

Course Title: Intermediate Pharmacoepidemiology

Course Number: EPID 0676

Course Pre- and Co-requisite(s): EPID 0672 Pharmacoepidemiology & Therapeutic Risk

Management

Course Location: Web-based with weekly live session, including two in-person sessions

on the following days:

September 7, 2022December 21, 2022

Course Date & Time: Live Session Wednesdays, 3-5pm

Course Instructor: Tobias Gerhard, PhD, FISPE, Director, Center for

Pharmacoepidemiology and Treatment Sciences, Institute for Health,

Health Care Policy and Aging Research; Associate Professor,

Pharmacy Practice and Administration

Institute for Health, #325, 112 Paterson St, New Brunswick, NJ 08901

tgerhard@ifh.rutgers.edu

Mary Beth Ritchey, PhD, FISPE, Associate Research Professor, Center for Pharmacoepidemiology and Treatment Sciences, Institute

for Health, Health Care Policy and Aging Research; Associate

Professor, Rutgers University School of Public Health

mer256@ifh.rutgers.edu

Office Hours: Contact by email for appointment

Course Assistant: None

Course Website: canvas.rutgers.edu

Required Course Text: Strom, Kimmel, Hennessy (eds.), Textbook of Pharmacoepidemiology (3rd

edition); Chichester, West Sussex, UK; Hoboken, NJ; Wiley Blackwell, 2021

Additional/Supplemental Readings/Resources: Additional readings will be assigned throughout the semester.

Course Description: This intermediate course is designed to build upon concepts introduced in EPID0672. It provides intermediate-level concepts and methods in pharmacoepidemiology and includes the development of a full proposal for a pharmacoepidemiological study as a final project. Lectures will be available online for asynchronous viewing before class. Background readings and lectures are intended for review prior to each class. The time in class will be dedicated to review of questions from background readings and lectures, journal club, and inclass activities. Online discussion and group work will focus on development of the final project.

Selected Concentration Competencies Addressed: Each Concentration identifies competencies for each degree offered.



The competencies addressed in this course for the MS *Epidemiology, Concentration in Pharmacoepidemiology* include:

- 1. Synthesize epidemiologic literature on pharmacoepidemiology topics in order to generate conclusions and recommendations;
- 2. Develop and test a specific hypothesis using an appropriate pharmacoepidemiologic study design and analysis plan;
- 3. Determine appropriate use and implement data systems in pharmacoepidemiologic research and/or practice;
- 4. Appropriately analyze and interpret pharmacoepidemiologic data, including large national or international level datasets.

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. Formulate pharmacoepidemiology research questions appropriate to address current issues in drug regulation;
- B. Describe and apply select intermediate pharmacoepidemiological study designs and their major strengths and weaknesses;
- C. Understand and apply select intermediate concepts and methods in modern pharmacoepidemiological research:
- D. Appreciate and explain select applications of pharmacoepidemiological research within specialized clinical domains;
- E. Critically review and interpret the medical and epidemiological literature related to studies of drug safety and effectiveness.

Course Requirements and Grading:

Weekly assignments:

- Required readings are assigned each week. Background lectures are assigned in some weeks.
 Students are expected to do the reading and review background lectures prior to class.
- Most weeks, students will be expected to work on specific sections of their final project. Draft sections will be posted within the discussion board on the course site and students will be expected to comment on two other student's drafts each week.

Class Participation:

- Class attendance and participation are mandatory.
 - Students are expected to attend class prepared for the class session and actively participate and positively contribute to group assignments and projects.
- Students will only be considered to have an excused absence if they contact Dr. Gerhard <u>before</u> the <u>beginning of the class</u> that will be missed.
- Missing 3 or more classes for any reason (excused or not) will result in a class participation grade of zero. Exceptions for extraordinary circumstances should be discussed with Dr. Gerhard.



- During live sessions each week, students are expected to be present with video cameras on
- Preparation and discussion of journal articles will count toward class participation.

