

University of Florida
College of Public Health & Health Professions Syllabus
HSA 7708: Health Services Research Methods II

SPRING 2020 (3 Credits)

Delivery Format: On Campus

UF e-Learning: <http://elearning.ufl.edu/>

Instructor Name: Ara Jo, PhD
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Email Address: ara13j@phhp.ufl.edu
Office Hours: By Appointment

Course schedule: Every Wednesday 1:55pm-4:55pm

Classroom: HPNP3105

Preferred Communication: Direct email.

Email Policy: Response within 24 hours to emails received on weekdays (M-F) and 48 hours to emails received over the weekend.

Prerequisites

None.

PURPOSE AND OUTCOME

Course Overview

This course is designed to review and understand health services research methods and focus on quantitative research methodologies for health services researchers.

Course Objectives and/or Goals

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

1. Understand diverse health services research methodologies.
2. Apply optimal methods to the health services research topic and context.

Instructional Methods

Textbooks and readings are primary resources. Required readings will be posted in weekly module. SAS or STATA statistical software (any version) are required to conduct quantitative method.

Competencies

1. Apply in-depth disciplinary knowledge and skills relevant to health services research.
2. Select appropriate interventional (experimental and quasi-experimental or observational (qualitative, quantitative or mixed methods) study designs and corresponding methods to address specific health service research questions.
3. Use appropriate analytical methods to clarify associations between variables and to delineate causal inferences.

4. Effectively communicate the findings and implications of health services research through multiple modalities to technical and lay audiences.

DESCRIPTION OF COURSE CONTENT

Course Schedule

Week	Topic(s)	Text Chapter
1	Introduction and overview of health services research	
2	Health Services Research Methods: Regression analysis	Wooldridge Ch. 1
3	Properties of OLS Estimators	Wooldridge Ch. 2
4	Violation of OLS Assumptions I: Non-normal Errors/Functional Form	Wooldridge Ch. 3, 6, 9
5	Violation of OLS Assumptions II: Heteroskedasticity and Autocorrelation	Wooldridge Ch. 8, 12
6	Violation of OLS Assumptions III: Missing data, Measurement error and Stochastic regression	Wooldridge Ch. 9
7	Mid-Term: Feb 20 (Thursday)	
8	Discrete Dependent Variables I: Binary (Logit, Probit, Grouped Logit)/ Polychotomous (Ordered Logit, Ordered Probit, Multinomial logit, conditional logit, nested logit, multinomial probit) Dependent Variables	Maddala Ch.2.1, 2.2, 2.5, 2.8-9 Wooldridge Ch. 7, Ch. 17
9	Discrete Dependent Variables II: Count Data Models (Poisson regression, Negative Binomial Regression)	Maddala Ch. 3.1-6
10	Models with Censored Data I: Tobit and Two-Part Models	Maddala Ch. 6.1-7

Week	Topic(s)	Text Chapter
11	Models with Censored Data II: Propensity Scores	-
12	Models with Censored Data III: Difference-and-Different Models	-
13	Other Modeling Tools I: Simultaneous Equations	Maddala Ch. 7 Wooldridge Ch. 16
14	Other Modeling Tools II: Hierarchical Linear Models	-
15	Clinical Trials	-
16	Mid-Term: April 23 (Thursday)	

Course Materials

- [Required] Wooldridge, J. Introductory Econometrics 3rd edition. Thompson Southwestern. 2006.
- [Required] Maddala, G. Limited Dependent & Qualitative Variables in Econometrics. Cambridge University Press. 1983
- Additional readings used for lectures will be posting on Canvas
- Lecture Slides used for lectures will be posting on Canvas

Announcements: Class announcements will be sent via the announcements tool in eLearning. 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.

Technical Requirements: You are REQUIRED to have a webcam and microphone. Browser requirements may change; please consult <https://kb.helpdesk.ufl.edu/FAQs/SupportedBrowsersForUFWebsites> to see a list of supported browsers and recommendations for browser configuration.

For **technical support for the course eLearning site, activities, and assessments**, please contact: the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://elearning.ufl.edu/help.shtml>

ACADEMIC REQUIREMENTS AND GRADING

Exam (20 points in Mid-term, 30 points in Final)

This course has two exams: mid-term and final. Exam dates are given on the course schedule. Exams covers the course materials. The final exam is **cumulative**.

Assignments: Late submission will be penalized with 1 point deduction

1. A Replication Study (25 pts)

This assignment is designed to replicate existing study using health services methodologies. It allows students to understand the rationale of the methodology and conduct the research independently. Select a study using one of health services research methods with national database. Following by method section, generate reliable findings. The final paper includes original findings and replicated findings. In addition, write strengths and weakness of the methodology. Lastly, suggest alternative methods to improve the study.

a. Rubric

- i. Replicated results (10 pts)
- ii. Strengths and weakness (10 pts)
- iii. Suggest alternative methods (5 pts)
- iv. Extra page or late submission will be deducted with 0.5 point.
- v. **Submit the document via Canvas by April 13th (Monday) 5pm**

2. Research Manuscript (25 pts)

Students will write a research manuscript based upon their own research interest. It should consist of three sections, 1) introduction, 2) methods and 3) results. The paper should be written in AMA style.

Rubric

- a. Introduction (5pts): background should be concise and clearly. Research question and hypothesis should be clearly described.
- b. Methods (10 pts): describe methods including study design, sampling design, sampling flow and statistical methods clearly. Also need justification of methodology.
- c. Results (10 pts): present descriptive and advanced analysis findings and interpret findings clearly.
- d. The paper should be up to 7 pages excluding tables, figures and references.

Grading

Final grades will reflect your performance in these areas:

Requirement		Number of Points
Exams	Mid-term	20
	Final	30
Assignments	A Replication Study	25
	Research Manuscript	25
Total points		100

Here are the **approximate** point score to letter grade translations:

Points earned	93-100	90-92.99	87-89.99	83-86.99	80-82.99	77-79.99	73-76.99	70-72.99	67-69.99	63-66.99	60-62.99	Below 60.99
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

- There will be no rounding up for grade increments, for example a 92.99 is an A-

- 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

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at:

<http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Finally, note that the assignment of letter grades will be influenced by the overall performance of the class. In other words, a rising tide lifts all boats.

Exam Policy

Policy Related to Make up Exams or Other Work

You MUST e-mail me within 24 hours of any issue if you wish to request a make-up.

Policy Related to Required Class Attendance

Please note all faculty are bound by the UF policy for excused absences. Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>) and require appropriate documentation. Additional information can be found here: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

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>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

Students are expected to be prepared and ready to participate in class discussions. Professional behavior is expected at all times. Utilization of electronic devices, particularly a cell phone, should be limited and only for support of learning environment.

Communication Guideline

Students will be expected to communicate via official UF email.

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.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. 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.

- You 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>

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.
