

Course Title: *Methods for Research Among Hidden Populations.*

Course Number: *UGPH 0744*

Course Pre- and Co-requisite(s): *Doctoral student standing*

Course Location: Zoom <https://rutgers-hipaa.zoom.us/j/97130932157?pwd=a29YVWN5YWt4VFpGMd4allwOURLZz09>

Course Date & Time: *Thursdays, 3-5pm*

Course Instructors: *Drs. Chongyi Wei and Henry Raymond*

Office Hours: *By Appointment Only*

Course Assistant: *None*

Required Course Text: *None*

Course Website: canvas.rutgers.edu

Additional/Supplemental Readings/Resources: *Journal articles, book chapters and other materials listed in Course Schedule*

Course Description: This course provides students with the tools to design and conduct research among LGBTQ populations and other populations that are hidden and hard to reach.

Selected Concentration Competencies Addressed: Each Concentration identifies competencies for each degree offered. The competencies addressed in this course for the PhD in Public Health-Epidemiology concentration include:

- Conduct independent epidemiologic literature reviews and summarize studies using qualitative and quantitative techniques;
- Critique epidemiologic literature, assess its strengths and weaknesses and determine if conclusions(s) are supported;
- Design and implement studies to investigate causes of disease;
- Formulate specific hypotheses and determine an appropriate study design and analysis plan using quantitative data analysis techniques; and
- Analyze and interpret epidemiologic data appropriately, including data from large national and state level datasets.

Please visit the Concentration webpages on the School of Public Health's website at <http://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:

- Conduct literature review to understand LGBTQ health and research methods;

- Assess and design research for LGBTQ populations;
- Formulate appropriate hypothesis for a study;
- Understand the theoretical and statistical foundations of sampling methods use among LGBT and hidden / hard to reach populations;
- Conduct an analysis of adaptive sampling method data (RDS); and
- Communicate research findings to relevant stakeholders.

Course Map

Competencies	Objectives	Relevant Assignments / Assessment
Conduct independent epidemiologic literature reviews and summarize studies using qualitative and quantitative techniques;	Conduct literature review to understand LGBTQ health and research methods.	Background section of grant
Critique epidemiologic literature, assess its strengths and weaknesses and determine if conclusions(s) are supported;	Conduct literature review to understand LGBTQ health and research methods.	Background section of grant
Design and implement studies to investigate causes of disease;	Understand the theoretical and statistical foundations of sampling methods use among LGBT and hidden / hard to reach populations.	Approach section of grant
Formulate specific hypotheses and determine an appropriate study design and analysis plan using quantitative data analysis techniques	Formulate appropriate hypothesis for a study	Aims page of grant
Analyze and interpret epidemiologic data appropriately, including data from large national and state level datasets	Conduct an analysis of adaptive sampling method data (RDS)	RDS analyst presentation

Course Requirements and Grading:

ASSIGNMENTS

1. Class participation: Students should come to class having done the readings and be prepared to engage in thoughtful discussion of class topics through sharing opinions and

asking questions. Act as designated lead of optional reading discussion (includes reading optional papers, sharing an overview and leading discussion).

2. Homework: Students will be given short homework 3 times during the semester.

3. Quizzes: Students will be given 3 announced quizzes during the semester. Quizzes are closed book however student may bring 1 (one) page of notes to use during quizzes.

4. Research Proposal Sections: Student groups will be required to write 4 sections of a research proposal following NIH proposal format. 1) Significance Section 1 pages, 2) Innovation Section ¼ page, 3) Approach Section 3-4 pages (including a dissemination plan), 4) Aims Page 1 page. Students will be provided guidelines and examples of NIH proposals. Pages should have margins of 0.5" and 11 pt font.

5. Final Presentation: Students will present a summary of their research proposal in the last two sessions of the semester. Presentations will be a maximum of 20 minutes, including a 1-2 minutes for questions and answers. Students must use at least one visual aid to enhance their presentation (e.g., PowerPoint, video, etc.). A grading rubric will be provided to students early in the semester.

