

University of Florida
College of Public Health & Health Professions Syllabus
HSA 6930 Special Topics: Health Services Research Methods I
Fall 2023
Delivery Format: On Campus
Course Website or E-Learning: Canvas

Instructor: Yen-an Zhu, PhD MS
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Office Hours: Available by appointment

Meeting Time: Every Thursday 9:35 AM – 12:35 PM
Meeting Place: HPNP G-109
Teaching Assistant: Ruixuan (Roxanne) Wang (ruixuan.wang@phhp.ufl.edu)
Preferred Communication: Direct UFL email

Pre-Requisites

- PHC 6052: Introduction to Biostatistical Methods (SAS)
- PHC 6053: Regression Methods for the Health and Life Sciences

Students must have prior experience with basic data entry and analysis in SAS. Students who have not taken the pre-requisite courses must illustrate their SAS skills at the PHC 6053 level in order to obtain instructor approval to enroll. All students must have access to SAS 9.4.

PURPOSE AND OUTCOME

Course Overview

Health Services Research (HSR) Methods I introduces students to the fundamentals of methodologies that commonly used in HSR, with topics that include the following: study conceptualization, development of research question, study design and its implication for analysis, fundamentals of data cleaning, management, and analysis, and result interpretation and communication.

Relation to Program Outcome

This course is the first of a two-course sequence on doctoral level health services research methods. It is a required core course of PhD program in Public Health – Health Services Research and covers the following competencies:

- Apply in-depth disciplinary knowledge and skills relevant to HSR
- Pose innovative and important research questions, informed by systematic reviews of the literature, stakeholder needs, and relevant theoretical and conceptual models
- Select appropriate interventional (experimental and quasi-experimental) or observational (qualitative, quantitative, or mixed methods) study designs to address specific HSR questions
- Use appropriate analytical methods to clarify associations between variables and to delineate causal inferences
- Effectively communicate the findings and implications of HSR through multiple modalities to technical and lay audiences

Course Objectives and/or Goals

Upon successful completion of the course, students are expected to be able to:

- Use the basic language and concepts of HSR
- Develop important and innovative HSR questions and hypotheses with the guide of conceptual framework
- Distinguish different types of study design and recognize their strengths and limitations
- Select appropriate measurement and data source based on the research question and study design
- Interpret statistical results and discuss their implications

Instructional Methods

Readings, slides, and notes are the primary class materials and will be posted to Canvas prior to each class session. SAS software is required to conduct quantitative analysis.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

Week	Date	Topic	Due Date
1	8/24	Introduction and overview of HSR	
2	8/31	Research question development	
3	9/7	Literature review	Exercise #1
4	9/14	Observational research design	
5	9/21	Conceptual models in HSR	Exercise #2
6	9/28	Commonly used data sources in HSR	Project topic/outline
7	10/5	Basic techniques for observational data analysis I: Descriptive analysis	
8	10/12	Basic techniques for observational data analysis II: Bivariate & multivariate analysis	Exercise #3
9	10/19	Mid-term presentation	Presentation slides
10	10/26	Statistical inference and scientific interpretation	
11	11/2	Experimental research design	Proposal
12	11/9	Quasi-experimental research design	Exercise #4
13	11/16	Qualitative research	
14	11/23	No Class (Thanksgiving!)	
15	11/30	Final presentation	Presentation slides Final project

Course Materials and Technology

- All required course materials are available online through Canvas.
- SAS software is required for exercises and the final project. There are several options for SAS access:

- Direct purchase and installation. This option is only available for Windows users. SAS can be purchased on campus at the UF computing help desk located at 132 HUB Stadium Road. The current cost is \$35. Visit <https://software.ufl.edu/software-listings/sas-student-licensing.html> for more information.
- Available on the UFApps server (<https://info.apps.ufl.edu/>). To use SAS on UFApps, you will need to learn how to upload and download files to and from the UFApps server.
- SAS OnDemand for Academic. It can be used with any operating system. Visit https://www.sas.com/en_us/software/on-demand-for-academics.html for more information and getting the access.
- Some departments may have access to SAS through the IT group or remote desktop. Check with your own department for SAS access.

I personally recommend using SAS OnDemand for Academic, as it will work for all users and does not have as many bugs as UFApps.

- There is no required textbook to purchase for this course. However, the following textbooks are recommended and may serve as useful references with additional examples –
 - Shi, L. (2019). *Health services research methods*. 3rd Edition. Cengage Learning.
 - Hart, C. (2018). *Doing a literature review: Releasing the social science research imagination*. 2nd Edition.
 - Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. 2nd Edition. Houghton, Mifflin and Company.

