the University. Faculty will respond to your email correspondence within 3 business days (i.e. Monday through Friday) and expect that students will respond to faculty email correspondence in the same time frame. Please re-send your email and/or contact faculty by phone if you do not receive a response to your email within these parameters.
- Faculty expects that students will check their Canvas email at least three times per week.
- Students can email faculty through our Canvas email.
- Electronic communication etiquette includes respectfully addressing the recipient of the email and use of appropriate font (use of all caps, all bolded, or all italicized font is equivalent to yelling or 'flaming' and is unacceptable). Please write out all words. The use of acronyms may lead to misinterpretation. If you are uncertain of your electronic communication, please speak directly with me.

Faculty Responsibilities

Your faculty will:

- Treat students with respect
- Inform students at beginning of class of general content, course activities, evaluation methods, grading, and schedule
- Convene scheduled classes unless valid reason and notice are given to students
- Respond to email correspondence and phone calls in a timely manner*
- Perform high quality, constructive evaluations of written work and exams
- Return evaluations in a timely manner

- Make every effort to ensure an environment that is conducive to learning
- Enforce student code

ADA - Nondiscrimination and Disability Access Statement

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. Reasonable prior notice is needed to arrange accommodations. Evidence of practices not consistent with these policies should be reported to the University's ADA/Section 504 Coordinator: Director, Office of Equal Opportunity and Affirmative Action, 201 S. Presidents Cr., Rm 135, Salt Lake City, UT. 84112. (801)581-8365 (V/TDD).

Faculty and Student Responsibilities

“All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and failing grade. Students have the right to appeal such action to the Student Behavior Committee.”

“Faculty...must strive in the classroom to maintain a climate conducive to thinking and learning.” PPM 8-12.3, B.

“Students have a right to support and assistance from the University in maintaining a climate conducive to thinking and learning.” PPM 8-10, II. A.

Writing

Your writing is expected to be professional and of scholarly quality. If you think your writing may be sub-par, please seek help at the [Writing Center](#) on University Campus. Their motto is, “You can become a better writer, right here, right now.”

APA: Some graduate (6003) assignments are required to be submitted in APA format, as specified. If you are unfamiliar with APA formatting, please contact the Writing Center, and/or go to this link: <http://owl.english.purdue.edu/owl/resource/560/01/>. Additional APA resources can be found in Course Resources.

Wellness Statement

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness - www.wellness.utah.edu; 801-581-7776.

Addressing Sexual Misconduct

Title IX makes it **clear** that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a **civil rights offense** subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776.

Veteran's Statement

If you are a **student veteran**, I want you to know that the U of Utah has a Veterans Support Center on campus. They are located in Room 161 in the Oplin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason.

LGBT Resource Center

If you are a member of the **LGBTQ community**, I want you to know that my classroom is a safe zone. Additionally, please know that the U of Utah has an LGBT Resource Center on campus. They are located in Room 409 in the Oplin Union Building. Hours: M-F 8-5pm. You can visit their website to find more information about the support they can offer, a list of events through the center and links to additional resources: <http://lgbt.utah.edu/>. Please also let me know if there is any additional support you need in this class.

Learners of English as a Second Language

If you are an English language learner, please be aware of several resources on campus that will support you with your language development and writing. These resources include: the Department of Linguistics EAS Program (<http://linguistics.utah.edu/eas-program/>); the Writing Center (<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); the English Language Institute (<http://continue.utah.edu/eli/>). Please let me know if there is any additional support you would like to discuss for this class.

Student Names and Personal Pronouns

Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers and other assignments. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected.

Course Assignments

MINI-PROJECTS:

All students are required to complete three mini-projects throughout the semester. Each mini-project represents one of several components of a gerontological research project and they can provide a foundation upon which the final project is built. These assignments are completed in the form of a brief paper (typed, double-spaced) in which the assigned readings and other appropriate sources are used as documentation. Although additional details for each mini-project will be provided as needed, below are brief descriptions of each assignment along with their due dates and point allocations. *All assignments must be submitted by 11:59 PM Mountain Time on the specified due date.*

Problem Statement: Develop a problem statement that discusses the overall purpose of a proposed research project. Derive hypotheses and/or research questions that flow from the problem statement. This assignment is worth 15 points and is due **February 12th, 11:59 PM (Mountain)**.

