

**College of Public Health & Health Professions  
College of Medicine  
PHC 6016 Section 054C  
Social Epidemiology  
Fall 2017**

**Thursday 8:30 – 11:30 am, 2 to 4th periods  
HPNP G105**

Delivery Format: Blended Course

Canvas: <https://ufl.instructure.com/courses>

---

Instructor Name: Krishna Vaddiparti  
Phone Number: 352-273-5746  
Email Address: kvaddiparti@ufl.edu  
Office Hours: by arrangement  
Mailing Address: Campus Box 100231  
Physical Address: 2004 Mowry Road, Room 4226  
Clinical and Translational Research Building  
Gainesville, FL 32610-0231  
FAX: 352-273-5365  
Web: epidemiology.php.ufl.edu  
Skype: krishna\_vaddiparti  
Preferred Course Communications: Email or skype preferred

---

### **Prerequisites**

Principles of Epidemiology and Epidemiologic Methods I (or equivalent research methods coursework). Students with no prior instruction in epidemiology but with methodological coursework from another related discipline may be admitted with permission from the instructor.

---

## **PURPOSE AND OUTCOME**

### **Course Overview**

Social epidemiology is a relatively new sub-field in epidemiology, which can be defined as “the branch of epidemiology that considers how social interactions and collective human activities affect health” (Oakes & Kaufman, 2014, p. 2). Social epidemiologists are concerned about investigating the social determinants of health (Marmot & Wilkinson, 2006) and consider population-level rather than individual-level factors and outcomes. Social processes including social networks, social support, social capital, social cohesion, and other ways of understanding ecological factors will be discussed. This course provides a broad exposure to the field of social epidemiology and allows students an opportunity for a targeted study of a particular problem from a social epidemiological framework. Designed as a third class in epidemiological methods, students should already be familiar with basic epidemiologic research methods before they enroll.

### **Course Objectives and/or Goals**

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

1. Discuss and evaluate the social determinants of health considered in the public health literature.
2. Describe at least two methods used in social epidemiology and the limitations of each.

3. Analyze the strengths and limitations of a variety of measurement strategies for the study of social processes.
4. Add to a meaningful scholarly debate on the need for community engaged and community-based participatory research methods in public health.
5. Describe approaches informed by social epidemiology, such as Health Impact Assessments, that have the potential to inform public policy and drive prevention programs and interventions.

## DESCRIPTION OF COURSE CONTENT

### Course Materials

All readings are cited under the topic and date for which they should be read. PDFs of each are available on the CANVAS page for this course on the elearning.ufl.edu web page. There is no required Text.

### Recommended for Additional Reading:

#### Social Epidemiology

Edited by Lisa F. Berkman, Ichiro Kawachi and Glymour M. Maria.  
New York: Oxford University Press, 2014.  
ISBN: 978-0-9395333-0.

#### Methods in Social Epidemiology

J. Michael Oakes and Jay S. Kaufman.  
San Francisco: Jossey-Bass, 2006  
ISBN 978-1-118-93319-0.

All readings are subject to change. Readings will be published on the Canvas e-Learning website before the class session when they will be needed. For technical support for this class, 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>

### Topical Outline/Course Schedule

Week Date	Topic(s)	Required Reading (Should be read for class the day listed)	Assignment Due
Week1 8/24	Introduction to Social Epidemiology	<p>Shy CM. The Failure of academic epidemiology: Witness for the prosecution. Am J Epi 1997;145(6):479-84.</p> <p>Our cities, our health, our future: Acting on social determinants for health equity in Urban Settings. WHO Commission on Social Determinants of Health. 2008; pp. 1-57.</p> <p>Zielhuis GA &amp; Kiemeney L. Social Epidemiology? No way. Int J Epidemiol. 2001;03:43-44.</p> <p><i>The following are a series of very short notes all responding to the same issue.</i></p> <p>Krieger N. Commentary: Society, biology and the logic of social epidemiology. Int J Epidemiol. 2001; 30:44-46.</p>	

