College of Public Health & Health Professions
College of Medicine
PHC 6016 Section 054C
Social Epidemiology
Fall 2020
Thursday 8:30 – 11:30 am, 2 to 4th periods
Conducted Online Synchronously

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.phhp.ufl.edu

Skype: krishna_vaddiparti

Preferred Course

Communications: Email

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.

<u>All readings are subject to change.</u> 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
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

Topical Outline/Course Schedule NOTE: New readings will be posted on canvas a week ahead of the class. Please refer to canvas for updated readings.

Week Date	Topic(s)	Required Reading (Should be read for class the day listed)	Assignment Due
Week 1 9/03	Introduction to Social Epidemiology	Shy CM. The Failure of academic epidemiology: Witness for the prosecution. Am J Epi 1997;145(6):479-84. 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. (BRUSH THROUGH THE MATERIAL) Galea S and Link B. (2013). Six paths for the future of social epidemiology. American Journal of Epidemiology, 178, 843-849. Zielhuis GA & Kiemeney L. Social Epidemiology? No way. Int J	
Week 2 9/10	Theories in Social Epidemiology	Epidemiol. 2001;03:43-44. Krieger N. Theories for social epidemiology in the 21st century: An ecosocial perspective. Int J Epidemiol. 2001;30:668-77. 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. 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 Susser M, Susser E. Choosing a future for epidemiology. Am J Public Health. 2015; 105(7): 1313-1316.	
Week 3 9/17	Inequalities and Disparities in Health 1	Thomas SB, Quinn SC, Butler J, Fryer CS & Garza MA. Toward a fourth generation of disparities research to achieve health equity. Annu Rev Public Health. 2011. 32:399-416. Wallerstein N, Yen IH & Syme L. Integration of social epidemiology and community-engaged interventions to improve health equity. Am J Public Health. 2011;5(101)822-830. Rothman KJ, Adami HO & Trichopoulos D. Should the mission of epidemiology include the eradication of poverty? Lancet. 1998;352: 810-13.	1a, 1b will be completed in class
Week 4 9/24	Inequalities and Disparities in Health 2	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. Krieger N, Chen JT, Waterman PD, Rehkopf DH & 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.	
		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.	
Week 5 10/01	Ecological Approaches	Oakes MJ, Forsyth A, & Schmitz KH. The effects of neighborhood density and street connectivity on walking behavior: The Twin Cities walking study. Epi Perspectives and Innovations. 2007;4:16. Rajaratnam JK, ZB Zurke JG & O'Campo P. Maternal and child	2
		Health and neighborhood context: The selection and construction of area-level variables. Health & Place. 2006;12:547-556.	
		Macintyre S. Deprivation amplification revisited: Or, it is always true that poorer places have poorer access to resources for health diets and physical activity? Int J Behav Nutr Phys Act. 2007;4:32.	
Week 6 10/08	Determinants of Health	Fleming PJ, Lee JGL, Dworkin SL. "Real Men Don't": Constructions of masculinity and inadvertent harm in public health interventions. Am J Public Health. 2014; 104(6); 1029-1035.	
		Gustafsson PE, San Sebastian M, Janlert U, Theorell T, Westerlund H, Hammarstrōm A. Life-course accumulation of neighborhood disadvantage and allostatic load: Empirical integration of three social determinants of health frameworks. Am J Public Health. 2014; 104(5): 904-910.	
		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. Ann Epidemiol. 2013; 23:143-149.	
Week 7 10/15	International Determinants of Health	Epidemiology of socioeconomic status and health: Are determinants within countries the same as between countries? Ann N Y Acad Sci. 1999; 896:16-29.	
		Labonte R & Schrecker T, Globalization and social determinants of health: Introduction and methodological background (part 3 of 3), Globalization and Health. 2007;3:7.	
		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. BMJ. 2002; 324(7343): 942. PMCID: PMC102326.	
Week 8 10/22	Methods and Approaches	Cohen D, Spear S, Scribner R, Kissinger P, Mason K & Wildgen J. "Broken Windows" and the risk of Gonorrhea. Am J Public Health. 2000; 90(2);230-36.	3
		Fowler JH, Christakis NA. Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. BMJ. 2008;337:a2338.	
	1		1

