University of Florida

Department of Health Outcomes & Biomedical Informatics
College of Medicine

Course Number and Title: GMS 6885: Translational Health Research Design
Course Director: Stephanie A. S. Staras, MSPH, PhD
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*Virtual Office Hours: Thursday 4-5 pm

Course Instructor: Kylie Harrall, PhD, MS
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*Virtual Office Hours: Friday 11 am - noon

Credit Hours: 3 hours
Semester/Year: Fall 2025
Delivery Format: Online

* Virtual office hours are provided for students to ask questions. In addition, students may also ask questions by email or setting up an appointment at any time.
Canvas URL: http://elearning.ufl.edu/
Department Website: https://hobi.med.ufl.edu/

PREREQUISITES: A graduate-level statistics.

MAIN TEXT (required)

Essentials of Epidemiology in Public Health 4th Edition Ann Aschengrau and George R. Seage
ISBN: 9781284128352

DESCRIPTION OF COURSE CONTENT

PURPOSE OF THE COURSE

This graduate level course provides an overview of the research designs common in translational health research. This course will provide students foundational understanding of a variety of research designs including the creation of defensible and meaningful hypotheses, bias potential, strengths, and limitations. Students will explore when different research designs are most appropriate for the scientific knowledge, the context, and community support. The course provides foundational work for the HOBI and Implementation Science advanced methods courses.

COURSE OBJECTIVES & GOALS

By the end of this course, the student should be able to:

1. Demonstrate a fundamental understanding of key concepts for translational health research designs including individual randomized trials, group randomized trials, quasi-experimental studies, cohort and longitudinal studies, case-control designs, and descriptive studies.

2. Propose and defend feasible hypotheses and translational health research designs to answer clinically meaningful questions.
3. Critique and devise research designs that incorporate mixed methods and multilevel determinates.
4. Apply translational health research designs to implementation science questions.

COURSE POLICIES

GETTING ANSWERS TO COURSE QUESTIONS

We are happy to help you. We love talking about study designs and find it fun to help you learn the material and think about your research questions. Office hours are online. If the stated times do not work for you, please send an email. We can either answer your email, or we can schedule a time to meet that will work with your schedule. We will do our best to get back to you within 24 hours on the weekdays and 48 hours over the weekend.

QUIZ/EXAM POLICY

Unless otherwise stipulated, all assignments are individual assignments. Students are forbidden to collaborate or consult with one another on such assignments. Students follow the University Policy on Academic Misconduct, which includes but is not limited to plagiarism.

ASSIGNMENT POLICY

A penalty of 10% per day (maximum of two days) shall be assessed on assignments turned in late. After two days late, students will receive a 0 for the assignment. Non-participation on discussion forums will earn a grade of zero.

MAKE-UP POLICY

Students are allowed to make up work only as the result of illness or other unanticipated circumstances. In the event of such emergency, documentation will be required in conformance with university policy. Work missed for any other reason will earn a grade of zero.

POLICY ON STYLE FOR CITATION AND PLAGIARISM

The two key purposes of citation are to 1) give appropriate credit to the authors of information, research findings, and/or ideas (and avoid plagiarism) and 2) facilitate access by your readers to the sources you use in your research.

Quotations: When directly quoting an outside source, the borrowed text, regardless of the amount, must be surrounded by quotation marks or block quoted. Quoted text over two lines in length should be single-spaced and indented beyond the normal margins. Every quote must include a source—the author, title, volume, page numbers, etc.—whether an internal reference, footnote, or endnote is used in conjunction with a bibliography page.

Paraphrasing or Citing an Idea: When summarizing an outside source in your own words or citing another person's ideas, quotation marks are not necessary, but the source must be included. This includes, but is not confined to, personal communications from other students, faculty members, experts in the field, summarized ideas from published or unpublished resource, and primary methods derived from published or unpublished sources. Use the general concept of "when in doubt – cite."

