Course Title: Social Epidemiology

Course Number: EPID 0673

Course Pre- and Co-requisite(s): PHCO 0502 and PHCO 0504 or permission from instructor

Course Location: Rm. 234, SPH Piscataway

Course Date & Time: Wednesday, 3-5 pm

Course Instructor: Henry F. Raymond DrPH, MPH. Associate Professor, Biostatistics - Epidemiology, Rutgers School of Public Health, Room 211 SPH, Piscataway
hfisher.raymond@rutgers.edu

Office Hours: By Appointment Only

Course Assistant: None

Course Website: canvas.rutgers.edu


OR if you want your own used copy (to buy): https://www.amazon.com/Social-Epidemiology-Lisa-F-Berkman/dp/0195083318/ref=sr_1_8?crid=11N6LLHG0RAAH&keywords=social-epidemiology&qid=1666641149&sprefix=social-epidemiology%2Caps%2C150&sr=8-8

Additional/Supplemental Readings/Resources:

Peer reviewed, scientific articles posted on Canvas.

Course Description: Social Epidemiology will familiarize students with the theories/concepts, empirical evidence, methods, and interventions concerning social factors and health. With a focus on United States society, the course examines how social factors such as race/ethnicity, socioeconomic status, discrimination, social capital, and characteristics of various social contexts contribute to the distribution of population health. The course helps students recognize that health and disease are shaped by multiple factors operating at multiple levels of influence, and that social conditions shape an individual’s exposure to disease risk, and awareness of and access to health promoting resources. Students will critically evaluate theoretical, substantive and methodological issues, and identify strengths and limitations of this discipline through class readings and videos; instructor-led and expert-led lectures, discussions and exercises; article reviews; a final paper and; a final presentation.
Course Format: The course will be conducted in-person on Wednesdays with online activities due weekly (see “Course schedule” for details). In-person meetings will consist of lectures, activities, and discussions. In-person activities and discussions will be based on the week’s readings. Students are expected to actively participate in activities and discussions; 8% of the final grade will be based on in-person participation and demonstration that students completed readings. Weekly online activities will consist of short quizzes or responses to assigned readings or videos accessible online through the course canvas site.

Selected Concentration Competencies Addressed:

Each Concentration identifies competencies for each degree offered. The competencies addressed in this course for the MPH in Epidemiology include:

A. Critique epidemiologic literature, assess its strengths and weaknesses and determine if conclusion(s) are supported;
B. Formulate a specific hypothesis and determine an appropriate study design and analysis plan;
C. Communicate and present study findings to professional audiences.

Please visit the Concentration webpages on the School of Public Health’s website at sph.rutgers.edu for additional competencies addressed by this course for other degrees and concentrations.

Course Objectives:

By the completion of this course, students will be able to:

A. Define and delineate the field of social epidemiology
B. Identify and explain at least two (2) social epidemiologic theories useful for understanding population health
C. Describe measures, methods, and study designs used in social epidemiology
D. Critically assess strengths and limitations of social epidemiologic studies
E. Describe major threats to validity and precision within social epidemiologic studies
F. Integrate numerous social factors to explain relationships with an epidemiologic outcome
G. Identify and structure mechanisms of social factors and an epidemiologic outcome
H. Recognize and outline interventions with potential for eliminating relationship between social factor(s) and an epidemiologic outcome

<table>
<thead>
<tr>
<th>Competency</th>
<th>Course Objective</th>
<th>Lessons / Weeks</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>Critique epidemiologic literature ... and determine if conclusions are supported</td>
<td>A, B, C, D, E, F, G</td>
<td>1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12</td>
<td>Article critiques, Final paper and presentation, On-line activities (most weeks), Midterm</td>
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<tr>
<td>Formulate a</td>
<td>C, D, E, F,</td>
<td>4, 5</td>
<td>Reading response,</td>
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specific hypothesis and determine an appropriate study design and analysis plan

| Communicate and present study findings to professional audiences | H | 14, 15 | Final paper and presentation |

Course Requirements and Grading:

The final grade for the class will be based on the following:

- 8%, Class participation
- 12%, Online activities
- 15%, Significance section (preceded by a 1 page topic summary for approval)
- 15%, Short article critiques (two @7.5%)
- 20%, Midterm
- 15%, Approach Section
- 5%, Aims page
- 10%, Presentation of Significance and approach

A. Class participation (8%): Students will be evaluated on participation in activities and discussion during in-person meetings. Comprehension of assigned readings will be necessary for meaningful participation.

