



VME 6771 Veterinary Epidemiologic Research
3 credits; Class # 24144
Fall 2023

Revision: July 14, 2023

Course description

Design, analysis and interpretation of experimental and observational studies in populations.

Student learning outcomes

- The student will examine different research methods used in experimental and observational studies.
- The student will analyze and critique published experimental and observational studies.
- The student will apply common statistical techniques required in various types of experimental or observational studies.
- The student will prepare and submit two research protocols (ie, clinical trial and cross-sectional study) for evaluation and feedback.
- The student will deliver two twelve-minute oral presentations describing her/his research protocol to peer-students and the course instructor.

Pre-requisites

- Must be a graduate student at the University of Florida.
- Must be registered in the course (3 credits).
- Laptop with wireless internet capability.

Course format

The class will meet Tuesdays and Thursdays in **Deriso Hall Paul Nicoletti's conference room** (see schedule below). In general, the course will consist of (1) lectures on the principles of epidemiologic study designs (clinical trials, cross-sectional studies, case-control studies, and cohort studies); (2) discussion of published experimental and observational studies; (3) instruction in basic analysis of epidemiologic data; (4) design of experimental and observational studies by the student; and (5) twelve-minute oral presentation by each student. For the discussions of published experimental and observational studies, please read the assigned papers before class. Guidelines to assist you in the preparation of the study designs will be provided. The project assignments should be typed double-spaced and be no longer than six pages (plus references).

Tentative Course Schedule – Fall 2023

Day	Date	Time		Presenter	IU	
Th	8/24	12.50-1.40 & 1.55-2.45	Introduction to the course	JH	1-2	
T	29		Cancer detectives of Lin Xian	JH	3-4	
Th	31		Sampling & sample size	JH	5-6	
T	9/5		Comp Lab 1: sample size calculations	DK JH	7-8	
Th	7		Evaluation of diagnostic tests	JH	9-10	
T	12		Comp Lab 2: evaluation of diagnostic tests	DK JH	11-12	
Th	14		My research question of interest is?*	All	13-14	
T	19		Disease frequency & measures of association Confounding & interaction	TD	15-16	
Th	21		Clinical trials	JH	17-18	
T	26		Journal Club: clinical trials***	DK	19-20	
Th	28		12.50-1.40	Review & study assignment (1)	JH	21
T	10/3	12.50-1.40 & 1.55-2.45	Statistical methods used in experimental and observational studies	TD	22-23	
Th	5		Cross-sectional studies	JH	24-25	
T	10		Journal Club: cross-sectional studies	Students	26-27	
Th	12		Case-control studies	JH	28-29	
T	17		Journal Club: case-control studies	Students	30-31	
Th	19		Review & study assignment (2)	JH	32-33	
T	24		Student oral presentations Clinical trial assignment is due today	All	34-35	
Th	26		Comp Lab 3: basic instruction in data analysis	DK JH	36-37	
T	31		Cohort studies	JH	38-39	
Th	11/2		Journal Club: cohort studies***	Students	40-41	
T	7		Scientific Writing Unpublished research is not research	JH	42-43	
Th	9		No class today			
T	14		Time to prepare project assignment No. 2			
Th	16		Student oral presentations Cross-sectional study assignment is due today	All	44-45	

**This session is an opportunity for graduate students to present and discuss their research and to receive feedback from the instructor and peer-students. Students must prepare a 12-15 minute pptx presentation including the objective statement(s), proposed research approach, and study results—if available.

***A research report will be selected for discussion. One student will be designated to lead the review of the report and group discussion.

Instructors

Jorge Hernandez, Professor (course coordinator)
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Teaching Assistant

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Office hours

Please e-mail to schedule an appointment.

Recommended reading

- Dohoo I, Martin W, Stryhn H. Veterinary Epidemiologic Research. AVC Inc. Charlottetown. Prince Edward Island. Canada (2003).
- Gordis, L. Epidemiology. WB Saunders Company (2000).

Grading

Students will formulate two research protocols that require methods used in clinical trials and cross-sectional studies. Each study design assignment will constitute 35% of the final grade. Completion of three computer lab exercises will be $10 \times 3 = 30\%$. Extra-credit points may be considered in the final course grade for students who show willingness to participate in class discussions. Course grade is non-competitive; course grades will be assigned based on the mastery of the material. I encourage you to talk with me to clarify any points of grading of study designs that you do not fully understand.

Percent	Grade	Grade Points
90.0 - 100.0	A	4.00
87.0 - 89.9	A-	3.67
84.0 - 86.9	B+	3.33
81.0 - 83.9	B	3.00
78.0 - 80.9	B-	2.67
75.0 - 79.9	C+	2.33
72.0 - 74.9	C	2.00
69.0 - 71.9	C-	1.67
66.0 - 68.9	D+	1.33
63.0 - 65.9	D	1.00
60.0 - 62.9	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:

[UF Graduate Catalog](#)
[Grades and Grading Policies](#)

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the [Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. [Click here for guidance on how to give feedback in a professional and respectful manner](#). 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 ufl.bluera.com/ufl/. [Summaries of course evaluation results are available to students here](#).

University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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.” [The Honor Code](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

Campus Resources

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus

On-Line Students Complaints
