

- Course Title:** Reproductive and Perinatal Epidemiology
- Course Number:** EPID0607
- Course Pre- and Co-requisite(s):** PHCO0502 Principles and Methods of Epidemiology
- Course Location:** SPH Building Room #P234, Piscataway, NJ
- Course Date & Time:** Tuesdays 3-5pm
- Course Instructor:** Rebecca Ofrane (she/her), MPH, DrPH student (Please call me Becky)
Adjunct Instructor
Rutgers School of Public Health, Urban-Global Public Health
rebecca.ofrane@rutgers.edu, (201)-455-7322
- Office Hours:** Friday 8:30-9:30am via Zoom, or by appointment. I'm eager to connect with each student and to use office hours as a chance to discuss your course-related questions, but also career and student success.
- Course Website:** canvas.rutgers.edu
- Required Course Text:** Louis GB, Platt RW. *Reproductive and Perinatal Epidemiology*. Oxford University Press; 2011. <https://bit.ly/3Me0IoB>
- Ross L, Solinger R. *Reproductive Justice: an Introduction*. University of California Press; 2017. <https://bit.ly/3xey950>

Additional/Supplemental Readings/Resources: Additional readings will be assigned throughout the semester and provided on the course Canvas website.

Course Description: The **Reproductive and Perinatal Epidemiology (EPID 0607)** course examines major topics in reproductive and perinatal epidemiology from fertility to outcomes of pregnancy. The course focuses on methodological issues in studying reproductive and perinatal outcomes using epidemiologic study designs, while incorporating life course and global health perspectives. The course also critically reviews the literature on major reproductive and perinatal outcomes, and engages in current debates in the literature.

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

1. Critique epidemiologic literature, assess its strengths and weaknesses, and determine if conclusion(s) are supported;
2. Formulate a specific hypothesis and determine an appropriate study design and analysis plan
3. Use epidemiologic techniques to quantitatively assess patterns and changes in disease occurrence;
4. Appropriately analyze and interpret epidemiologic data, including large national and state level datasets;
5. 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:

1. Describe the physiology and disparities of various reproductive and perinatal health outcomes;
2. Apply unique methodological issues in studying reproduction;
3. Recognize statistical models frequently used in reproductive and perinatal epidemiology;
4. Engage in debate on current issues in reproductive health both locally and globally;
5. Write and present a critical epidemiologic literature review; and
6. Identify state, national, and international data for surveillance of maternal and child health, including gaps and limitations.

Competency	Course Objectives(s)	Week	Assessment(s)
1	2, 3, 4, 5	All weeks	Literature review assignment; Journal Club, Just the Facts assignment, weekly class discussions
2	1, 2, 3, 5, 6	All weeks	Literature review assignment; weekly class discussions
3	1, 2	All weeks	Just the Facts assignment, Journal Club, City Lightning Talk, weekly class discussions
4	1, 2, 3, 6	All weeks	Epi in the News presentation, City Lightning Talk
5	1, 2, 4, 5	All weeks	Epi in the News presentation, City Lightning Talk, weekly class discussions

Course Guidelines:

- This is an in-person live instruction course, with Canvas as a critical part of the course. Class attendance and Canvas use are required. Canvas is the homebase for the course, including assignments, discussions and more, so please familiarize yourself with the Canvas course layout.
- For 3 graduate school credit hours, NJ requires 2.5 hours of classroom contact time, at SPH we divide this into 2 hours in the classroom and 30 minutes doing other class activities called the “Online 30”. You will find these each week in Canvas. Additional course prep/studying time/homework time is expected.
- Reading and critically analyzing journal articles and other readings is an important aspect of this course. I recommend that students find a preferred method for taking notes on readings and other course content, so you can critically engage and refer to notes in discussions more easily. [This UNC site](#) is a helpful start, and we can always discuss during office hours.

Course Requirements and Grading:

- Your final grade is based on multiple assignments as described below. All major assignments should be uploaded to the appropriate Canvas location by 11pm ET on their Monday due dates (unless otherwise noted). Readings and other content will be incorporated into the assignments, Online 30 and other discussions.
- Each student has 3 “oops tokens”, or opportunities to turn in an assignment late, but it must be discussed with the instructor at least 3 days before the assignment deadline. This means if you know you’ll have a tough week because of other personal, school or work commitments, plan ahead as much as possible and work out an appropriate deadline. These cannot be used for Journal Club Quizzes (or where otherwise noted), as these prepare you for class discussions.

- Class participation is worth 10% of your total grade, but is much more than a grade. This is where the magic happens in learning. You will be graded on whether you are an adult with respect to the course material. What does that mean? Responding to and asking questions in class regularly, in a way that moves that discussion forward; listening to and respecting other students; attending at least one office hour session; and attending class and actively working to make up missed sessions.