B. Online activities (12%): Online activities, such as short quizzes and responses to readings or an assigned, online video, will be posted weekly. Students will be required to complete these activities on Canvas by **Tuesday at 5:00pm** each week. Comprehension of assigned readings or online videos will be necessary for successful completion of online activities.

C. Significance Section (15%): Students will be required to submit a Significance Section patterned on NIH grant format (1-2 pages) describing a social epidemiologic issue that is affecting a community, describes the problem and identifies the gap in knowledge about the problem and community. I will ask you to submit a one-page topic description (not graded) to determine if there is enough material to ensure a successful assignment.

D. Article critique (15%, 7.5% each): Students will be required to write two (2), short critiques (2-page) from the assigned, peer-reviewed articles (not book chapters). Each critique should consist of:
1. Article summary, and critical assessment (strengths, limitations, and future directions). The strengths and limitations section should include at least one (1) strength or limitation beyond those already listed by the author(s) of the peer-reviewed article. See “Writing assignment requirements” below, for additional details.

E. **Midterm (20%)**: A midterm will be given during the in-person meeting of week 8 (March 13th). All topics between week 1 and week 7 will potentially be on the exam. Exam questions will be multiple choice, True/False, matching, or short answer. The midterm will be self-administered via Canvas. Please bring a laptop or other suitable device capable of internet connection in order to complete the midterm. If a device is needed, please notify the instructor and SPH Office of Computing and Technology (sphcomputing@ca.rutgers.edu) at least 1 week in advance of the midterm.

F. **Approach Section (15%)**: Students will work independently to build on their earlier Significance Section to write an Approach Section patterned after an NIH R21. The approach section should include- study design, methods, description of population, study site, human subjects protections, strengths, weaknesses. (see Guidance on Approach Section in Canvas) (6-8 pages). Students will be assigned topics by the instructor if the proposed topic (not proposal) lacks sufficient evidence necessary to fulfill the requirements.

G. **AIMS Page (5%)**: Students will summarize the problem, the significance, their approach and document 1-2 specific aims for their research paper. This section will be patterned on an NIH R21 application.

H. **Presentation of final paper (10%)**: Students will prepare a short (12 – 15 min) presentation of the final paper. The presentation and paper are a combination of AIMS, significance and approach assignments. All presentations will be delivered during the last two in-person class meetings (May 1st & May 8th). As such, presentation length and transition between presentations is critical to allow enough time for everyone. Presentations should be ≤ 15 slides. **All presentations should be completed and uploaded to Canvas by 5:00pm on Tuesday April 27th.** Please deliver your presentation in Microsoft Powerpoint, or export as an Adobe ‘.pdf’ file extension to avoid compatibility issues.

I. **Writing assignment requirements**: Besides page limits noted above, all written assignments should conform to the following:
   1. Double-spaced, 0.5” margins, 11 pt. Arial font
   2. Standard page size (8.5” x 11”)
   3. (Final paper only) Bibliography of any style (APA, AMA, etc.) with ≥ 20 references cited in text as well as at end of document. Tip: AMA’s in text citations are superscript numbers so using AMA saves space for your writing!
   4. (Final paper only) Page limits are exclusive of bibliography but inclusive of tables and figures.
   5. Drafts of any writing assignment will not be reviewed by the instructor – only final versions
   6. All writing assignments must be completed and uploaded to Canvas at 5:00pm on Friday of the week that they are due. Late submissions will be deducted 5% of
the final grade per every past-due day.
7. Rubrics for all writing assignments and examples of well-written critiques and social epidemiology in action assignments will be posted to Canvas.

Grading Policy:  
94 – 100 A  
90 – <94 A-  
87 – <90 B+  
84 – <87 B  
80 – <84 B-  
77 – <80 C+  
70 – <77 C  
<70 F

Course Schedule: Include week by week listing of each class session:

1/18/2023 WEEK 1: HISTORY OF SOCIAL EPIDEMIOLOGY

Introductions and Orientation to Course

Required Readings:
1. BK, Chapter 1, “A Historical Framework for Social Epidemiology”, pp.3-12.