For technical support, please contact the UF Help Desk at:

- helpdesk@ufl.edu
- (352) 392-HELP (select option 2)
- <https://helpdesk.ufl.edu/>

Additional Academic Resources

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

ACADEMIC REQUIREMENTS AND GRADING

Assignments

1. **Attendance (5 points):** Students are required to attend all classes. See attendance policy.
2. **Participation (5 points):** Students are required to participate to the class actively. They must ask questions or provide feedback to other students' class projects.
3. **Exercises (4*10 points = 40 points):** Students will be required to complete **four** exercises independently throughout the semester. This assignment is designed to assess and evaluate a variety of content covered in the class. The instructions and rubrics will be posted on Canvas and due on Thursdays at 11:59 pm. Due date are listed on the course schedule.
4. **Class project:** Students will be required to complete a class project consisting of numerous skills learned in this course. They are encouraged to discuss the topic of the project with their academic advisors based on their own research interests. Students who submit an abstract/poster of the class project will be given bonus points. Due dates are listed on the course schedule. Further instructions will be given on Canvas.
 - a. **Project topic/outline (5 points):** Students are expected to propose a research topic of their interests. They need to identify their study population and research question, and moreover give the rationale of their choice in one to two paragraphs (no more than one page).
 - b. **Mid-term presentation (5 points):** Students are expected to give a 10-min presentation to describe the background and methods they will use for the proposed project during the class. The slides will be submitted to Canvas after the presentation.
 - c. **Proposal (15 points):** The propose should include background, conceptual framework, study aim(s), study design, study population, and statistical analysis plan (no more than 5 pages). The submitted proposal need to incorporate the comments and feedback they receive in the mid-term presentation.
 - d. **Final presentation (5 points):** Students are expected to present their final projects in 15 minutes with another 5-min Q&A session using PowerPoints slides. The slides will be submitted to Canvas after the presentation.
 - e. **Final project (20 points):** The final product should include four sections as a regular scientific manuscript: (1) introduction, (2) methods, (3) results, and (4) discussion. It should be written in AMA style and no more than 10 pages, excluding figures, tables, and references.

All assignments must be submitted through Canvas Assignment by the exact due date and time. Late submission will result in 1 point deduction per each day.

Grading

Grades will be determined according to student performance on the three requirements as shown in the table below. The same evaluation procedure will be applied to **ALL** students.

<i>Requirement</i>	<i>Points</i>
Attendance	5
Participation	5
Exercises (10 points per exercise)	40
Class project	50
Project topic/outline	5
Mid-term presentation with slides	5
Proposal	15
Final presentation with slides	5

Final project	20
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Point system used (i.e., how do course points translate into letter grades)

Example –

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

There will be no rounding up for grade increments. Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0 based on 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if based on credits in courses numbered 5000 or higher that have been earned with a B+ or higher.

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

More information on UF grading policy may be found at:

<https://gradcatalog.ufl.edu/graduate/regulations/>

Exam Policy

- **Policy related to make up exams or other work**

Only in extreme circumstances will the instructor accept late assignments. If you anticipate turning an assignment in late, please discuss with the instructor beforehand. It is your responsibility to check that the correct assignment has been submitted to Canvas on time.

Always review your submission after turning it in. **The penalty for late submission is a reduction of 1 point per day per each 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 me within 24 hours of the technical difficulty if you wish to request a make-up.

- **Policy related to required class attendance**

Excused absences must be consistent with university policies in the Graduate Catalog (<https://gradcatalog.ufl.edu/graduate/#text>). Additional information can be found here: <https://gradcatalog.ufl.edu/graduate/regulations/>.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

It is critical to review all materials posted on Canvas and read all announcements carefully. Students are expected to work through the materials as directed and ask questions if you do not understand. It is your responsibility to review the comments and feedback we give on your graded assignments. In addition, students are expected to maintain a civil tone and respect the opinions of other persons. While commenting on others' posts is encouraged, aggressive or patronizing tone and language are unacceptable and may result in the loss of your posting and discussion privileges.

Communication Guideline

Questions should be asked via direct UFL email and during the office hours (available by appointment). If you have questions about assignments, ask the instructor or teaching assistant **BEFORE** the due dates. It is too late to seek clarifications/corrections after grades have been assigned. Response within 24 hours to emails received on weekdays (Monday – Friday) and 48 hours on weekends. Response to Canvas messages may be delayed.

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://graduateschool.ufl.edu/>

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 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: <https://phhp.ufl.edu/policy-classroom-guests-of-students/>

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.ua.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.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.ua.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.

- **Counseling and Wellness Center** offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Online and in-person assistance is available.
 - (352) 392-1575
 - <http://www.counseling.ufl.edu> for more information
- **U Matter We Care** 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.
 - <http://www.umatter.ufl.edu/>
- **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.
 - (352) 392-0627
 - <https://shcc.ufl.edu/> for more information
- 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**
 - (35) 392-1111 (or 9-1-1 for emergencies)
 - <https://police.ufl.edu/>
- **UF Health Shands Emergency Room/Trauma Center**
 - Emergency room at 1515 SW Archer Road, Gainesville, FL 32608
 - (352) 733-0111 for immediate medical care call
 - <https://ufhealth.org/locations/uf-health-shands-emergency-room-trauma-center/>

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.