Course Title: Social Epidemiology

Course Number: EPID 0673, Spring 2020

Course Prerequisites: Graduate standing in PHCO 0502 (Principles and Methods of Epidemiology) and PHCO 0504 (Introduction to Biostatistics), equivalents, or obtain written approval from the instructor

Course Location: 1 River Front Plaza, 10th Fl., Room 1023 (Newark)

Course Date & Time: Mondays, 3:00-5:00 pm, January 21st, 2020 – May 11th, 2019. Class assignments due Fridays, by 5:00pm, January 24th, 2019 – May 8th, 2020

Course Instructor: Jesse J. Plascak, PhD
Assistant Professor, Department of Biostatistics & Epidemiology, SPH Room 209 (Piscataway, School of Public Health Building)
Office phone: 732-235-4664
Email: jesse.plascak@Rutgers.edu

Office Hours: By appointment only

Course Assistant: None

Required Course Text: None

Course Readings & Resources
- Peer-reviewed, scientific articles posted in Canvas.
- How to write a literature review YouTube video: https://www.youtube.com/watch?v=rnHvO5aRXq0
- Videos streamed through Rutgers library system (internet connection and Rutgers log-in required):
  1. The raising of America: early childhood and the future of our nation
  2. Unnatural Causes: is inequality making us sick?

The following books are not required, but recommended for students interested in further readings on the topics:
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, 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 a hybrid format with in-person meetings on Mondays and 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 Rutgers University Library.

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

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

Please visit the Department webpages on the School of Public Health’s website at sph.rutgers.edu/about/accreditation_resourcefile.html for additional competencies addressed by this course for other degrees and departments.

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 relationships between social factor(s) and an epidemiologic outcome
<table>
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<tr>
<th>Competency</th>
<th>Course Objective</th>
<th>Lessons / Weeks</th>
<th>Assessment</th>
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<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, 10, 11, 12</td>
<td>Article critiques (1 &amp; 2), Social epidemiology in action (1 &amp; 2), Final paper and presentation, On-line activities (most weeks), Midterm</td>
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<td>Formulate a specific hypothesis and determine an appropriate study design and analysis plan</td>
<td>C, D, E, F,</td>
<td>4, 5</td>
<td>Reading response (week 4), reading quiz (week 5), in-class exercises, Midterm, Final paper and presentation,</td>
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<tr>
<td>Communicate and present study findings to professional audiences</td>
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<td>13, 14, 15, 16</td>
<td>Final paper and presentation</td>
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**Course Evaluation & Grading**

A. The final grade for the class will be based on the following:
   1. 8%, Class participation
   2. 12%, Online activities
   3. 15%, Social Epidemiology in action (two)
   4. 15%, Short article critiques (two)
   5. 20%, Midterm
   6. 25%, Final written paper
   7. 5%, Presentation of final paper

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

C. **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 the **Friday prior to class at 11:59 pm**. Comprehension of assigned readings or online videos will be necessary for successful completion of online activities.

D. **Social Epidemiology in action (15%, 7.5% each)**: Students will be required to submit two (2), short summaries (2-page) of Social Epidemiology in action. “Social Epidemiology in action” is the title I am giving to the observable occurrence of social epidemiologic processes operating within and around our daily life. Students should begin to recognize social epidemiologic factors and processes as they progress through the course material. The source of recognized social epidemiologic factors or processes should **not** originate from required course material, but rather daily lived experiences. By “daily life” I am referring to events observed frequently (daily to monthly) and at a local – regional spatial scale (i.e., individually experienced/observed event, characteristics of a local neighborhood, local/regional current event). Such daily lived events could include, for example, food shopping; work / school / worship commute; local cultural /
leisure / entertainment event attendance; Star-Ledger / Daily Targum / News 12 NJ article / clip; etc. “Social Epidemiology in Action” summaries should consist of:

1. A general description of the observable occurrence (e.g., while commuting, shopping, attending cultural event, etc.);
2. the observed or potentially-impacted health outcome(s);
3. a description of a theoretical framework that could be used to understand the social epidemiologic process; and
4. a potential, evidence-based intervention that could be applied to ameliorate the observed or potentially-impacted health outcome. Details deemed personally sensitive, fully at the discretion of students, should be omitted from summaries (e.g., exact location, time, purpose, etc.). If summarizing a local/regional media source, the general description of the observable occurrence should reference the exact media source. See “Writing assignment requirements” below, for additional details.

E. 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 chapter). Each critique should consist of:

1. Article summary, and
2. 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.

F. Midterm (20%): A midterm will be administered during the usual meeting time of week 9 (March 23rd). 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. Midterm’s will be self-administered via Canvas. The midterm can be completed at any location using any materials, but must be completed without aide from other individuals. 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.

G. Final review paper (25%): Students will work independently to review the social epidemiology of a health condition or outcome of their choosing (10 – 12 pages). Final written papers should consist of:

1. A summary of the social epidemiologic literature on the outcome, which includes a critical assessment; and
2. summary of potential, evidence-based interventions aimed at improving the health outcome.