Sampling and Recruitment Plan: Discuss how you would identify a proposed sample, what sampling strategy would you use and how you would recruit potential study participants. If an experimental design is used, discuss how you will deal with randomization or matching. Justify your sampling and recruitment plan while also identifying potential limitations. This assignment is worth 25 points and is due **March 5th, 11:59 PM (Mountain)**.

Measurement of Variables and Scale Selection: Describe how you plan to measure the variables in your study. If applicable, what scales are chosen that measure key variables and what is the rationale for your choice (psychometrics, administration features, design applicability etc.)? If no established measures are available, what items/indicators would you design yourself to measure your variables of interest. If a non-quantitative method is chosen describe how the observations will be measured and coded. This assignment is worth 25 points and is due **March 26th, 11:59 PM (Mountain)**.

BRAINSTORMING SESSIONS

Each week prior to the due dates for the above papers, there will be an opportunity for students to brainstorm their ideas with the class. Time should allow for 1- 2 students (for about 20 minutes apiece) to present their ideas at each brainstorming session. I plan to hold these brainstorming sessions *live* through video conferencing using *Zoom* at the times indicated on the module page for this class. *You are encouraged to use the discussion board* as well to develop your ideas further or to provide feedback to others' ideas. Even if it is not your turn to brainstorm your idea during a videoconference, you are free to present it on the discussion board for comment. *It is expected that everyone consult the discussion board regularly to see if a post has been made and to join the conversation in order to offer feedback to your classmates.* Your participation in these sessions and any ensuing on-line discussions will go toward your overall *participation grade* in the class.

You are only required to sign up in the calendar if you plan to present your idea on that day. You don't need to sign up if you are just joining but not presenting.

JOURNAL ARTICLE CRITIQUE

Each student in the class is required to select a data-based article from a refereed journal in gerontology or aging and to orally present a 20 minute summary and critique of the report using a *brief PowerPoint presentation* outlining your "talking points." See the list of journals where such articles can be found.

I recommend using the built-in screen recording tool in Canvas to record your PowerPoint, instead of using recording directly in the PowerPoint app.

The critique should address the following points:

1. A brief summary of the overall purpose of the study and its rationale. Were there research questions or hypotheses specified and tested?
2. A detailed description of the study protocol (design features, sampling and recruitment, measures). Was adequate information provided and was there anything not specified that would have been beneficial to discuss.
3. A critique of potential limitations to the study design and its implications.
4. How were limitations addressed by the investigator(s) or what might have been done differently to strengthen the study?
5. Are the conclusions of the study consistent with the findings?
6. Comment on any implications the findings have (if any) for future research, theory development, clinical practice, program development, service delivery, and/or policy.

Presentations are scheduled for **the weeks of 4/1, 4/8, 4/15, and 4/22**. You will find sign-up times in your calendar in which you can indicate the week you prefer to do your presentation.

All presentations need to be posted by **noon** Mountain Time on the Monday of that week. In the scheduler in the calendar, choose the Monday you prefer to upload your presentation.

One week prior to your scheduled presentation, you must provide copies of the article you intend to critique for each member of the class and me. The articles should be emailed as a PDF file through Canvas. In your inbox, search for this course and you can email everyone at once (if you experience difficulty doing this, contact me and I will assist you.)

*Following the student's presentation, time will be allotted (until 5:00 PM Mountain on Friday of that week) for an open discussion of the article in which everyone is required to post a **substantive** response to the article itself and/or issues raised in the critique. Therefore, it is everyone's responsibility to read the article that will be critiqued ahead of time in order to participate fully in the discussion.*

Your presentation is worth 20 points. Your responses to your classmates' presentations are each worth 5 points. Therefore you will have 2 assignments: The first is the upload of your critique (presentation) for grading purposes and the second is the discussion related to each critique. **You**

will need to upload your presentation in both the submission assignment *and* in the discussion for your classmates to view. You will notice that you will receive 0 points in the discussion of your own critique. Do not be concerned - This will be dropped from your grade for this assignment!