		Berkman LF & Glass T. Social integration, social networks, social support, and health. In Berkman LF and Kawachi I, eds., Social Epidemiology, pp. 137-173. New York: Oxford University Press, 2000.	
Week 9 10/29	Multilevel Approaches	Sampson RJ. Raudenbush SW. Earls F. Neighborhoods and violent crime: A multilevel study of collective efficacy. Science. 1997; 277:918-924.	4
	Guest lecture: TBA	Pickett KE & Pearl M. Multilevel analyses of neighborhood socioeconomic context and health outcomes: a critical review. J Epi Comm Health. 2001; 55:111-122. Dunn EC, Nilliren CE, Evans CR, Subramanian SV, Richmond TK.	
		Disentangling the relative influence of schools and neighborhoods on adolescents' risk for depressive symptoms. Am J Public Health. 2015; 105(4): 732-740.Marmot M. NOTE: Please have R installed on your computers for this class	
Week 10 11/05	Measurement in Social Epidemiology	Raudenbush SW. The quantitative assessment of neighborhood social environments. In Kawachi I & Berkman LF. Neighborhoods and Health, pp. 112-131.New York: Oxford University Press, 2003.	
	Guest lecture:	Harper S & Lynch J. Measuring health inequalities. In Oakes JM & Kaufman JS, eds. Methods in Social Epidemiology, New York: Jossey-Bass, 2006, Chp't 6, pp. 134- 168.	
	ТВА	Smith NDL and Kawachi I (2014). State-level social capital and suicide mortality in the 50 U.S. states. Social Science and Medicine, 120, 259-277. https://www.sciencedirect.com/science/article/pii/S0277953614005747	
Week 11 11/12	Prevention in Social Epidemiology Guest lecture: Dr. Deepthi	Hebert KA, Wendel AM, Kennedy SK, Dannenberg AL. Health Impact Assessment: A comparison of 45 local, national, and international guidelines. Environmental Impact Assessment Review. 2012; 34:74-82. "Health Impact Assessment." Available from: http://www.cdc.gov/healthyplaces/hia.htm	5
	Varma	Kansas Health Institute. Potential Health Effects of Casino Development in Southeast Kansas. Kansas Health Impact Assessment Project, October 2012. Available from: http://www.healthimpactproject.org/hia/us/southeast-kansas-casino	
Week 12 11/19	Causality Guest lecture: TBA	Kaufman JS & Cooper RS. Seeking causal explanations in social epidemiology. Am J Epidemiol. 1999;150(2):113-20. Krieger N. Proximal, distal, and the politics of causation: What's	6
	IDA	level got to do with it? Am J Public Health. 2008; 98:221-230.	
Week 13 11/26		Thanksgiving No Class	

Week 14 12/03	Interventions +	Wallerstein N, Duran B. Community-Based Participatory Research contributions to intervention research: the intersection of science and practice to improve health equity. Am J Public Health. 2010; 100(S1): S40-S46. Kristensen TS. Intervention studies in Occupational Epidemiology. Occup Environ Med. 2005;62:205–210.	7
	Student Presentations	In class student presentations – Final Project (5 Presentations)	8a (in class)
Week 15 12/10	Student Presentations	In class student presentations – Final Project (8 Presentations)	8a (in class)
Week 16 12/17		NO CLASS; FINAL PAPER DUE ON CANVAS	8b

ACADEMIC REQUIREMENTS AND GRADING

Assignments

Assign- ment #	Requirement Choose a particular public health problem to complete the assignments. With instructor permission, you can change topics, but assignments build on each other.	Date Due	% of Final Grade
1a	Literature presentation. Present $5-7$ slides on literature on your selected public health problem. Present basic facts and some critical analysis on at least 3 articles. Have the PowerPoint presentation ready to present in the class.	Sept. 17	10%
1b	Through Canvas, you will download a grading sheet and grade the person(s) assigned to you through Canvas.	Sept. 17	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.	Oct. 01	10%
3	Describe the discrete measures of social variables important to investigate the public health problem chosen, from a social epidemiological approach. You might refer to existing, public data sets for this exercise to understand see how some of those variables are defined and coded. You must specify exact variables from exact databases or risk loss of credit. (i.e., in 2010 Monitoring the Future downloadable database, income coded as xxx and health status coded as excellent, good, fair, or poor. Two typewritten pages maximum, font no smaller than size 11. Provide at least 5 citations.	Oct. 22	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. 29	10%