Plagiarism is a serious violation of the academic honesty policy of the College. If a student plagiarizes others' material or ideas, he or she may receive an "E" in the course. The faculty member may also recommend further

sanctions to the Dean, per College disciplinary action policy. Generally speaking, the three keys of acceptable citation practice are: 1) thoroughness, 2) accuracy, and 3) consistency. In other words, be sure to fully cite all sources used (thoroughness), be accurate in the citation information provided, and be consistent in the citation style you adopt. All references should include the following elements: 1) last names along with first and middle initials; 2) full title of reference; 3) name of journal or book; 4) publication city, publisher, volume, and date; and 5) page numbers referenced. When citing information from the Internet, include the WWW address at the end, with the "access date" (i.e., when you obtained the information), just as you would list the document number and date for all public documents. When citing ideas or words from an individual that are not published, you can write "personal communication" along with the person's name and date of communication.

RESPECT FOR STUDENT BACKGROUNDS

It is my intent that the learning needs are met for students from a variety of backgrounds and educational experiences. My goal is to create a learning environment that supports a wide variety of thoughts, opinions and perspectives. I have included materials that address ways to serve all populations within research studies. Your suggestions on how to more comprehensively address the breadth of material in this course are encouraged and appreciated. Please feel free contact me if you have any suggestions to improve the quality of the course materials.

UF POLICIES

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php. You are expected and required to comply with the University's academic honesty policy (University of Florida Rules 6C1-4.017 Student Affairs: Academic Honesty Guidelines, available at http://regulations.ufl.edu/chapter4/4017.pdf). Cheating, plagiarism, and other forms of academic dishonesty will not be tolerated. Note that misrepresentation of the truth for academic gain (e.g., misrepresenting your personal circumstances to get special consideration) constitutes cheating under the University of Florida Academic Honesty Guidelines

ACCEPTABLE AND UNACCEPTABLE USE OF AI

The use of generative AI tools (e.g. ChatGPT, Dall-e, etc.) is **permitted** in this course for the following activities:

- Brainstorming and refining your ideas;
- Fine tuning your research questions;
- Finding information on your topic;
- Drafting an outline to organize your thoughts; and
- Checking grammar and style.

The use of generative AI tools is **not permitted** in this course for the following activities:

- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts assigned to you.
- Writing entire sentences, paragraphs or papers to complete class assignments.

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty.

Any assignment that is found to have used generative AI tools in unauthorized ways will result in the following consequences. The first instance of will result in a written warning. The second instance will result in a deduction of five percentage points from your overall grade. The third instance will result in a drop of a letter grade (A to B, A- to B-, and so on). The fourth instance will result in a F letter grade in the course. When in doubt about permitted usage, please ask me for clarification.

COMMUNICATION COURTESY

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. The first instance of clearly rude and/or inappropriate behavior will result in a warning. The second instance will result in a deduction of five percentage points from your overall grade. The third instance will result in a drop of a letter grade (A to B, A- to B-, and so on).

Follow netiquette for online communications https://www.cise.ufl.edu/wp-content/uploads/2019/08/CISE_Netiquette_Guide.pdf

GETTING HELP

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

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

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up. Other resources are available at http://distance.ufl.edu/getting-help/

COUNSELING AND WELLNESS RESOURCES

For any type of counseling needs, especially related to stress with school, work, personal life, crisis and emergency counseling, alcohol and other drug related services as well as Psychiatry wellness, you are encouraged to make an appointment with the counseling and wellness center through this link: https://counseling.ufl.edu/

LIBRARY HELP DESK SUPPORT

Should you have any complaints with your experience in this course please visit http://distance.ufl.edu/student-complaint-process/ to submit a complaint.

EVALUATION AND GRADING POLICIES

The following will be used to assess students' progress in achieving the course objectives.

1. WEEKLY EVALUATION ACTIVITIES (70% OF TOTAL GRADE)

Each week, students will complete an evaluation activity prior to attending class. The type of activity will rotate between quizzes, an in-class discussion forum, and a study design activity.

A. SYLLABUS AND FOUNDATIONAL MATERIAL QUIZ – (2% OF TOTAL GRADE)
For week 1, students will complete two brief quizzes: one on the syllabus and the other on foundational content. The syllabus quiz will be worth one point and is designed to confirm your understanding of the expectations of the course. The foundational material quiz is worth one point and is meant to help guide you on how prepared you are to take the course. On the foundational materials quiz, students who complete the quiz will receive full credit regardless of answers. There are materials provided to help you learn foundational material that may not yet be familiar to you.

