

College of Public Health & Health Professions
College of Medicine
PHC 6016 Social Epidemiology
Fall 2024
Thursday 8:30 – 11:30 am, 2 to 4th periods
Room HPNP G-110
Canvas: <https://ufl.instructure.com/courses>

Instructor Name: Krishna Vaddiparti
Phone Number: 352-273-5746
Email Address: kvaddiparti@ufl.edu
Office Hours: by Zoom or in-person. Please email
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
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, 2006). “Social epidemiology looks at how society shapes, and is shaped by, the control and spread of disease. Understanding the role of geopolitics, national and nationalist politics, and economics—as well as inequalities based on race, gender, nationality, and immigrant status—is central to understanding disease in the world today, in the past, and in the future,” (Riley 2021)”. 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 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
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

References

Marmot M and Wilkinson R. (2006) Social Determinants of Health, 2nd Edition. Oxford University Press, Oxford:

Oaks JM and Kaufman JS. (2006). Methods in social epidemiology. Jossey-Bass, A Wiley Imprint, San Fransico, CA.

Riley N (2020). Studying Social Epidemiology in the Throes of COVID-19

<https://www.bowdoin.edu/news/2020/12/online-teaching-studying-a-pandemic-while-in-its-throes.html>

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 8/22	Introduction to Social Epidemiology	<p>Shy CM. The Failure of academic epidemiology: Witness for the prosecution. <i>American Journal of Epidemiology</i> 1997;145(6):479-84.</p> <p>Galea S and Link B. Six paths for the future of social epidemiology. <i>American Journal of Epidemiology</i>. 2013; 178, 843-849.</p> <p>Zielhuis GA & Kiemeneij L. Social Epidemiology? No way. <i>International Journal of Epidemiology</i>. 2001;03:43-44.</p> <p>Gilman SE et al. Advancing the Social Epidemiology Mission of the <i>American Journal of Epidemiology</i>; 2022;191,557-560.</p> <p>Honjo K, Social Epidemiology: Definition, History and Research Examples. <i>Environmental Health and Preventive Medicine</i>, 2004; 9, 193-199. READ DEFINITION AND HISTORY</p>	
Week 2 8/29	Theories in Social Epidemiology	<p>Krieger N. Theories for social epidemiology in the 21st century: An Ecosocial perspective. <i>Int J Epidemiol</i>. 2001;30:668-77.</p> <p>Singer M. Syndemics and the Worlds They Made. In Singer M, <i>Introduction to Syndemics: A Critical Systems Approach to Public and Community Health</i>, Chapter, 7 pp. 157- 76.</p> <p>Honjo K, Social Epidemiology: Definition, History and Research Examples. <i>Environmental Health and Preventive Medicine</i>, 2004; 9, 193-199. READ EXAMPLES</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. <i>Am J Public Health</i>: 2013; 103(1): 79-85. doi: 10.2105/AJPH.2012.300810</p> <p>Poteat T, Millett GA, Nelson LE, Beyrer C (2020). Understanding COVID-19 risks and vulnerabilities among black communities in America: The lethal force of syndemics. <i>Annals of Epidemiology</i>, 47, 1-3</p>	
Week 3 9/05	Inequalities and Disparities in Health	<p>Thomas SB, Quinn SC, Butler J, Fryer CS & Garza MA. Toward a fourth generation of disparities research to achieve health equity. <i>Annu Rev Public Health</i>. 2011. 32:399-416.</p> <p>Diez Roux AV. Social Epidemiology: Past, Present, and Future. <i>Annual Reviews of Public Health</i>. 2022; 43:79-98</p> <p>Rothman KJ, Adami HO & Trichopoulos D. Should the mission of epidemiology include the eradication of poverty? <i>Lancet</i>. 1998;352: 810-13.</p> <p>The Interwoven Threads of Inequality and Health. Q&A with Nancy Krieger –<i>New Yorker</i> (2020),</p>	<p>#1a. Topic proposal for the final paper & Literature presentation. due.</p> <p>#1b. peer evaluation/ feedback will be completed in class</p>