6. Attendance: Attendance is required. Each student will be allowed one (1) absence without receiving a reduced grade. Each additional absence will result in a 2-point deduction in your attendance grade, for a maximum of 5-points. More than three or more absences may result in the student being dropped from the course. Absences may be considered excused (i.e., not impacting your grade) with appropriate medical documentation at the instructor's discretion.

7. Conduct Analysis of RDS data. This 700-level requirement will ask students to use an existing data set to conduct an analysis of RDS data using RDS Analyst. Details will be distributed in class. Students will make a short presentation of their results and discuss how using RDS estimators changed the estimates of population parameters.

GRADING

Assignment Point Allocation:

Class participation	10 pts
Research Proposal Sections	
Significance	5 pts
Survey Questions	5 pts
Aims	5 pts
Approach	10 pts
Innovation	5 pts
Lay abstract	5 pts
Proposal outline presentation	15 pts
Final Presentation and full grant proposal	20 pts
RDS analysis	15 pts
Presentation of RDS analysis	<u>10 pts</u>
Total	100 pts

<i>Grading Policy:</i>	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:

Session/ Date	Topics	Readings To be completed BEFORE class	Assignme nt Due
1. CY HR 9/3	Course Overview Introductio n of instructor and students	Coulter RWS et al. Research Funded by the National Institutes of Health on the Health of Lesbian, Gay, Bisexual, and Transgender Populations. Am J Public Health 2014;104:105-112. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3935708/ Example NIH grant application: Discovering the hidden twin epidemics of methamphetamine and HIV among high-risk men in China Activity: Brainstorm research ideas Online 30: NCI Webinar “LGBTQ health disparities: gains we’ve made and challenges we face” https://cancercontrol.cancer.gov/IS/training-education/Details.aspx?ID=52	
2 CY 9/10	Literature reviews	Denney AS & Tewksbury R. How to write a literature review. J Criminal Justice Educ 2013;24:218-234. https://www.tandfonline.com/doi/full/10.1080/10511253.2012.730617 Wei et al., Lower HIV prevalence among Asian/Pacific Islander men who have sex with men: a critical review for possible reasons. AIDS Behav 2011;15:535-549. https://www.ncbi.nlm.nih.gov/pubmed/21153049 Librarian Guest Lecture: PubMed and Endnote Online 30: None (extra in week 1)	
3 CY Pull from Dand I 9/17	Communit y assessme nt / engageme nt	Israel BA et al., Community-based participatory research: Policy recommendations for promoting a partnership approach in health research. Education for Health 2001;14:182-197. https://www.ncbi.nlm.nih.gov/pubmed/?term=Community-based+participatory+research%3A+Policy+recommendations+for+promoting+a+partnership+approach+in+health+research Wright LA et al., Lessons learned from community-based participatory research: establishing a partnership to support lesbian, gay, bisexual and transgender aging in place. Family Practice 2017;34:330-335. https://www.ncbi.nlm.nih.gov/pubmed/?term=Lessons+learned+from+community-based+participatory+research%3A+establishing+a+partnership+to+support+lesbian%2C+gay%2C+bisexual+and+transgender+aging+in+place . Wallerstein N & Buran B. Community-based participatory research contributions to intervention research: the intersection of science and practice to improve health equity. Am J Pubic Health 2010;100:S40-46. https://www.ncbi.nlm.nih.gov/pubmed/?term=Community-	Significanc e Section Due