		<p>Macdonald KI. Commentary: Social epidemiology. A way? Int J Epidemiol. 2001;30:46-47.</p> <p>McPherson K. Commentary: Epidemiology? Keep it broad and deep. Int J Epidemiol. 2001;30:48.</p> <p>Kaufman JS. Commentary: Social Epidemiology? Way! Int J Epidemiol. 2001;30:48-49.</p> <p>Siegrist J. Commentary: Social Epidemiology – A promising field. Int J Epidemiol. 2001;30:50.</p>	
Week 2 8/31	Theories in Social Epidemiology	<p>Krieger N. Theories for social epidemiology in the 21<sup>st</sup> century: An ecosocial perspective. Int J Epidemiol. 2001;30:668-77.</p> <p>Singer M. Syndemics and the Worlds They Made. In Singer M, Introduction to Syndemics: A Critical Systems Approach to Public and Community Health, Chapter, 7 pp. 157- 76.</p> <p>Herrick AL, Lim SH, Plankey MW, Chmiel JS, Guadamuz TT, Kao U, Shoptaw S, Carrico A, Ostrow D, Stall R. Adversity and Syndemic Production Among Men Participating in the Multicenter AIDS Cohort Study: A Life-Course Approach. Am J Public Health: 2013; 103(1): 79-85. doi: 10.2105/AJPH.2012.300810</p> <p>Susser M, Susser E. Choosing a future for epidemiology. Am J Public Health. 2015; 105(7): 1313-1316.</p>	
Week 3 9/7	Inequalities and Disparities in Health 1	<p>Thomas SB, Quinn SC, Butler J, Fryer CS &amp; Garza MA. Toward a fourth generation of disparities research to achieve health equity. Annu Rev Public Health. 2011. 32:399-416.</p> <p>Wallerstein N, Yen IH &amp; Syme L. Integration of social epidemiology and community-engaged interventions to improve health equity. Am J Public Health. 2011;5(101)822-830.</p> <p>Rothman KJ, Adami HO &amp; Trichopoulos D. Should the mission of epidemiology include the eradication of poverty? Lancet. 1998;352: 810-13.</p>	1a, 1b will be completed in class
Week 4 9/14	Inequalities and Disparities in Health 2	<p>Williams DR, Mohammed SA, Leavell J, Collins C. Race, socioeconomic status, and health: Complexities, ongoing challenges, and research opportunities. Ann N Y Acad Sci. 2010;1186:69-101.</p> <p>Krieger N, Chen JT, Waterman PD, Rehkopf DH &amp; Subramanian SV. Painting a truer picture of US socioeconomic and racial/ethnic health inequalities: The public health disparities geocoding project. Am J Public Health. 2005;95(2):312-323.</p> <p>Kochanek MA, Arias E, Anderson RN. How did cause of death contribute to racial differences in life expectancy in the United States in 2010? NCHS Data Brief 125. July 2013.</p>	

<p>Week 5 9/21</p>	<p>Ecological Approaches</p>	<p>Oakes MJ, Forsyth A, &amp; Schmitz KH. The effects of neighborhood density and street connectivity on walking behavior: The Twin Cities walking study. <i>Epi Perspectives and Innovations</i>. 2007;4:16.</p> <p>Rajaratnam JK, ZB Zurke JG &amp; O'Campo P. Maternal and child Health and neighborhood context: The selection and construction of area-level variables. <i>Health &amp; Place</i>. 2006;12:547-556.</p> <p>Macintyre S. Deprivation amplification revisited: Or, it is always true that poorer places have poorer access to resources for health diets and physical activity? <i>Int J Behav Nutr Phys Act</i>. 2007;4:32.</p>	<p>2</p>
<p>Week 6 9/28</p>	<p>Determinants of Health</p>	<p>Fleming PJ, Lee JGL, Dworkin SL. "Real Men Don't": Constructions of masculinity and inadvertent harm in public health interventions. <i>Am J Public Health</i>. 2014; 104(6); 1029-1035.</p> <p>Gustafsson PE, San Sebastian M, Janlert U, Theorell T, Westerlund H, Hammarström A. Life-course accumulation of neighborhood disadvantage and allostatic load: Empirical integration of three social determinants of health frameworks. <i>Am J Public Health</i>. 2014; 104(5): 904-910.</p> <p>Smith PM, Smith BT, Mustard CA, Lu H, Glazier RH. Estimating the direct and indirect pathways between education and diabetes incidence among Canadian men and women: A mediation analysis. <i>Ann Epidemiol</i>. 2013; 23:143-149.</p>	
<p>Week 7 10/5</p>	<p>Measurement in Social Epidemiology</p> <p>Guest lecture: Dr. Jim Chen</p>	<p>Raudenbush SW. The quantitative assessment of neighborhood social environments. In Kawachi I &amp; Berkman LF. <i>Neighborhoods and Health</i>, pp. 112-131. New York: Oxford University Press, 2003.</p> <p>Harper S &amp; Lynch J. Measuring health inequalities. In Oakes JM &amp; Kaufman JS, eds. <i>Methods in Social Epidemiology</i>, New York: Jossey-Bass, 2006, Chp't 6, pp. 134- 168.</p> <p>Watt HC, Carson C, Lawlor DA, Patel R, Ebrahim S. Influence of life course socioeconomic position on older women's health behaviors: Findings from the British women's Heart and Health Study. <i>Am J Public Health</i> 2009; 99(2): 320-327.</p> <p>Chen X, Stanton B, Gong J, Fang X, Li X. Personal Social Capital Scale: an instrument for health and behavioral research. <i>Health Education Research</i>. 2009; 24(2): 306-317.</p> <p>Exercise 1: How will you measure poverty (CSWk2)</p>	
<p>Week 8 10/12</p>	<p>Methods and Approaches</p>	<p>Cohen D, Spear S, Scribner R, Kissinger P, Mason K &amp; Wildgen J. "Broken Windows" and the risk of Gonorrhoea. <i>Am J Public Health</i>. 2000; 90(2);230-36.</p> <p>Fowler JH, Christakis NA. Dynamic spread of happiness in a</p>	<p>3</p>