Discussion Board Posting:

- All students will be responsible for discussion board postings on topics related to previous lectures and sections in the final project (see below)
 - (1) Discussion board postings will be based on sections in the final project
 - (2) Each group is responsible for posting content for their project by 11pm Wednesday
 - (3) Each student is responsible for posting critiques to one (1) other project by 11pm Sunday

Rubric for discussion board postings:

	Incomplete Response (No credit)	Complete Response (1 Point)	Outstanding Response (2 Points)
Timely and substantial interaction	No response or response is essentially "I agree" or "disagree"	At least one substantial initial post and one response to another group before deadline	 Well-developed initial posting and responses Multiple thoughtful responses to classmates Submitted on or before the deadline
Comprehension and clarity	Shows little or limited understanding of course content / questions posed Restatement of information already provided in course lectures or initial post	 Demonstrates basic knowledge and understanding of the course content Provides relevant examples from personal knowledge and experience Acknowledges comments made by others, but does not offer new ideas Includes original ideas with prompting Initial posting for the week is too long or contains details extraneous to weekly topic 	 Brings new knowledge to the discussion and includes other resources that enrich the learning of the group Offers relevant thoughts and ideas based on experience and/or prior learning without prompting Demonstrates applicability to specific case without prompting Makes connections with previous lessons in the course

^{(*}Rubric adapted from Philadelphia Office of Adult Education training materials)

Journal Article Critique

- All students will be responsible for completing two (2) article critiques (applied pharmacoepidemiologic study with a focus on the week's topic area)
 - (1) Articles will be assigned by course faculty
 - (2) Conduct an in-depth critique of the article



- (3) Develop a PowerPoint presentation summarizing the findings (not required but recommended)
- (4) Present the critique during designated class time
- (5) Lead class discussion on the article (engagement of the class during the presentation is required)
- All students are expected to read and be prepared to discuss the journal article each week.

Final Project (due on December 14):

Six-page proposal exclusive of references and 1-page specific aims. The proposal will be a group project (group size dependent on the size of the class; 3-6 projects per class).

Write a study proposal for an observational pharmacoepidemiologic study using at least one of the major methods presented in this course.

- 1) Topics will be chosen from options presented during the first day of class
- 2) The proposal should include the following sections:
 - a. Specific Aims (1 page)
 - b. Approach (6 pages):
 - i. Study Design
 - ii. Setting/Data Source
 - iii. Study population
 - iv. Exposures
 - v. Outcomes
 - vi. Covariates
 - Specifically discuss why and/or how these covariates were selected. Label covariates as risk factors, instruments, intermediates/effect modifiers, and confounders
 - vii. DAG including the important information
 - viii. Statistical Analysis
 - ix. Sample size calculation not required but should be discussed if not available
 - x. Assumptions: what assumptions are required for use of the methods you selected?
 - xi. Limitations: what are the sources of bias? Also address error and generalizability.
 - xii. Sensitivity Analyses: how will you test your assumptions and address bias?

Grading:

1.	Journal article presentation / critique	30% (15% per presentation)
2.	In-class activities	10% (2.5% per activity; 4 activities)
3.	Discussion posts – initial posting	10% (1% per discussion; 10 discussions)
4.	Discussion posts – response / critique	10% (1% per discussion; 10 discussions)
5.	Final Project	30%
6.	Class Participation (Q&A, JC)	10% (0.67% per week)
	Total:	100%



Course Competencies:

Competency	Course Objectives(s)	Lessons	Assessment(s)
1 Critique lit	A, B, C, D, E	2-13	Journal article critique, discussion posting
2 Hypothesis/plan	A	1-12	Discussion posting, Inclass activities, Final project
3 Data – appropriate use and implementation	A, B, C, D, E	2-15	Journal article critique, Discussion posting, Inclass activities, Final project
4 Analyze	A, B, C, D	2-15	Journal article critique, discussion posting, In- class activities, Final project

Course Schedule: This is a general schedule and is subject to change/updates as needed throughout the semester. Please attend class and check the course website weekly for updates.

