

PHC 7934 COURSE SYLLABUS  
**Epidemiology Seminar I: Seminal Epidemiologic Texts**  
Fall Semester, 2016  
Tuesdays, 10:30AM to 12:35AM; 2 credit hours  
Room: CTRB Rm# 4217

**Instructor Information**

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**Course Overview or Purpose**

This course can be taken by students in the Epidemiology PhD program in year 1 or year 2 or with instructor permission. The two main purpose of this course are: (1) to consolidate the knowledge base and to enhance the basic understanding of what is epidemiology, what are epidemiologists doing; and (2) to train students on how to choose the direction and topic areas of their own research. The study goals will be achieved by (1) exposing students to a set of carefully selected epidemiological programs and published manuscripts/book sections in epidemiology, (2) discussing the findings and implications of seminal epidemiologic manuscripts that resulted from major programs of research, 3) reviewing the strengths and weaknesses of major epidemiologic study designs and methodological approaches in the context of reviewing seminal texts; and 4) applying knowledge of epidemiologic methods to the students’ own research studies.

**Course Objectives**

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

- Describe the goals, historical context, primary exposures and outcomes of interest, and public health importance of major programs of epidemiologic research.
- Summarize the findings and public health implications of seminal epidemiologic studies that resulted from these programs of research.
- Discuss the strengths and weaknesses of major epidemiologic study designs.
- Describe the epidemiologic methods, including field methods and analysis plans, used to conduct a new study (methods ideally will be informed by approaches presented in papers reviewed during the Seminar).

## **Course Format**

Both didactic and interactive methods of instructions will be employed. While the instructor will give brief lectures to review key elements of the epidemiologic study design or approach featured in classic/prominent texts, the majority of the class time will be focused on group discussion of the readings.

## **Course Materials**

### **Text/Readings**

There is no textbook required for this class. All readings will be assigned the week prior to the class they are due.

## **Course Requirements**

*Class discussion.* Students will be asked to carefully review summaries on prominent programs of research and to read 1-2 classic epidemiologic papers prior to class. Students will actively participate in each class discussion. Students should be prepared to summarize findings of the studies, to discuss public health implications, and to share comments and questions about the readings.

*Discussion leader.* Each student will lead the class discussion of the readings at least once during the semester. The discussion leader will prepare a brief presentation to 1) describe the goals, historical context, primary exposures and outcomes of interest, and public health importance of the featured research program (e.g., will summarize the Framingham Heart Study) and 2) highlight key points of the seminal study of the week that was written in the context of the research program. After the presentation, discussion leaders will facilitate discussion of the study. Discussion leaders should have comments and questions related to the study prepared, and he/she should be capable of keeping the discussion flowing for the duration of the class period.

*Presentation.* Please present to the class the field and analytic methods of a study you currently are conducting or that you wish to conduct in the future. The content of the presentation should be similar to what would be presented in the Methods section of the manuscript that is written to present your study's results. If appropriate, please incorporate approaches used in papers reviewed during the Seminar. Students should first (briefly) describe the rationale for conducting the study and the specific aims and hypotheses of the study of interest and then outline in detail the field methods used to collect the data being analyzed and the analytic plan designed to address the specific aims. Students should present their studies in 20 minutes and should allow 20 minutes for feedback from peers.

## **Grading**

Grades will be based on attendance (10%), participation in class discussion on a regular basis (30%), participation as a discussion leader (20%), and the presentation (40%). Students must use Microsoft Power Point for their class presentations. Presentations will be graded on quality and creativity of content, as well as clarity, style, and delivery. All deadlines must be met.

### **Grading Scale**

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

It is possible to receive a grade of Incomplete (I) with instructor permission and at instructor discretion for unforeseen circumstances.

Grades of I not completed within one year are converted to F or U.

## Course Outline

### Session 01 Introduction

Become familiar with each other

Introduce the course

Select papers by individual students for focused reading and summary report by sessions

### Session 02 Populations and Health

#### Reading

Omran AR. Epidemiologic transition in the United States: the health factor in population change. *Popul Bull.* 1977; 1-42.

Rose G. Sick individuals and sick populations. *Int J Epidemiol* 1985;30:427–32.