		<p>large social network: longitudinal analysis over 20 years in the Framingham Heart Study. <i>BMJ</i>. 2008;337:a2338.</p> <p>Berkman LF &amp; Glass T. Social integration, social networks, social support, and health. In Berkman LF and Kawachi I, eds., <i>Social Epidemiology</i>, pp. 137-173. New York: Oxford University Press, 2000.</p>	
Week 9 10/19	<p>Multilevel Approaches</p> <p>Guest lecture: Dr. Hui Hu</p>	<p>Sampson RJ. Raudenbush SW. Earls F. Neighborhoods and violent crime: A multilevel study of collective efficacy. <i>Science</i>. 1997; 277:918-924.</p> <p>Pickett KE &amp; Pearl M. Multilevel analyses of neighborhood socioeconomic context and health outcomes: a critical review. <i>J Epi Comm Health</i>. 2001; 55:111-122.</p> <p>Dunn EC, Nilliren CE, Evans CR, Subramanian SV, Richmond TK. Disentangling the relative influence of schools and neighborhoods on adolescents' risk for depressive symptoms. <i>Am J Public Health</i>. 2015; 105(4): 732-740.</p>	4
Week 10 10/26	<p>International Determinants of Health</p>	<p>Marmot M. Epidemiology of socioeconomic status and health: Are determinants within countries the same as between countries? <i>Ann N Y Acad Sci</i>. 1999;896:16-29.</p> <p>Labonte R &amp; Schrecker T, Globalization and social determinants of health: Introduction and methodological background (part 3 of 3), <i>Globalization and Health</i>. 2007;3:7.</p> <p>Behague DP, Victora CG, Barros FC. Consumer demand for caesarean sections in Brazil: informed decision making, patient choice, or social inequality? A population based birth cohort study linking ethnographic and epidemiological methods. <i>BMJ</i>. 2002; 324(7343): 942. PMID: PMC102326.</p>	
Week 11 11/2	<p>Prevention in Social Epidemiology</p> <p>Guest lecture: Dr. Deepthi Varma</p>	<p>Hebert KA, Wendel AM, Kennedy SK, Dannenberg AL. Health Impact Assessment: A comparison of 45 local, national, and international guidelines. <i>Environmental Impact Assessment Review</i>. 2012; 34:74-82.</p> <p>"Health Impact Assessment." Available from: <a href="http://www.cdc.gov/healthyplaces/hia.htm">http://www.cdc.gov/healthyplaces/hia.htm</a></p> <p>Kansas Health Institute. Potential Health Effects of Casino Development in Southeast Kansas. Kansas Health Impact Assessment Project, October 2012. Available from: <a href="http://www.healthimpactproject.org/hia/us/southeast-kansas-casino">http://www.healthimpactproject.org/hia/us/southeast-kansas-casino</a></p>	5
Week 12 11/9	<p>Causality</p> <p>Guest lecture: Dr. Hui Hu</p>	<p>Kaufman JS &amp; Cooper RS. Seeking causal explanations in social epidemiology. <i>Am J Epidemiol</i>. 1999;150(2):113-20.</p> <p>Krieger N. Proximal, distal, and the politics of causation: What's level got to do with it? <i>Am J Public Health</i>. 2008; 98:221-230.</p>	6

Week 13 11/16	Interventions	Wallerstein N, Duran B. Community-Based Participatory Research contributions to intervention research: the intersection of science and practice to improve health equity. <i>Am J Public Health</i> . 2010; 100(S1): S40-S46.  Kristensen TS. Intervention studies in Occupational Epidemiology. <i>Occup Environ Med</i> . 2005;62:205–210.	7
Week 14 11/30	Student Presentations	In class student presentations – Final Project	8a (in class)
Week 15		NO CLASS; ASSIGNMENTS DUE ON CANVAS	8b