		<p>https://www.newyorker.com/news/q-and-a/the-coronavirus-and-the-interwoven-threads-of-inequality-and-health</p> <p>Williams DR, Mohammed SA, Leavell J, Collins C. Race, socioeconomic status, and health: Complexities, ongoing challenges, and research opportunities. <i>Ann N Y Acad Sci.</i> 2010;1186:69-101.</p> <p>Oakes JM and Andrade KN. (2014). Methodologic innovations and advances in social epidemiology. <i>Current Epidemiology Reports</i>, 1, 38-44.</p> <p>Chen JT, Testa C, Waterman PD, Krieger N. Intersectional inequities in COVID-19 mortality by race/ethnicity and education in the United States, January 1, 2020 – January 31, 2021. <i>Harvard Center for Population and Development Studies</i>, Volume 21, Number 3, February 23, 2021.</p>	
Week 4 9/12	Ecological Approaches	<p>Oakes MJ, Forsyth A, & 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>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>Martikainen P, Bartley M, Lahelma E. Psychosocial determinants of health in Social Epidemiology. <i>International Journal of Epidemiology</i>, 2002; 31:1091-1093.</p>	#2. Research question(s) and hypotheses for final paper due
Week 5 9/19	Determinants of Health	<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>	#3. Introduction to final paper (1st draft) due
Week 6 9/26	International Determinants of Health	<p>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 & 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>	

		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.	
Week 7 10/3	Methods and Approaches + In-class consultation	<p>Cohen D, Spear S, Scribner R, Kissinger P, Mason K & Wildgen J. "Broken Windows" and the risk of Gonorrhea. <i>Am J Public Health</i>. 2000; 90(2);230-36.</p> <p>Fowler JH, Christakis NA. Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. <i>BMJ</i>. 2008;337:a2338.</p> <p>Berkman LF & 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> <p>Oakes JM and Andrade KN. (2014). Methodologic innovations and advances in social epidemiology. <i>Current Epidemiology Reports</i>, 1, 38-44.</p>	
Week 8 10/10	Measurement in Social Epidemiology	<p>Raudenbush SW. The quantitative assessment of neighborhood social environments. In Kawachi I & Berkman LF. <i>Neighborhoods and Health</i>, pp. 112-131. New York: Oxford University Press, 2003.</p> <p>Harper S & Lynch J. Measuring health inequalities. In Oakes JM & Kaufman JS, eds. <i>Methods in Social Epidemiology</i>, New York: Jossey-Bass, 2006, Chp't 6, pp. 134- 168.</p> <p>Smith NDL and Kawachi I (2014). State-level social capital and suicide mortality in the 50 U.S. states. <i>Social Science and Medicine</i>, 120, 259-277. https://www.sciencedirect.com/science/article/pii/S0277953614005747</p> <p>Additional Reading:</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>Chen X, Wang P, Wegner R, Gong J, Fang X, Kaljee L. Measuring Social Capital Investment: Scale development and examination of links to social capital and perceived stress. <i>Social Indicators Research</i>. 2015; 120: 669-687.</p>	#4. Methods of final paper (1st draft) due
Week 9 10/17	Multilevel Approaches +	Sampson RJ. Raudenbush SW. Earls F. <i>Neighborhoods and violent crime: A multilevel study of collective efficacy</i> . <i>Science</i> . 1997; 277:918-924.	