Self-selected readings related to “demographic transition theory”

### Session 03 Tuskegee Syphilis Study

#### Readings

Vonderlehr RA, Clark T, Wenger OC, Heller JR. Untreated syphilis in the male negro: a comparative study of treated and untreated cases. *JAMA.* 1936;107(11):856-860.

Heller, J. Syphilis victims in US study went untreated for 40 years. *NY Times*; July 26, 1972.

White R. Unraveling the Tuskegee study of untreated syphilis. *Arch Intern Med* 2000; 160:585-98.

Cottler LB, McCloskey DJ, Aguilar-Gaxiola S, Bennett NM, Strelnick H, Dwyer-White M, Collyar DE, Ajinkya S, Seifer S, O’Leary CC, Striley CW, Evanoff B. Community needs, concerns and perceptions about health research: Findings from the CTSA Sentinel Network. *Am J Pub Health.* 2013; 103(9):1685-1692. PMID: 23409875.

### Session 04 Smoking and Lung Cancer

#### Readings

Doll R and Hill B. Smoking and Carcinoma of the Lung. *Br Med J* 1950; 30: 739-748.

One or two reading under student’s choice, examples may include epigenetics of tobacco use or gene-tobacco interactions.

### Session 05 Nurse’s Health Study/Obesity Study

#### Readings

Field AE, Willett WC, Lissner L, Colditz AG: Dietary fat and weight gain among women in the Nurses’ Health Study. *Obesity* 2007; 15(4): 967-976

One or two readings under students’ choice in which data from Nurse’s Health are used

## **Session 06 Framingham Heart Study**

### Reading

Dawber TR, Kannel WB, Revotskie N, Stokes JI, Kagan A, Gordon T: Some factors associated with the development of coronary heart disease. Six years' follow-up experience in the Framingham Study. *Am J Public Health* 1959; 49(10):1349-1356.

One or two of students' choice regarding cardiovascular disease research, including exercise and prevention. One option: Gong J, Chen X, Li S. Efficacy of a community-based activity program KM2H2 for stroke and heart attack prevention... *Plos One* 2105.

## **Session 07 Women's Health Initiative**

### Readings

Rossouw JE, Anderson GL, Prentice RL, LaCroix AZ et al. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results From the Women's Health Initiative randomized controlled trial. *JAMA* 2002;288:321-333.

Prentice RL, Langer R, Stefanick ML, et al, for the Women's Health Initiative Investigators. Combined postmenopausal hormone therapy and cardiovascular disease: toward resolving the discrepancy between observational studies and the Women's Health Initiative clinical trial. *Am J Epidemiol* 2005; **162**: 404–14.

## **Session 08 Global Burden of Disease**

### Reading

Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012 Dec 15;380(9859):2224-60.

Chen X. Understanding the development and perception of global health for more effective student education. *Yale Journal of Biology and Medicine* 87(2): 1-9.

Ball J, Chen X. Shifts in endocrine homeostasis and preventive hormone therapy: Extending the Women's Health Initiative globally. *Global Health Research and Policy*, July 17, 2016 1:9, DOI: 10.1186/s41256-016-0009-4.

## **Session 09 Epidemiologic Catchment Area Study**

### Reading

Cottler LB, Zipp JF, Robins LN, Spitznagel EL. Difficult-to-recruit respondents and their effect on prevalence estimates in an epidemiologic survey. *Am J Epidemiol*. 1987 Feb;125(2):329-39.

### Background Reading

Regier DA, Myers JK, Kramer M, Robins LN, Blazer DG, Hough RL, Eaton WW, Locke BZ. The NIMH Epidemiologic Catchment Area program. Historical context, major objectives, and study population characteristics. *Arch Gen Psychiatry*. 1984 Oct;41(10):934-41.

## **Session 10 North American-AIDS Cohort Collaboration on Research and Design**

### Reading

Samji H, Cescon et al, Closing the Gap: Increases in Life Expectancy among Treated HIV-Positive Individuals in the United States and Canada. Plos One, 2013 Dec.

Althoff KN, Gange SJ, Klein MB, Brooks JT, Hogg RS, Bosch RJ et al. Late presentation for human immunodeficiency virus care in the United States and Canada. Clin Infect Dis. 2010 Jun 1;50(11):1512-20.