Optional Readings:

1/25/2023 WEEK 2: SOCIOECONOMIC STATUS & INEQUALITY

Required Readings:
2. BK, Chapter 4, “Income Inequality”, pp. 76-94.

Optional Readings:
2/1/2023 WEEK 3: RACE, ETHNICITY, DISCRIMINATION

Required Readings:

1. BK, Chapter 3, “Discrimination and Health”, pp. 36-75

Optional Readings:


ASSIGNMENT DUE: Article critique #1

Online 30: Video response- Race, discrimination

2/8/2023 WEEK 4: SOCIAL EPIDEMIOLOGY THEORY

Required Readings:


Optional Readings:

Classroom Activity: Show and Share. Bring in a social-epi conceptual framework and be ready to discuss how it fits theory.

Online 30: Reading response- Theory

2/15/2023 WEEK 5: SOCIAL EPIDEMIOLOGY METHODS (MEASUREMENT, DESIGN, INFERENCE)

Required Readings:


Optional Readings:


DAG Exercise

Online 30: Reading quiz- Epi methods

2/22/2023 WEEK 6: WORKING CONDITIONS, EMPLOYMENT, AND MARKETS

Required Readings:


Optional Readings:


Online 30: Video response- working conditions

3/1/2023 WEEK 7: SOCIAL NETWORKS / SOCIAL CAPITAL
Required Readings:

2. BK, Chapter 8, “Social Capital, Social Cohesion, and Health”, pp. 174-190

Online 30: Video response Social networks and social capital

3/8/2023 WEEK 8: MIDTERM (MATERIAL FROM WEEK’S 1-7)

No readings

NO ASSIGNMENT DUE

3/11/2023 – 3/19/2023 SPRING RECESS

3/22/2023 WEEK 9: PHYSICAL ENVIRONMENTS AND HEALTH

Required Readings:


Optional Readings:


ASSIGNMENT DUE: Article critique #2

Online 30: Video response- Physical environments;

Required Readings:


Optional Readings:


Online 30: Video response- Social factors and health

4/5/2023 WEEK 11: MECHANISMS BETWEEN SOCIAL FACTORS → HEALTH II: BIOLOGIC FACTORS

Required Readings:

1. BK, Chapter 14, “Toward a New Social Biology”, pp.306-331

Optional Readings:

Online 30: Video response- Biologic factors and health

4/12/2023 WEEK 12: INTERVENTIONS & TRANSLATION I: BEHAVIOR CHANGE

Required Readings:

1. BK, Chapter 11, “Health Behaviors in a Social Context”, pp.242-266.

Optional Readings:

Online 30: Reading response- Behavior change

4/19/2023 WEEK 13: INTERVENTIONS & TRANSLATION I: POLICY

Required Readings:


Online 30: Reading response- Policy and programs

4/28/2023 WEEK 14: FINAL PRESENTATION

No readings

ASSIGNMENT DUE: 1) Final presentations uploaded to Canvas 5:00 pm, Tuesday April 27

2) ½ of presentations during in-person class – Wednesday, April 28

5/3/2023 WEEK 15: FINAL PRESENTATION & FINAL PAPER

No readings:

ASSIGNMENT DUE: 1) ½ of presentations during in-person class – Wednesday, May 3

2) Final paper uploaded to Canvas 5:00 pm, Friday, May 5

Learning Management System: Canvas will be used extensively throughout the semester for course syllabus, assignments, announcements, communication and/or other course-related activities. It is the student’s responsibility to familiarize themselves with Canvas and check it regularly. If you have difficulties accessing Canvas, please inform the instructor and Canvas Support (help@canvas.rutgers.edu). Canvas is accessible at canvas.rutgers.edu.

School of Public Health Honor Code: The School of Public Health Honor Code is found in the School Catalog (sph.rutgers.edu/academics/catalog.html). Each student bears a fundamental responsibility for maintaining academic integrity and intellectual honesty in his or her graduate work. For example, all students are expected to observe the generally accepted principles of scholarly work, to submit their own rather than another’s work, to refrain from falsifying data, and to refrain from receiving and/or giving aid on examinations or other assigned work requiring independent effort. In submitting written material, the writer takes full responsibility for the work as a whole and implies that, except as properly noted by use of quotation marks, footnotes, etc., both the ideas and the works used are his or her own. In addition to maintaining personal academic integrity, each student is expected to contribute to the academic integrity of the School community by not facilitating inappropriate use of her/his own work by others and by reporting acts of academic dishonesty by others to an appropriate school authority. It should be clearly
understood that plagiarism, cheating, or other forms of academic dishonesty will not be tolerated and can lead to sanctions up to and including separation from the Rutgers School of Public Health.

