

Course Title: Critical Review of Epidemiologic Literature
Course Number: EPID 0700
Course Location: Piscataway SPH room 2B
Course Date & Time: Thursday 12:30 – 1:30
Course Instructor: This course will be taught by: Judith Graber, PhD, Associate Professor
graber@eohsi.rutgers.edu
Literature review sessions will include a guest faculty member to co-lead the discussion with the course instructor

Office Hours: By appointment

Required Course Text: Readings provided on course canvass page

Course Description: This course is an advanced course in reading and interpreting current epidemiologic literature. It replaces the journal club attendance and presentation requirement of previous PhD curricula. The class will be required for PhD Epidemiology students and open to other SPH graduate students.

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 conclusions(s) are supported.
- 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:

- Be able to critically review published epidemiological literature, including:
 - Identify strengths and weaknesses of published epidemiologic reports
 - Identify epidemiologic study designs and assess the appropriateness of the analytic approaches in published epidemiologic reports
 - Differentiate between a meta-analysis, pooled analysis, and qualitative systemic reviews
 - Identify potential threats to validity in epidemiologic studies, including bias, confounding, and random error, and assess whether the report used strategies that adequately addressed them.
- Communicate and present study findings to professional audiences

Course Canvas Site: The course Canvas site can be found after logging in to <http://Canvas.rutgers.edu/>.

Please test your access to the site as soon as possible. **Important course materials will be posted there including lectures and class assignments.** If you cannot access the site, let Dr. Graber **know as soon as possible**. There are training materials available to help you with Canvas and can be accessed from your Canvas homepage or you can reach out to Canvashelp@ca.rutgers.edu for assistance.

Course Requirements and Grading:

Assessment	Grade %
Article Critique: PowerPoint presentation for the faculty-selected articles student prepare (see guidelines below)	First = 15% Second = 20% Third = 20%
Article Critique: Student-selected article and discussion <ul style="list-style-type: none"> • Article choice is due before the second class 	20%
Questions for articles other students are presenting: prepare and submit <u>three or four</u> questions before class questions for the presenter – <ul style="list-style-type: none"> • Please submit the questions to Dr. Garber at least 1 hour before class • If your question is answered during the presentation, you don't need to ask it • Question point breakdown: <ul style="list-style-type: none"> ○ The first 4 times you submit 3 questions, they are worth 0.75 points each ($3*4*0.75 = 9$) ○ The last 4 times submit 4 questions, they are worth 1 point each ($4*4*1 = 16$) 	25%

Presentation Guide:

- Presentations format: PowerPoint
- Time- 35 to 40 minutes and 15 to 20 minutes for discussion
- Number of slides: up to 30
- Content: follows the style/layout of a journal article but adds your critique, i.e. what are the strengths and weaknesses of the article beyond those which the author acknowledges?
- Grading

Assessment criteria	
• Introduction/context	10%
• Study design identification and support	5%
• Methods	20%
• Results	15%
• Discussion/ research public health importance	10%
• Strengths and limitations <u>in addition to that stated in the report</u>	20%
• Leading the discussion	15%
• Slide presentation quality	5%

The standard SPH alpha-numeric grade conversion applies

Course Schedule: This is a general schedule and is subject to change/updates as needed throughout the semester.

Wk/Date	Article	Faculty member	Student
Wk 1 23-Jan	Syllabus review and course expectations Readings: <ul style="list-style-type: none"> • Pearce N, Vandembroucke JP. Educational note: types of causes. Int J Epidemiol. 2019 Nov 9. • PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist. http://www.prisma-statement.org • STROBE ((Strengthening The Reporting of OBServational Studies in Epidemiology) Checklist. https://www.strobe-statement.org/index.php?id=available-checklists 	Prof. Graber	
Wk 2 30-Jan	Article: Cespedes Feliciano EM, et al. Adipose tissue distribution and cardiovascular disease risk among breast cancer survivors. J Clin Oncol 2019; 37(28):2528-2536.	Prof. Llanos	Shah
Wk 3 6-Feb	Article: ECHO collaborative. HIV incidence among women using intramuscular depot medroxyprogesterone acetate, a copper intrauterine device, or a levonorgestrel implant for contraception: a randomised, multicentre, open-label trial. Lancet 2019; 394:303-13.	Prof. Shiau	Wang
Wk 4 13-Feb	Bhatta DN, Glantz SA. Association of E-Cigarette Use With Respiratory Disease Among Adults: A Longitudinal Analysis. Am J Prev Med 2020. 58(2);182-190	Prof. Mandersski	Aremu
Wk 5 20-Feb	Student choice		Shah
Wk 6 27-Feb	Rowhani-Rahbar A., et al. Income inequality and firearm homicide in the US: a county-level cohort study. Inj Prev 2019; 25: i25–i30	Prof. Hohl	Wang
Wk 7 5-Mar	Osypuk, T.L., et. al. The price of admission: does moving to a low-poverty neighborhood increase discriminatory experiences and influence mental health? Social psychiatry and psychiatric epidemiology. 2019. 54(2), pp.181-190.	Prof. Plascak	Aremu
Wk 8 12-Mar	SPRING BREAK 		
Wk 9 19-Mar	Hernan MA and Robins JM. Using Big Data to Emulate a Target Trial When a Randomized Trial Is Not Available. Am J Epidemiol 2016 Apr 15;183(8):758-64	Dr. Rhoads	Aremu
Wk 10 26-Mar	Woodruff TJ, Zota AR, Schwartz JM. Epub 2011 Jan 14. Environmental chemicals in pregnant women in the United States: NHANES 2003-2004. Environ Health Perspect. 2011 Jun;119(6):878-85.	Prof. Rivera-Nunez	Shah

Wk 11 2-Apr	Student choice		Aremu
Wk 12 9-Apr	Lachowsky NJ, et. al. Does size really matter? A sensitivity analysis of number of seeds in a respondent-driven sampling study of gay, bisexual and other men who have sex with men in Vancouver, Canada. BMC Medical Research Methodology (2016) 16:157	Prof. Raymond	Wang
Wk 13 16-Apr	Eisenberg-Guyot J. Solidarity and disparity: Declining labor union density and changing racial and educational mortality inequities in the United States. Am J Ind Med. 2019 Dec 17.	Prof. Marshall	Shah
Wk 14 23-Apr	Student choice		Wang
Wk 15 30-Apr	Wrap up lecture	Prof. Graber	

Learning Management System: Moodle 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 Moodle and check it regularly. If you have difficulties accessing Moodle, please inform the instructor and Moodle Support (moodlehelp@ca.rutgers.edu). Moodle is accessible at moodle.rutgers.edu.

School of Public Health Honor Code: The School of Public Health Honor Code is found in the student bulletin (sph.rutgers.edu/academics/catalog/index.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_requirements.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.

Withdrawal/Refund Schedule: Students who stop attending their course(s) without processing an [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/registration/school_calendars.html