Week 1: Introduction to the Course; Bias and Confounding – September 7-11, 2022

- Live Session, In-person (September 7, 2022):
 - Course Introduction (Tobias Gerhard, Mary Beth Ritchey)
 - Course Project Opportunities (Mary Beth Ritchey)
 - Bias and Confounding in Pharmacoepidemiology (Tobias Gerhard)
 - In-class activity
 - Choose project for course
 - Choose journal club topic/week
- Assigned Readings Due:
 - o Textbook of Pharmacoepidemiology
 - Chapter 1: What is Pharmacoepidemiology?
 - Chapter 2: Study Designs Available for Pharmacoepidemiologic Studies
- Assignments Due:
 - o None



Week 2: Causal Graphs; Active Comparator New User Design – September 12-18, 2022

- Lectures Asynchronous:
 - Causal Graphs (Mary Beth Ritchey)
 - The Active Comparator New User Design (Tobias Gerhard)
- Assigned Readings Due:
 - Greenland S, Pearl J, Robins JM. Causal diagrams for epidemiologic research.
 Epidemiology. 1999;10:37–48.
 - Gaskell AL, Sleigh JW. An introduction to causal diagrams for anesthesiology research. *Anesthesiology*. 2020; 132:951-67.
 - Lund et al. The active comparator, new user study design in pharmacoepidemiology: historical foundations and contemporary application.
 Curr Epidemiol Rep. 2015 Dec;2(4):221-228.
- Live Session (September 14, 2022):
 - Developing a Good Research Question (Mary Beth Ritchey)
 - o Review of Asynchronous Lectures Q & A
 - o Journal Club: Causal Graphs, TBD
- Assignments Due:
 - o None

Week 3: Propensity Scores I – September 19-25, 2022

- Lectures Asynchronous:
 - Introduction to Propensity Scores (Tobias Gerhard)
 - o Propensity Score Estimation (including variable selection) (Mary Beth Ritchey)
 - Propensity Score Applications (matching, stratification, weighting) (Mary Beth Ritchey)
 - Assessment of Performance (Tobias Gerhard)
 - Propensity Score Trimming (Tobias Gerhard)
- Assigned Readings Due:
 - Textbook of Pharmacoepidemiology, Chapter 21: Advanced Approaches to Controlling Confounding in Pharmacoepidemiology Studies
 - Sturmer, et al. Propensity scores for confounder adjustment when assessing the effects of medical interventions using nonexperimental study designs. *J Intern Med.* 2014;275(6):570-80.
 - Elze MC, Gregson J, et al. Comparison of Propensity Score Methods and Covariate Adjustment: Evaluation in 4 Cardiovascular Studies. *J Am Coll Cardiol*. 2017;69:345–57.
- Live Session (September 21, 2022):
 - Review of Asynchronous Lectures Q & A
 - Applied Example of Propensity Score Use (Greta Bushnell)



- Journal Club: Propensity score application with active comparator and new user design, TBD
- Assignments Due:
 - Discussion Forum Research Questions
 - Initial posting no later than September 21, 2022
 - One response no later than September 25, 2021

Week 4: Propensity Scores II – September 26 – October 2, 2022

- Lectures Asynchronous:
 - High-dimensional propensity scores (Tobias Gerhard)
 - Propensity Score Calibration (Mary Beth Ritchey)
 - Disease Risk Scores (Mary Beth Ritchey)
- Assigned Readings Due:
 - Schneeweiss S et al. High-dimensional propensity score adjustment in studies of treatment effects using health care claims data. *Epidemiology*. 2009 Jul;20(4):512-22.
 - Glynn R, Gagne J, Schneeweiss S. Role of disease risk scores in comparative effectiveness research with emerging therapies. *Pharmacoepidemiol Drug Saf.* 2012 May; 21(Suppl 2): 138–147.
 - Samuel M, Batomen B, Rouette J, et al. Evaluation of propensity score used in cardiovascular research: a cross-sectional survey and guidance document. BMJ Open 2020;10:e036961.
- Live Session (September 28, 2022)
 - Review of Asynchronous Lectures Q & A
 - o Journal Club: Propensity score or disease risk score, TBD
- Assignments Due:
 - Discussion Forum Specific Aims
 - Initial posting no later than September 28, 2022
 - One response no later than October 2, 2022