5	Using an ecological or Syndemic approach, consider what other	Nov.	10%
	problems/epidemics may act synergistically with the problem you have chosen.	12	
	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.		
6	Create a one-page flow log for a study that you could conduct on the	Nov.	10%
	chosen problem using a social epidemiological approach. The flow log	19	
	should specify inclusion and exclusion criteria as well as every data		
	collection point or intervention point in the study.		
7	Brief review of study or program design and measures (research or	Dec.	10%
	evaluation). Using your flow log, describe details of the study. You may	03	
	take up to four type written pages maximum, font no smaller than size 11.	03	
8a	Each student gets 15 minutes (10 minutes presentation+5 minutes	Dec	15%
	discussion and Q&A) to present their project they worked on during the	03 &	
	course. The presentation will be in a seminar format and includes:	10	
	background to the public health problem, literature review, social	10	
	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		
8b	Incorporate instructor and student comments on all your assignments and	Dec.	10%
	submit final project on Canvas. Your final paper should be no less than 15	17	
	typed pages, font no smaller than size 11.		

Point system used.

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

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

Letter Grade	Α	Ā-	B+	В	B-	C+	С	C-	D+	D	D-	E	WF	I	NG	S-
Grade	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
Points																

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

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

Expectations Regarding Course Behavior

Communication Guidelines

Online Participation

Professional and respectful behavior is expected of all students participating in this online course. Please be aware that all assignments and homework are due on the specified date and time. Late submissions are almost universally not accepted. High speed internet and a web cam are essential for this online course and ensuring internet connectivity and bandwidth is your responsibility. Late submissions and inability to participate in discussion boards or inability to take exams due to poor internet connectivity is not accepted. Therefore, please refrain from waiting until the due date to submit your assignments or taking exams as it will be difficult for us to accommodate your requests because of technical problems from your side.

Zoom Professional Behavior: Remote Learning Expectations and Requirements

As graduate students, you are expected to:

- Dress appropriately for attending class on Zoom- just like you would be attending in person. Your upper body is viewable through the webcam.
- Arrive on time for sessions.
- Mute your microphone on entry to Zoom and when not talking. Frame the camera on your face and ensure there is sufficient lighting.
- Keep your webcam on throughout the class- this will ensure that you are prepared when we use breakout rooms.
- Engage actively in class. Active participation includes sharing verbally, typing in the chat box, or sharing your screen with example work or content.
- Attend class in a conducive learning environment. The preferable environment is sitting in a
 chair at a desk or table. If this is not possible, you may sit on a sofa or bed, but you should not
 be under covers or lying down unless there are extenuating circumstances (i.e., medical).
 Maintain a non-distracting background.
- Minimize and prevent distractions by dedicating time and attention to the class and the online learning activities (i.e., do not allow "visitors" in your classroom environment, such as youth or pets, do not attend class in a vehicle; do not multi-task with household chores or by driving during class time).
- Maintain access to notes for reference during the virtual class time.
- Use electronic devices only for classroom activities. Refrain from additional emailing, texting, or browsing the internet during virtual class time.

• Direct conversations to class content and activities while in breakout sessions. The instructor will periodically join your breakout room. Feel free to request assistance at any point.

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 professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available

at https://gatorevals.aa.ufl.edu/students/. 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 https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

On Campus Face-to-Face

If we will have any face-to-face instructional sessions to accomplish the student learning objectives of this course, I will let you all know the classroom number and location ahead of time. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.

- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (https://coronavirus/symptoms.html), please use the UF Health screening system (https://coronavirus.ufhealth.org/screen-test-protect/covid-19-exposure-and-symptoms-who-do-i-call-if/) and follow the instructions on whether you are able to attend class.
 - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work
 (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/).

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class or as soon as you believe you might be eligible for accommodations. 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 do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. 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 and in person 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.
- 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. 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: https://shcc.ufl.edu/
- 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

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 do not be afraid to ask for assistance.

INCLUSIVE LEARNING ENVIRONMENT

Public health and health professions are based on 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 <u>Office of Multicultural & Diversity Affairs</u> website.