

# University of Florida

## Department of Health Outcomes & Biomedical Informatics College of Medicine

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Course Director: Stephanie A. S. Staras, MSPH, PhD  
Course Number and Title: GMS 6885: Translational Health Research Design

Credit Hours: 3 hours  
Semester/Year: Fall 2021  
Delivery Format: Online

Phone Number: 352-294-8299  
Email Address: [sstaras@ufl.edu](mailto:sstaras@ufl.edu)  
Office Hours: Friday 2-4 pm  
Canvas URL: <http://elearning.ufl.edu/>  
Department Website: <https://hobi.med.ufl.edu/>

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**PREREQUISITES:** A graduate-level statistics course.

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### MAIN TEXT (required)

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

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### DESCRIPTION OF COURSE CONTENT

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#### 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 the community support. The course provides foundational work for the HOBİ 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.
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## **COURSE POLICIES**

### **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 must of course follow the University Policy on Academic Misconduct, which includes but is not limited to prohibition of plagiarism.

### **ASSIGNMENT POLICY**

A penalty of 10% per day (maximum of two days) shall be assessed on assignments turned in late. 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 DIVERSITY**

It is my intent that the learning needs are met for students from diverse backgrounds and perspectives, and that the diversity students bring to this class be viewed as a resource. My goal is to create a learning environment

that supports diversity of thoughts, opinions and experiences. I have included materials that address ways to increase diversity within research studies. Your suggestions on how to more comprehensively address diversity 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.

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## **UF POLICIES**

### **UNIVERSITY POLICY ON ACCOMMODATION STUDENTS WITH DISABILITIES**

Students requesting accommodation for disabilities must first register with the Dean of Students Office: <https://drc.dso.ufl.edu/> . The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

### **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

### **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 <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

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## **GETTING HELP**

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

- [Learning-support@ufl.edu](mailto: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.

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## 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 PREREQUISITE QUIZ – (2% OF TOTAL GRADE)

For week 1, students will complete two brief quizzes: one on the syllabus and the other on prerequisite content. The syllabus quiz will be worth one point and the prerequisite quiz worth one point. On the prerequisite quiz, students will receive full credit regardless of answers.

#### 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. Students who post an introduction will receive full credit.

#### C. QUIZZES – (10% OF TOTAL GRADE)

During 5 weeks, the evaluation assignment will be a two-question quiz based on the learning assignment for that week. Each question will be worth one point of the final grade for a total of 10 points (5 weeks \* 2 points). All quiz questions will be multiple response option type questions. Quizzes must be completed by 11:59 pm Sunday. Students will receive full credit for the lowest quiz grade; thus, essentially students may skip one quiz.

#### D. ONLINE DISCUSSION FORUMS – (16% OF TOTAL GRADE)

During 4 weeks, the evaluation assignment will be participation in online discussion. Participation in a discussion is worth 4 points for a total of 16 points assigned to discussions (4 weeks \* 4 points).

#### E. STUDY DESIGN ACTIVITIES – (40% OF TOTAL GRADE)

During 4 weeks, each student will complete a study design activity by providing short answers to questions for a scenario that leads you to creating a specific study. Each study design is worth 10 points for a total of 40 points (4 weeks \* 10 points). Upon completion of each answer, students will receive sample answers so they can adjust their design as needed. Study designs will be graded on conceptual understanding and accuracy based on the study design evaluation rubric. Study design activities will be must be completed by 11:59 pm Sunday

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

Students will create a study design activity. The activity will consist of 10 questions with answers. Questions will be a variety of short answer, multiple choice, and true/false (defend) responses. Students can select from the following study designs: Individual Randomized Trial, Group Randomized Trial, Quasi-experimental studies, Longitudinal, or Cohort, or Case-Control Designs.

### 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.

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## COURSE SCHEDULE

Module	Dates	Major Topic	Evaluation Assignment
Start here		Course overview	<ul style="list-style-type: none"> <li>◆ Syllabus Quiz</li> <li>◆ Introductory Discussion board</li> </ul>
1	8/23 – 8/29	Introduction to the course	◆ Pre-requisites Quiz
2	8/30 – 9/5	What is translational research?	◆ Discussion Forum 1
3	9/6 – 9/12	Research principles	◆ Discussion Forum 2
4	9/13 – 9/19	Study Designs	◆ Quiz 1
5	9/20 – 9/26	Individual randomized trials	◆ Discussion Forum 3
6	9/27 – 10/3	Group randomized trials	◆ Study Design Activity 1
7	10/4 – 10/10	Quasi-experimental studies	◆ Quiz 2
8	10/11 – 10/17	Cohort and longitudinal studies	◆ Study Design Activity 2
9	10/18 – 10/24	Case-control design	◆ Study Design Activity 3
10	10/25 – 10/31	Descriptive studies	◆ Quiz 3
11	11/1 – 11/7	Choosing a design	◆ Study Design Activity 4
12	11/8 – 11/14	Meta-analyses	◆ Quiz 4
13	11/15 – 11/21	Mixed methods	◆ Discussion Forum 4
14	11/22 – 11/28	Multi-level designs	◆ Quiz 5
15	11/29 – 12/5	<i>Student Research Project</i>	◆ Student Research Project Due 12/5/21 at 11:59 pm