Week 5: Instrumental Variables / Prevalent User Design – October 3-9, 2022

- Lectures Asynchronous:
 - Instrumental Variables An Introduction (Tobias Gerhard)
 - Prevalent User Design (Chintan Dave[tbc])
- Assigned Readings Due:
 - Brookhart MA et al. Instrumental variable methods in comparative safety and effectiveness research. *Pharmacoepidemiol Drug Saf.* 2010;19(6):537-54.



- Suissa S, Moodie EE, Dell'Aniello S. Prevalent new-user cohort designs for comparative drug effect studies by time-conditional propensity scores. *Pharmacoepidemiol Drug Saf.* 2017;26: 459–468.
- Live Session (October 5, 2022):
 - Review of Asynchronous Lectures Q & A
 - In-class activity, TBD
- Assignments Due:
 - Discussion Forum DAG
 - Initial posting no later than October 5, 2022
 - One response no later than October 9, 2022

Week 6: Validation Studies / Sensitivity Analysis – October 10-16, 2022

- Lectures Asynchronous:
 - Sensitivity analysis to test the robustness of results to design choices (Tobias Gerhard)
 - Quantitative bias analysis (Tobias Gerhard)
 - Validation studies (Mary Beth Ritchey)
 - Transparency and Reproducibility (Mary Beth Ritchey)
- Assigned Readings Due:
 - Textbook of Pharmacoepidemiology, Chapter 12: Validity of Pharmacoepidemiologic Drug and Diagnosis Data
 - Lash TL, Fox MP, MacLehose RF, et al. Good practices for quantitative bias analysis. *Intl J Epidemiol*. 2014, 1969–1985.
 - Wang SV, Schneeweiss S, Berger ML, et al. Reporting to Improve Reproducibility and Facilitate Validity Assessment for Healthcare Database Studies V1.0 [published correction appears in *Value Health*. 2018 Feb;21(2):248]. *Value Health*. 2017;20(8):1009-1022.
 - Schneeweiss S, Rassen JA, Brown JS, et al. Graphical Depiction of Longitudinal Study Designs in Health Care Databases. Ann Intern Med. 2019;170(6):398-406.
- Live Session, In-person (October 12, 2022):
 - Review of Asynchronous Lectures Q & A
 - Journal Club: Validation study, TBD
- Assignments Due:
 - Discussion Forum Study design
 - Initial posting no later than October 12, 2022
 - One response no later than October 16, 2022

Week 7: Pediatric Pharmacoepidemiology – October 17-23, 2022



- Lectures Asynchronous:
 - None
- Assigned Readings Due:
 - o TBD
- Live Session (October 19, 2022):
 - Pediatric Pharmacoepidemiology (Daniel Horton[tbc])
 - o Journal Club: Pediatric Pharmacoepidemiology, TBD
- Assignments Due:
 - Discussion Forum Setting / data source
 - Initial posting no later than October 19, 2022
 - One response no later than October 23, 2022

Week 8: Pregnancy Pharmacoepidemiology – October 24-30, 2022

- Lectures Asynchronous:
 - o None
- Assigned Readings Due:
 - Pharmacoepidemiology, 4th edition, Chapter 22 Research on the Effects of Medications in Pregnancy and in Children
- Live Session, In-person (October 26, 2022):
 - Pregnancy Pharmacoepidemiology (Elizabeth Suarez [tbc])
 - o Journal Club: Pregnancy Pharmacoepidemiology, TBD
- Assignments Due:
 - Discussion Forum Exposures / Outcomes / Covariates
 - Initial posting no later than October 26, 2022
 - One response no later than October 30, 2022