**Students with Disabilities:** Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student must apply for Services by first completing a Registration Form with the Rutgers Office of Disability Services (ODS) at ods.rutgers.edu. The student will also be required to participate in an ODS intake interview and provide documentation. If reasonable accommodations are granted, ODS will provide you with a Letter of Accommodations which should be shared with your instructors as early in your courses as possible.

**Commitment to Safe Learning Environment:** The Rutgers School of Public Health is committed to helping create a safe learning environment for all students and for the School as a whole. Free expression in an academic community is essential to the mission of providing the highest caliber of education possible. The School encourages civil discourse, reasoned thought, sustained discussion, and constructive engagement. Provocative ideas respectfully presented are an expected result. An enlightened academic community, however, connects freedom with responsibility. The School encourages all students to disclose any situations where you may feel unsafe, discriminated against, or harassed. Harassment or discrimination of any kind will be not tolerated and violations may lead to disciplinary actions.

**Student Well-Being:** The School of Public Health recognizes that students may experience stressors or challenges that can impact both their academic experience and their personal well-being. If the source of your stressors or challenges is academic, students are encouraged to discuss these challenges and circumstances with their instructor, if they feel they may need additional support or temporary accommodations at the beginning or during this course. The course instructor may consider making reasonable temporary adjustments depending on the student’s situation. For personal concerns or if additional support is needed, students may reach out to the Office of Student Affairs (studentaffairs@sph.rutgers.edu) or any of the appropriate referral resources listed on the SPH Student Connect Canvas page.

**Reporting Discrimination or Harassment:** If you experience any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking, know that help and support are available. You may report such incidents to the RBHS Title IX Office or to the School of Public Health’s Office of Student Affairs. Rutgers University has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. If you experience any other form of discrimination or harassment, including racial, ethnic, religious, political, or academic, please report any such incidents to the School’s Office of Student Affairs. The School strongly encourages all students to report any incidents of discrimination or harassment to the School. Please be aware that all Rutgers employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers as listed in Appendix A to Policy 10.3.12) are required to report information about such discrimination and harassment to the School and potentially the University. For example, if you tell a faculty or staff member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty or staff member must share that information with the RBHS Title IX Coordinator. If you wish to speak to a confidential employee who does not have this reporting responsibility, you can find a list of resources in Appendix A to University Policy 10.3.12. For more information about your options at Rutgers, please visit Rutgers Violence Prevention and Victim Assistance.

**Overview of School Policies:** Academic and non-academic policies and procedures, such Auditing a Course, Retaking Courses, Grade Grievance and others that cover registration, courses and grading, academic standing and progress, student rights and responsibilities, graduation and more may be found under Policies on the School of Public Health website. Below are select specific policies; however,
students are responsible for keeping informed about academic and non-academic policies and procedures beyond those noted on this syllabus.

**Graduate Student Computer Policy:** Students are required to possess a personal laptop, no older than approximately two years, that must meet minimum requirements which may be found online at: sph.rutgers.edu/student-life/computer-support.html

**Policy Concerning Use of Recording Devices and Other Electronic Communications Systems:** When personally owned communication/recording devices are used by students to record lectures and/or classroom lessons, such use must be authorized by the faculty member or instructor who must give either oral or written permission prior to the start of the semester and identify restrictions, if any, on the use of mobile communications or recording devices.

**Policy Concerning Use of Turnitin:** Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com (directly or via learning management system, i.e. Canvas) for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site. Students who do not agree should contact the course instructor immediately.

**Withdrawal/Refund Schedule:** Students who stop attending their course(s) without submitting a completed Add/Drop Course form will receive a failing grade. Furthermore, students dropping to zero credits for the semester are considered withdrawn and must submit a completed Leave of Absence form from the School of Public Health’s Office of Student Affairs. The School of Public Health refunds tuition only. Administrative and technology fees are non-refundable. You may find the Withdrawal/Refund Schedule on the School of Public Health website at: sph.rutgers.edu/academics/academic-calendar.html