	In-class consultation	Pickett KE & Pearl M. Multilevel analyses of neighborhood socioeconomic context and health outcomes: a critical review. <i>J Epi Comm Health</i> . 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. <i>Am J Public Health</i> . 2015; 105(4): 732-740.	
Week 10 10/24	Prevention in Social Epidemiology Guest lecture: TBA	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. "Health Impact Assessment." Available from: http://www.cdc.gov/healthyplaces/hia.htm 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	#5. Results of final paper (1st draft) due
Week 11 10/31	Interventions + In-class consultation	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.	#6. Discussion, Conclusions and Implications of final paper (1st draft) due
Week 12 11/07	TBA	Make Up Class	
Week 13 11/14	Student Presentations	In class student presentations 1 – Final Project	#7. Student Presentations (in class)
Week 14 11/21	Student Presentations	In class student presentations 2 – Final Project	#7. Student Presentations (in class)
Week 15 11/28	Final Paper	HOLIDAY FINAL PAPER DUE ON CANVAS ON DECEMBER 4, 2024	#8. Final Paper

ACADEMIC REQUIREMENTS AND GRADING

Assignments

Assignment #	<p style="text-align: center;">Final paper</p> <p>Students will complete a final paper (3000 to 3500 words) that can take one of the following two formats:</p> <p style="text-align: center;">1) Narrative literature review 2) Empirical data analysis</p> <p>These papers should address an important and timely research topic in the field of social epidemiology and should follow the layout of a typical paper in an epidemiology journal: Abstract, Introduction, Methods, Results, Discussion. Detailed instructions for the format of the final paper will be provided throughout the semester.</p> <ul style="list-style-type: none"> • Should incorporate social epidemiology concepts and terms discussed in class • The rationale for the investigation should be sufficiently supported by social epidemiology theories and socio-behavioral theories 	Date Due	% of Final Grade
1a	<p>Topic proposal for the final paper</p> <p>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.</p>	Sept. 05	10%
1b	Through Canvas, you will download a grading matrix 1b and grade the person(s) assigned to you through Canvas.	Sept. 05	5%
2	<p>Research question(s) and hypotheses for final paper</p> <p>Draft one or two descriptive research questions guiding your final paper and present a hypothesis if any.</p> <p>Your submission should not be more than one page, font size 12, double line spacing.</p>	Sept 12	5%
3	<p>Introduction to final paper (1st draft). Prepare a description on the social epidemiological perspective on your choice of public health problem. Discuss national/global variation. The rationale for the investigation should be sufficiently supported by social epidemiology theories and socio-behavioral theories Three typewritten pages maximum, font size 12, and double line spacing. Provide at least 5 citations.</p>	Sept 19	10%
4	<p>Methods of final paper (1st draft). Describe the methods of your final paper in detail. Two to three type-written pages maximum, double line spacing font size 12. Provide at least 5 citations.</p>	Oct. 10	15%
5	<p>Results of final paper (1st draft). Present your results (qualitative/quantitative findings if your paper is based on empirical data analysis), or your narrative review findings. Three to four typewritten pages maximum excluding tables/figures, double line spacing, font size 12. Tables and figures are to be presented on separate pages.</p>	Oct 24	15%

6	<p>Discussion, Conclusion, and Implications of final paper (1st draft). Succinctly discuss your findings using background literature to support/explain your findings. Using an ecological or syndemic approach, consider what other problems/epidemics may act synergistically with the problem you investigated.</p> <p>Include limitations, conclusion, and implications like any manuscript.</p> <p>Four type written pages maximum, double line spacing and font size 12.</p>	Oct 31	20%
7	<p>Student Presentations. 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, methods, results, conclusion and implications.</p> <p>Students peer evaluate and provide comments to each presenter on the peer evaluation form provided during presentations</p> <p>Please upload the PowerPoint presentation and final paper after you are done presenting in the class.</p>	Nov 14 & 21	10%
8	<p>Final paper. Incorporate instructor and student comments on all your assignments and submit final paper on Canvas. Your final paper should also have an abstract and keywords, and be no less than 15 typed pages (excluding references, tables, figures), font no smaller than size 12.</p>	Dec 04	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

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/>.

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 [Office of Multicultural & Diversity Affairs](#) website.