Week 9: COVID-19 and Vaccine Pharmacoepidemiology – October 31 – November 6, 2022

- Lectures Asynchronous:
 - Vaccine Pharmacoepidemiology (Leah McGrath [tbc])
- Assigned Readings Due:
 - o TBD
- Live Session (November 2, 2022):
 - SARS Cov-2 and COVID-19 Research (Vincent Lo Re III [tbc])
 - In-class activity, TBD



- Assignments Due:
 - Discussion Forum Graphical depictions & transparency
 - Initial posting no later than November 2, 2022
 - One response no later than November 6, 2022

Week 10: Cancer Pharmacoepidemiology – November 7-13, 2022

- Lectures Asynchronous:
 - External Controls (Mary Beth Ritchey)
- Assigned Readings Due:
 - o TBD
- Live Session (November 9, 2022):
 - Cancer Pharmacoepidemiology (Monica D'Arcy [tbc], Benjamin Bates [tbc], Farzin Khosrow-Khavar [tbc])
 - o Journal Club: Cancer pharmacoepidemiology, TBD
- Assignments Due:
 - Discussion Forum Statistical analysis and sample size
 - Initial posting no later than November 9, 2022
 - One response no later than November 13, 2022

Week 11: Health Services Research and Opioids – November 14-20, 2022

- Lectures Asynchronous:
 - o None
- Assigned Readings Due:
 - o TBD
- Live Session (November 6, 2022):
 - Health Services Research and Opioids (Hillary Samples [tbc])
 - o Journal Club, TBD
- Assignments Due:
 - Discussion Forum Sensitivity analyses
 - Initial posting no later than November 16, 2022
 - One response no later than November 20, 2022

NOTE: November 24, 2022 – No class – Thanksgiving Recess



Week 12: — November 28 – December 4, 2022

- Lectures Asynchronous:
 - o TBD
- Assigned Readings Due:
 - Textbook of Pharmacoepidemiology:
 - Chapter 6: Views from academia, industry, regulatory agencies, and the legal system
- Live Session (November 30, 2022):
 - Pharmacoepidemiology in Industry and Service Provider Roles (Jesse Berlin and Dan Mines [tbc])
 - o Journal Club, TBD
- Assignments Due:
 - Discussion Forum Assumptions and limitations
 - Initial posting no later than November 30, 2022
 - One response no later than December 4, 2022

Week 13: Current Regulatory Issues in Pharmacoepidemiology & Chancellor's Perspective – December 5-11, 2022

- Lectures Asynchronous:
 - Real-World Evidence in Drug Regulation (Mary Beth Ritchey)
 - Labelling Extensions Using Old Drugs for New Indications (Mary Beth Ritchey)
 - Regulatory Decision Making and Pharmacoepidemiology (Mary Beth Ritchey)
- Assigned Readings Due:
 - Textbook of Pharmacoepidemiology:
 - Chapter 5: When should one perform pharmacoepidemiology studies?
 - Framework for FDA's Real-World Evidence Program, December 2018 Available at: https://www.fda.gov/media/120060/download
 - EMA Big Data Task Force Final Report, January 2020 Available at: https://www.hma.eu/fileadmin/dateien/HMA_joint/00-About_HMA/03-Working_Groups/Big_Data/HMA-EMA_Joint_Big_Data_Taskforce_Phase_II_report_Evolving_Data_Driven_Regulation.pdf
 - Gray CM, Grimson F, Layton D, Pocock S, Kim J. A Framework for Methodological Choice and Evidence Assessment for Studies Using External Comparators from Real-World Data. *Drug Saf.* 2020;43(7):623-633.
- Live Session, In-person (December 14, 2022):
 - o A Perspective on Pharmacoepidemiology (Brian Strom)
 - o Review of Asynchronous Lectures Q & A
 - In-class activity (TBD)