Assignments:

- *Just the Facts*: Students will read an assigned CDC MMWR report and summarize important facts and statistics from these reports. The goal is to present a lot of complex data and information concisely, and creativity is encouraged. You can put the data and facts into tables or charts, create data visualizations or a short slide deck. While length will vary based on selected format, the content should be approximately equivalent to 2 pages of 1.5-spaced text. Students can work individually or in pairs on this assignment. Canvas due date: 9/26/22.
- *City Lightning Talk*: Students will use the City Health Dashboard website to explore social determinants of health for a selected city of interest and present a 3 minute overview of your city's data to the class, with a focus on maternal health and relevant social drivers we've discussed in class. Canvas due date: 10/31/22, presented in class 11/1/22.
- *Epi in the News*: Students will select a topic of interest from current events related to reproductive and perinatal epidemiology, find a relevant epidemiologic study, and summarize the paper and issue for the class. The presentation should incorporate concepts we've discussed throughout the course and from readings. Presentation length will be determined once final class roster is set. Topic selection will be shared via a Canvas Discussion Board by 10/1/22, and presentations will be in class 11/29/22.
- *Literature Review*: Over the semester, students will work individually on a critical literature review addressing a topic of their choice in reproductive or perinatal epidemiology. Students will submit a 1-page proposal specifying a specific exposure-outcome relationship they would like to research (which will be approved by the instructor), and then the final literature review paper on that topic. The paper should be 5-6 pages single-spaced, not including references, tables, graphs, 1-inch margins, and formatted according to the [American Journal of Epidemiology style](#). No late papers will be accepted (and no Oops tokens for this final assignment). Proposal due in Canvas 10/10/22. Final lit review due **Tues** 12/20/22 at 11pm ET.
- *Online 30*: To supplement our in-class time each week, there are additional mandatory activities that should take you approximately 30 minutes each week. These activities vary, and might include participating in a Canvas discussion board, watching a relevant video, etc., and they will be posted on Canvas. These are due before class starts (by 3 pm) each Tuesday.
- *Journal Club Quizzes*: An academic journal club is a way to dive deeper into epidemiology papers through group discussion ([see this blog](#) to see what a general journal club format is like). Students will prepare for group discussions by completing quizzes on Canvas related to the class readings and papers. There will be 10 quizzes spread throughout the course and they must be completed before class starts (by 3 pm) on Tuesdays.

Overview of Assignments and Points

Class Participation	10 pts
Online 30 (1-2 pt each)	15 pts
Journal Club Quizzes (2 pts each)	20 pts
Just the Facts assignment	10 pts
City Lightning Talk	5 pts
Epi in the News Presentation	12 pts
Literature Review	28 pts
Total:	100 pts.

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:

Module/Date	Topic	Readings & Class Prep	Assignments Due
Week 1 – 9/6/22	Introduction to Reproductive and Perinatal Epidemiology	Louis & Platt Ch. 1, 16; Reproductive and Perinatal Terminology	Online30 due by next class
Week 2 – 9/13/22	Female & Male Reproductive Health and Fertility <i>Dr. Emily Barrett</i>	Louis & Platt Ch. 2, 3, 4; Gundersen et al	Journal Club; Online30 due by next class
Week 3 – 9/20/22	Pregnancy and Pregnancy Loss	Louis & Platt Ch. 5, 7; Gaskins	Journal Club; Online30 due by next class
Week 4 – 9/27/22	Pregnancy Intention and Termination	Ross & Solinger Ch. 1, 3; Bearak et al; Mark and Cowan	Just the Facts (9/26/22, 11pm); Online30 due by next class
Week 5 – 10/4/22	Pregnancy Complications and Birth Defects <i>Dr. Merlene Fredericks-James</i>	Lindsay Nurse et al.; Louis & Platt Ch. 6, 10; Rocha et al.	Journal Club; Online30 due by next class
Week 6 – 10/11/22	Maternal Mortality and Morbidity Disparities and Surveillance	Louis & Platt Ch. 11; Declerq and Zephyrin; CDC podcast	Literature Review Proposal (10/10/22, 11pm); Online30 due by next class
Week 7 – 10/18/22	Environmental Exposures During Pregnancy and Developmental Origins of Health and Disease (DOHaD) <i>Dr. Emily Barrett</i>	Brown et al.; Guillette et al	Journal Club; Epi in the News topic selection; Online30 due by next class
Week 8 – 10/25/22	Social Determinants of Perinatal Health	Ross & Solinger Ch. 2; Burriss and Hacker; Kozhimannil et al	Journal Club; Online30 due by next class
Week 9 – 11/1/22	Pregnancy and Medications <i>Dr. Elizabeth Suarez</i>	Louis & Platt Ch. 14;	Lightning Talk (10/31/22, 11pm; presented in class); Online30 due next class
Week 10 – 11/8/22	Perinatal Mental Health <i>Dr. Slawa Rokicki</i>	Slopen et al; Smith et al;	Journal Club; Online30 due by next class
Week 11 – 11/15/22	Preterm Birth <i>Dr. Zorimar Rivera-Nunez</i>	Louis & Platt Ch. 8; Picklesimer et al; Devitt	Journal Club; Online30 due by next class
NO CLASS - 11/22/22 (Thursday Classes)			
Week 13 – 11/29/22	“Epi in the News” Presentations	Catch up	Epi in the News presentation – in class
Week 14 – 12/6/22	Epigenetics in Perinatal and Pediatric Epidemiology <i>Dr. Stephanie Shiao</i>	Cao-Lei et al; Shiao et al; Waterland and Michels	Journal Club; Online30 due by next class
Week 15 – 12/13/22	Reproductive Justice and Racism	Ross & Sollinger Ch. 4; video	Journal Club
Week 16 – 12/20/22	Prenatal Care, COVID and Telehealth	Galle et al; Hill and Burroughs	Journal Club; Lit Review papers (12/20/22, 11pm)

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](#) or any of the appropriate referral resources listed on the [SPH Student Connect](#) Canvas page.

Overview of School Policies: Academic and non-academic policies and procedures, such as 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.

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.

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](#).

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