Prior to working on the full 10 – 12 page-length paper, students will submit a short (0.5 – 1 page) proposal of their topic for instructor approval. Approval will ensure that enough information on a suggested topic is available to adequately complete the assignment. Accordingly, the proposal should:

1. identify the health outcome,
2. include a summary or listing of social epidemiologic factors found to be associated with the health outcome (with ≥ 10 references), and
3. identify at least one (1) potential, evidence-based intervention.
4. Include the PubMed search

The proposal will be worth 5 of the 25 total percentage points; proposal=5%, final written paper = 20%. See “Writing assignment requirements” below, for additional details on due dates, late
submissions, and posting of rubrics. Students will be assigned topics by the instructor if the proposed topic (not proposal) lacks sufficient evidence necessary to fulfill the requirements. The final written paper must be uploaded to Canvas 11:59 pm Friday, May 8th.

H. **Presentation of final paper (5%)**: Students will prepare a short (12 – 15 min) presentation of the final paper. All presentations will be delivered during the last class meeting (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 the Canvas dropbox by 11:59 pm on Friday, May 1st so that they can be downloaded to local computers and ready by the start of class time. 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, 1.0” margins, 12 pt. Arial font
2. Standard page size (8.5” x 11”)
3. (Final paper only) Bibliography of any style (APA, NIH grant proposal, etc.) with ≥ 20 references cited in text as well as at end of document
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 11:59 pm on Monday 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

J. **Final letter grade assignment**:  

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**FEBRUARY 3 = LAST DAY TO WITHDRAW WITH 100% REFUND (see ‘Withdrawal/Refund Schedule’ below)**

†EXPERT-LED, GUEST LECTURE
WEEK 1: HISTORY OF SOCIAL EPIDEMIOLOGY

Required Readings:

Optional Readings:

ASSIGNMENT DUE: Introductory quiz (Friday, 1/24)

WEEK 2: SOCIOECONOMIC STATUS & INEQUALITY-

Required Readings:

Optional Readings:
4. BKG, Chapter 4, “Income Inequality”, pp. 126-147.

ASSIGNMENT DUE: Reading response (Friday, 1/31)

WEEK 3: RACE, ETHNICITY, DISCRIMINATION

Required Readings:

Optional Readings:
WEEK 4: SOCIAL EPIDEMIOLOGY THEORY

Required Readings:

Optional Readings:

WEEK 5: SOCIAL EPIDEMIOLOGY METHODS (MEASUREMENT, DESIGN, INFERENCE)

Required Readings:

Optional Readings:

WEEK 6: WORKING CONDITIONS, EMPLOYMENT, AND MARKETS

Required Readings:

Optional Readings:
ASSIGNMENT DUE:  1) Video response (Friday, 2/28);

WEEK 7: SOCIAL NETWORKS / SOCIAL CAPITAL
Required Readings:


Optional Readings:

5. BKG, Chapter 8, “Social Capital, Social Cohesion, and Health”, pp. 290-315

ASSIGNMENT DUE:  1) Video response (Friday, 3/6); 2) Article critique #2 (Monday, 3/9)

WEEK 8: SPRING RECESS

WEEK 9: MIDTERM (MATERIAL FROM WEEK’S 1-7)
No readings:

NO ASSIGNMENT DUE:

WEEK 10: PHYSICAL ENVIRONMENTS AND HEALTH
Required Readings:


Optional Readings:

ASSIGNMENT DUE: 1) Video response (Friday, 3/27)

WEEK 11: MECHANISMS BETWEEN SOCIAL FACTORS ➔ HEALTH I: EMOTION & HEALTH BEHAVIORS

Required Readings:

Optional Readings:
4. BKG, Chapter 9, “Affective States and Health”, pp.320-351.

ASSIGNMENT DUE: Video response (Friday, 4/3), Final paper proposal (Monday, 4/6)

WEEK 12: MECHANISMS BETWEEN SOCIAL FACTORS ➔ HEALTH II: BIOLOGIC FACTORS

Required Readings:

Optional Readings:

ASSIGNMENT DUE: Video response (Friday, 4/10)

WEEK 13: INTERVENTIONS & TRANSLATION I: POLICY

Required Readings:

Optional Readings:

ASSIGNMENT DUE: Slide response (Friday, 4/17), 2) Social epidemiology in Action #2 (Monday, 4/20)

WEEK 14: INTERVENTIONS & TRANSLATION I: BEHAVIOR CHANGE

Required Readings:

Optional Readings:

ASSIGNMENT DUE: Reading quiz (Friday, 4/24)

WEEK 15: FINAL PRESENTATION

No readings

ASSIGNMENT DUE: 1) Final presentations uploaded to Canvas 5:00 pm, Friday May 1
2) Final presentations delivered during class – Monday, May 4

WEEK 16: FINAL PAPER

No readings:

ASSIGNMENT DUE: 2) Final paper uploaded to Canvas 5:00 pm, Friday, May 8

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.

**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](https://sph.rutgers.edu/student-life/computer-support.html) 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](https://sph.rutgers.edu/student-life/computer-support.html) 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/school-calendar.html

**Student Wellness Services**

Counseling, ADAP & Psychiatric Services (CAPS)
(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ [www.rhscaps.rutgers.edu](http://www.rhscaps.rutgers.edu)
CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students’ efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)
(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901/ [www.vpva.rutgers.edu](http://www.vpva.rutgers.edu)
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.