- Final Project Q & A
- Assignments Due:
 - None

Week 14: Pragmatic Trials & Self-Controlled Study Designs- December 12-18, 2022

- Lectures Asynchronous:
 - Pragmatic Trials (TBD)
 - Self-Controlled Study Designs (TBD)
- Assigned Readings Due:
 - Zuidgeest MGP, Goetz I, Groenwold RHH, et al. Series: Pragmatic trials and real world evidence: Paper 1. Introduction. *J Clin Epidemiol*. 2017;88:7-13.
 - Loudon K, Treweek S, Sullivan F, Donnan P, Thorpe KE, Zwarenstein M. The PRECIS-2 tool: designing trials that are fit for purpose. BMJ. 2015;350:h2147.
 - Woodcock A, Bakerly ND, New JP, et al. The Salford Lung Study protocol: a pragmatic, randomised phase III real-world effectiveness trial in asthma. BMC Pulmonary Medicine. 2015;15:160.
 - Hallas J, Pottegård A. Use of self-controlled designs in pharmacoepidemiology. J Intern Med. 2014;275(6):581-9.
 - Whitaker HJ, Farrington CP, Spiessens B, Musonda P. Tutorial in biostatistics: the self-controlled case series method. *Stat Med.* 2006;25:1768-97. doi:10.1002/sim.2302.
 - Peterson I, Douglas I, Whitaker H. Self controlled case series methods: an alternative to standard epidemiological study designs. BMJ. 2016;354:i4515
- Live Session (December 7, 2022):
 - Review of Asynchronous Lectures Q & A
- Assignments Due:
 - Final Project Paper due December 14, 2022

Week 15: Advanced Topics TBD – December 19-21, 2022

- Lectures Asynchronous:
 - o TBD
- Assigned Readings Due:
 - o TBD
- Live Session (December 21, 2022):
 - o TBD
- Assignments Due:
 - o None



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 <u>Policy 10.3.12</u>. For more information about your options at Rutgers, please visit <u>Rutgers Violence Prevention and Victim Assistance</u>.

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

Syllabus Addendum: Remote Learning Policies – FOR REMOTE COURES

As you know, we are engaged in this course under extraordinary circumstances. Not only are we now conducting the class remotely, but we are all working under the repercussions of the COVID-19 pandemic. The following are class policies for our class sessions with Zoom. Please read carefully; these policies apply to the Fall 2022 semester. All students are expected to adhere to the policies.

<u>General</u>: Log into Zoom using your Rutgers NetID and sign-in with your full first name and last name as listed on the class roster. (If you use a different name than what is listed on the class roster, please email the instructor in advance of the class or send a private Chat message.) Using your full name allows the instructor to know who is in attendance and to quickly sort students into their groups when needed. Users who do not log into Zoom using their Rutgers NetID may have trouble accessing the Zoom classroom.

<u>Video</u>: Please turn on your video when possible. We recognize that this isn't always easy but this will help to build our class community. Seeing the faces of your classmates more closely duplicates the typical in-person learning experience and may shift your mindset into more focus and attention. Seeing each other can also provide each of us with positive social interactions.

• If you're unable to find an environment without a lot of visual distractions or prefer to not show your living space as a background, feel free to use a virtual background (several



virtual background images created by the School of Public Health are available in the Student Connect Canvas page).

- To save bandwidth, there may be times during class when the instructor asks students to turn off videos.
- Add a photo to your Zoom profile. (Then in times when videos are off, we'll see photos of everyone rather than an empty box.)
- If you have limited internet bandwidth or other issues impacting your video use, please inform the instructor.

Audio: Mute your microphone when you are not talking. This helps eliminate background noise.

- Use a headset, if possible. If you own headphones with a microphone, please use them. This improves audio quality.
- Be in a quiet place, if possible. Turn off any music, videos, etc. in the background.

<u>Chat</u>: Stay on topic and be respectful. Use the chat window for questions and comments that are relevant to class.

NOTE: Class meetings on Zoom will be recorded and made available for students in the course on Canvas only