B. INTRODUCTORY DISCUSSION BOARD– (2% OF TOTAL GRADE)
Each student will post an introduction, so your classmates know who you are. Why are you taking this course? What do you hope to learn from it? What academic strengths are you bringing to this class? You are encouraged to comment on your classmates' posts and respond to anything that strikes your interest.

C. RESEARCH DESIGN QUIZZES – (10% OF TOTAL GRADE)
Throughout the course, you will have 5 quizzes about the research design materials presented. Each quiz is worth 2 points for a total of 10 points across the research design quizzes. (5 weeks * 2 points = 10 points). As sometimes opinions of experts differ, all answers will be evaluated on what is in the course material and not general knowledge.

D. ONLINE DISCUSSION FORUMS – (16% OF TOTAL GRADE)
Students will complete 4 online discussions. Participation in a discussion is worth 4 points for a total of 16 points assigned to discussions (4 discussions * 4 points).

E. STUDY DESIGN ACTIVITIES – (40% OF TOTAL GRADE)
Students will complete 4 study design activities by answering multiple choice questions about a scenario that leads you to creating a specific study. In total, the study designs are worth 40 points. Because students improve once understanding the layout of the first study design, the first study design is worth 7 points and each of the next three are worth 11 points each.

2. STUDENT CREATION OF A STUDY DESIGN (30% OF TOTAL GRADE)

Students will create a study design activity. The activity will consist of 5 questions with answers based on one of the below studies that include an individual randomized trial, group randomized trial, quasi-experimental study, cohort, and case-control. Questions should be a variety of short answer, multiple choice, and true/false (defend) responses.

The course is designed so that you will have all the relevant information you need to complete this assignment by the beginning of November. I suggest that you use the final month to complete the assignment rather than waiting until the last week. This assignment will be checked with Turitin software for plagiarism. All instances of plagiarism will be handled following University policy described above. UF has a tool to help students correct unintentional plagiarism before handing in your assignments. Please consider using Draft Coach at https://elearning.ufl.edu/student-help/draft-coach/.

SCALING

Letter grade	Grade points	Grade Percentage
A	4.0	94-100
A-	3.67	90-93
B+	3.33	87-89
B	3.0	83-86
B-	2.67	80-82
C+	2.33	77-79

C	2.0	73-76
C-	1.67	70-72
D+	1.33	67-69
D	1.0	63-66
D-	0.67	60-62
F	0	<60

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/ Students' evaluations are important (e.g. for assessing instructors' performance on their teaching activities in relation to promotion) and they will be used to improve the course topics, materials, assignments, exams, and the instructor's teaching style.

COURSE SCHEDULE

Module	Dates	Major Topic	Evaluation Assignment	Assignment Due Date
Start Here and 1	8/21 – 8/31	Course overview and Introduction	◆Introductory Discussion board ◆ Syllabus Quiz ◆ Foundational Material Quiz	8/31/25
2	9/1 – 9/7	Introduction to Translational Research	◆ Discussion 1 post ◆ Discussion 1 response	9/7/25 9/14/25
3	9/8 – 9/14	Research Principles	◆ Discussion 2 post ◆ Discussion 2 response	9/14/25 9/21/25
4	9/15 – 9/21	Introduction to Study Designs	◆ Quiz 1	9/21/25
5	9/22 – 9/28	Individual randomized trials	◆ Discussion 3 post ◆ Discussion 3 response	9/28/25 10/5/25
6	9/29 – 10/5	Group randomized trials	◆ Study Design Activity 1	10/5/25
7	10/6 – 10/12	Quasi-experimental studies	◆ Quiz 2	10/12/25
8	10/13 – 10/19	Cohort and longitudinal studies	◆ Study Design Activity 2	10/19/25
9	10/20 – 10/26	Case-control design	◆ Study Design Activity 3	10/26/25
10	10/27 – 11/2	Descriptive studies	◆ Quiz 3	11/2/25
11	11/3 – 11/9	Choosing a design	◆ Study Design Activity 4	11/9/25
12	11/10 – 11/16	Meta-analyses	◆ Quiz 4	11/16/25
13	11/17 – 11/23	Mixed methods	◆ Discussion 4 post ◆ Discussion 4 response	11/23/25 11/30/25
14	11/24 – 11/30	Multi-level designs	◆ Quiz 5 *Student Research Project*	11/30/25 12/8/25