## ACADEMIC REQUIREMENTS AND GRADING

### Assignments

Assignment #	Requirement	Date Due	% of Final Grade
	<b>Choose a particular public health problem to complete the assignments. With instructor permission, you can change topics, but assignments build on each other.</b>		
1a	Literature presentation. Present 5 – 7 slides on literature on your selected public health problem. Present basic facts and some critical analysis on 3 articles. Copy the slides as handouts and bring them to class with your PowerPoint presentation.	Sept. 7	10%
1b	Through Canvas, you will download a grading sheet and grade the person(s) assigned to you through Canvas.	Sept. 7	5%
2	Prepare a description on the social epidemiological perspective on your choice of public health problems. Discuss global variation. Two type written pages maximum, font no smaller than size 11. Provide at least 5 citations.	Sept. 21	10%
3	Describe existing databases and existing discrete measures of variables important to investigating the public health problem chosen, from a social epidemiological approach. You might consider using a data base because you are conducting a secondary analysis, or because you are adding measures of population, community and neighborhood to data you have at the individual level to study the problem. You must specify exact variables from exact databases or risk loss of credit. (i.e., in the 2010 Monitoring the Future downloadable database, income coded as xxx and health status coded as excellent, good, fair, or poor. Two type written pages maximum, font no smaller than size 11. Provide at least 5 citations.	Oct. 12	10%
4	Explain who you might want to collaborate with you to do research on this problem. Consider people from different fields who are likely to have widely different expertise and divergent methods. Decide on two possible collaborators. Provide their names, information on their expertise and research, and what you would hope they would add to a research proposal. Two type written pages maximum, font no smaller than size 11.	Oct. 19	10%

5	Using an ecological or Syndemic approach, consider what other problems/epidemics may act synergistically with the problem you have chosen.  In addition, carefully describe the potential relationships between the problems. 1. Co-occurring by chance; 2. Causing or predisposing to the other; 3. All being caused by something else; 4. Being part of the same problem. Two type written pages maximum, font no smaller than size 11.	Nov. 2	10%
6	Create a one-page flow log for a study that you could conduct on the chosen problem using a social epidemiological approach. The flow log should specify inclusion and exclusion criteria as well as every data collection point or intervention point in the study.	Nov. 9	10%
7	Brief review of study or program design and measures (research or evaluation). Using your flow log, describe details of the study. You may take up to four type written pages maximum, font no smaller than size 11.	Nov. 16	10%
8a	Each student gets 15 minutes (10 minutes presentation+5 minutes discussion and Q&A) to present their project they worked on during the course. The presentation will be in a seminar format and includes: background to the public health problem, literature review, social epidemiological perspective of the problem, research question, hypothesis, variables of interest, description of the data set, study flow log and analysis plan.  Students peer evaluate and provide comments to each presenter on the peer evaluation form provided during presentations	Nov 30	15%
8b	Incorporate instructor and student comments and submit final project on Canvas	Dec. 7	10%

Point system used.

Points earned	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	Below 60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

Letter grade to grade point conversions are fixed by UF and cannot be changed.

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>

### Policy Related to Make up Exams or Other Work

Assignments are due by midnight on the date specified. Requests for extension should be made before the close of the assignment unless an emergency makes that impossible. Requests 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.

### **Policy Related to Required Class Attendance**

Please note all faculty members are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details:

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

---

## **STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT**

### **Citations 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, UF Policies on Honesty and honor code violations, noted above, will be followed.

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.



### **Class Demeanor Expected by the Professor**

Students are expected to treat other students and the professor respectfully. This means listening and interacting with peers and the professor. Students using electronic devices for any purpose other than note taking or completing group assignments will be asked to put them away.

### **Communication Guidelines**

All email messages, threaded discussions, chats, and online collaborations should be conducted meeting professional standards. Please be as specific as possible in your comments. (An Odds Ratio of 10.6 vs. large, for instance). Do not use ad hominem arguments. Be kind and responsible. Refer to these Netiquette Guidelines for further guidance on appropriate comments:

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

### **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/>. I put these comments to use to improve the course for your fellow students, so please help me know how to do so. In addition, please note that these comments and scores have a direct impact on faculty tenure and promotion.

## **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)AAAA

---

## **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 must 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 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.
- Crisis intervention is available 24/7 from these US resources. Use the Country Code 01: Alachua County Crisis Line 1-352-264-6789  
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>
- National Suicide Hotline 1-800-SUICIDE (1-800-784-2433)
- National Suicide Prevention Lifeline 1-800-273-TALK (1-800-273-8255)
- Rumor Control 1-352-264-6557

Do not wait until you reach a crisis to 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.

---