## **Session 11 Place and Health: Moving to Opportunity**

### Reading

Ludwig J, Sanbonmatsu L, Gennetian L, Adam E, Duncan GJ, Katz LF, Kessler RC, Kling JR, Lindau ST, Whitaker RC, and McDade TW. Neighborhoods, obesity, and diabetes--a randomized social experiment. N Engl J Med. 2011;365:1509-19.

Chen X, Stanton B, Li X, Fang X, Lin D & Xiong Q. A comparison of health-risk behaviors of rural migrants with rural residents and urban residents in China. Am J Health Behav. 2009; 33(1): 15-25.

## **Session 12 Social Capital and Health**

### Reading

Kunitz SJ. Social capital and health. British Medical Bulletin. 2004, 69:61-73

Chen X, Stanton B, Li X, Gong J, Fang X. Personal Social Capital Scale – An instrument for social and behavioral research. *Health Education Research*. April 2009; 24(2):306-317. DOI: 10.1093/her/cyn020

## **Session 13 Randomized Trial for Behavioral Intervention Research: Design and analysis**

### Reading

Cottler LB, Compton WM, Ben-Abdallah A, Cunningham-Williams R, Abram F, Fichtenbaum C, Dotson W. Peer-delivered interventions reduce HIV risk behaviors among out-of-treatment drug abusers. Public Health Rep. Jun 1998; 113(Suppl 1): 31–41. PMID: PMC1307725.

Chen X, Stanton B, Gomez P, Lunn S, Deveaux L, Brathwaite N, et al. Effects on condom use of an HIV prevention programme 36 months postintervention: a cluster randomized controlled trial among Bahamian youth. Int J STD AIDS, 2010. 21(9): p. 622-30.

## **Session 14 & 15 Student Presentations**

## **Course Policies**

### **Classroom Etiquette**

Please come to class on time and be prepared to stay until the time scheduled as the end of class. We think your investment in the degree is worth maximizing your in-class experience, and we expect to provide materials that extend the full, scheduled class times. Pagers and cell phones should not be used in class. The use of cell phones, text messaging, and pagers is one of the most common complaints we have from students in recent years. Please turn them off, or, if you expect urgent calls, set them to “vibrate.”

## **Attendance**

Class attendance is mandatory. Excused absences follow the criteria of the UFL Graduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays), and should be communicated to the instructor **prior to the missed class day** when possible. UFL rules require attendance during the first two course sessions. Students are responsible for all material presented in class and meeting the scheduled due dates for class assignments.

## **Make-up Work**

Students are allowed to make up work **ONLY** as the result of an excused absence. If a student knows he or she will miss a class and is scheduled to give a presentation on the day that he or she misses, he or she must be prepared to present the following class.

University policies regarding attendance and make-up work are available in the catalog:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

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

## **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, the Graduate Student Handbook and these web sites for more details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://www.dso.ufl.edu/sccr/honorcodes/conductcode.php>

<http://www.dso.ufl.edu/studenthandbook/studentrights.php>

<http://gradschool.ufl.edu/students/introduction.html>

Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

## **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](http://www.multicultural.ufl.edu)

### **Accommodations for Students with Disabilities**

Students requiring accommodations must first register with the Dean of Students' Office. The Dean of Students' Office will provide documentation to the student who must then provide this documentation to the faculty member when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework. We all learn differently: however, if you have experienced problems in university classes with writing, in-class exams, understanding or concentrating in class; please talk to us or access a learning or education testing resource at the University or in another professional setting. For your assistance, should you need them, please consider either of the following:

University Counseling Services, <http://www.counsel.ufl.edu/services.asp>  
P301 Peabody Hall – 392-1575  
Student Mental Health Services in the Student Health Care Center  
<http://www.health.ufl.edu/shcc>, Room 245, Infirmary Bldg.- 392-1171

### **Counseling and Student Health**

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the UF Counseling & Wellness Center, 352-392-1575. Visit their web site for more information: <http://www.counseling.ufl.edu/>.

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, including primary care, women's health care, immunizations, mental health care, and pharmacy 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: [www.health.ufl.edu/shcc](http://www.health.ufl.edu/shcc)

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>

BUT – 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 please do not be afraid to ask for assistance.