CITI CERTIFICATION

It is important that all phases of the research process be conducted in an ethical manner. Federal regulations require that anyone who plans to pursue research that involves human subjects first must be certified in a way that documents they are sufficiently trained to do so while protecting the rights of their study participants. Hence, an assignment for this course is to complete such a certification. *If you are a student at the University of Utah, this certification will continue to be valid (for up to 3 years) which would apply if you pursue a project, thesis, or dissertation that involves human subjects during that time. (Students at other universities should check with their own institution to determine how long the certification is active there.)* Register at the [CITI website](#), - after which you can proceed to the modules to complete the certification. *It is highly recommended that students whose programs fall within the University of Utah Health Sciences Center, including Gerontology MS students, complete the biomedical modules even if their present or future research interests are social-behavioral.* At the completion of your certification, the CITI system will display a Completion Report. *Print and save this for your records, then email it to me so I have a record of your certification.* Upon receipt, you will be awarded the **10 points** for this assignment. You may complete the training at any time during the term; however, the deadline is **April 19th – 11:59 PM (MT)**.

Extra Credit Option – Good Clinical Practice (GCP) Certification (10 extra points)

Since the Course overview video was created, the Institutional Review Board mandated another required certification for research with human subjects, called Good Clinical Practice (GCP). *Although this new certification is not required for this class, you will need to have completed this training in addition to the CITI certification if you plan to conduct any research involving human subjects, including but not limited to a thesis, project or dissertation.* I am therefore offering you the option to complete the GCP training (in addition to the required CITI human subjects training) in this class for an **additional 10 points**. This training is available at the [CITI Website](#) and it remains valid for up to 3 years. If you wish to take advantage of this extra credit opportunity, you need to complete the training and submit your completion report to me by **April 19th – 11:59 PM (Mountain)**.

FINAL PROJECT

Each student is expected to complete a final project that essentially will be a plan for a proposed focused research investigation on a social/behavioral gerontological topic of the student's interest. You are encouraged to discuss your proposed topic idea with me, if you wish, so you can feel confident about your choice. *It is strongly suggested that you design your earlier mini-projects in such a way that they can be used as a foundation for this final project.* Therefore, it would be advantageous to have a topic that interests you in mind as early as possible in the semester. **Please note that a proposed design focused on a secondary analysis of already existing data is not acceptable.**

The final project is to be presented as a typed double-spaced report and must have the following four components:

- A concise literature review (about 3-4 pages) that provides the background as well as a rationale for what you propose to examine, identifying the salient features of what already has been studied as well as gaps that your proposed study would hope to address. The literature review should provide support for the study's problem statement and related research questions and/or hypotheses.
- An overview of the design of your proposed study including the type of design chosen (i.e., survey, experimental, field observation etc.), how the sample will be identified and recruited, randomization or matching strategies (if applicable) and how subjects will be contacted (procedures etc.) You also are expected to identify any potential limitations of your design and sampling strategy.
- A description of your proposed mode of data collection, how the variables in your study will be measured, and what established scales (if applicable) will be chosen as indicators for your key variables. Be sure to address issues pertaining to reliability, validity and other applicable features of the measures you choose that are relevant to the proposed study. For qualitative (or mixed) studies, describe how that data would be collected and analyzed as well as strategies to ensure their reliability and validity.
- An appendix that includes your data collection instrument (e.g., questionnaire, interview schedule, data forms etc.) with coding instructions and any other related materials needed for data collection and coding. The appendix also should include (as applicable) letters of invitation, recruitment flyers, or any other appropriate items relevant to the protocol of the proposed project.

A document describing the project outline as well as examples from previous terms are available on Canvas. This assignment is worth 80 points and is due **April 25th, 11:59 PM (Mountain)**.