Session/ Date	Topics	Readings To be completed BEFORE class	Assignme nt Due
		<p>based+participatory+research+contributions+to+intervention+research%3A+the+intersection+of+science+and+practice+to+impr ove+health+equity.</p> <p>Online 30: NCI Webinar “Engaging Underserved Communities in Clinical Trial Recruitment” https://cancercontrol.cancer.gov/IS/training-education/Details.aspx?ID=62</p>	
4. HR 9/24	Survey /Measurem ent considerati ons	<p>Ascertaining sexual orientation and gender status Survey methods, eliciting sensitive info</p> <p>Williams Institute Sexual orientation https://williamsinstitute.law.ucla.edu/wp-content/uploads/SMART-FINAL-Nov-2009.pdf Gender https://williamsinstitute.law.ucla.edu/wp-content/uploads/geniuss-report-sep-2014.pdf</p> <p>Pathela et al. 2006 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470570/</p> <p>Activity: Students take turns in pairs asking sex, gender, orientation, income and sexual behavior questions .</p> <p>Online 30: Post reflection on this activity on Canvas.</p>	
5. HR 10/1	Intro to sampling	<p>Trochim and Donnelly, pp 42-51 LGBTQ Health Surveillance: Data = Power. Sell RL. Am J Public Health. 2017 Jun;107(6):843-844. doi: 10.2105/AJPH.2017.303798.</p> <p>Osmond et al. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1963298/</p> <p>Magnani et al. https://www.ncbi.nlm.nih.gov/pubmed/?term=15930843</p> <p>Activity:</p> <p>Online 30: https://www.youtube.com/watch?v=eIZD1BFfw8E</p>	Draft Survey questions due
6. HR 10/8	Location based sampling	<p>Watters https://doi.org/10.2307/800824 Vallerory et al https://www.ncbi.nlm.nih.gov/pubmed/?term=10889593 MacKellar. Et al. https://www.ncbi.nlm.nih.gov/pubmed/?term=17354526</p> <p>Activity: Randomizing a sampling calendar for TLS</p> <p>Online 30: https://www.youtube.com/watch?v=V9aRII-9Opc</p>	

Session/ Date	Topics	Readings To be completed BEFORE class	Assignme nt Due
7. HR 10/15	Network based sampling	Heckathorn doi:10.1111/j.1467-9531.2011.01244.x. https://www.ncbi.nlm.nih.gov/pubmed/22228916 Abdul-Quader et al. doi:10.1007/s11524-006-9108-8 https://link.springer.com/article/10.1007/s11524-006-9108-8 Burt et al. doi: 10.1016/j.annepidem.2009.10.002 https://www.ncbi.nlm.nih.gov/pubmed/20123167 Activity: Six degrees of separation. Online 30: https://www.youtube.com/watch?v=thKrwGITi8w	
8. CY 10/22	Internet based sampling	Pequegnat et al., Conducting Internet-based HIV/STD prevention survey research: considerations in design and evaluation. AIDS Behav 2007;11:505-521. https://www.ncbi.nlm.nih.gov/pubmed/17053853 Topolovec-Vranic J & Natarajan K. The use of social media in recruitment for medical research studies: a scoping review. J Med Internet Res 2016;18:e286. https://www.ncbi.nlm.nih.gov/pubmed/27821383 Rosser BRS et al., Capturing the social demographics of hidden sexual minorities: an Internet study of the transgender population in the United States. Sexuality Res & Social Policy 2007;4:50-64 https://link.springer.com/article/10.1525/srsp.2007.4.2.50 Optional: Prescott TL et al. Reaching Adolescent Gay, Bisexual, and Queer Men Online: Development and Refinement of a National Recruitment Strategy. J Medical Internet Research 2016;18:e200. https://www.jmir.org/2016/8/e200/	Aims Page Due
9 CY HR 11/29	Proposal outline presentations	None	
10 HR 11/5	Comparisons	Kendal et al. DOI 10.1007/s10461-008-9390-4 https://www.ncbi.nlm.nih.gov/pubmed/18389357 Johnston et al. http://dx.doi.org/10.1080/09540120902729973 Wei et al. https://www.ncbi.nlm.nih.gov/pubmed/22750886 Kral https://www.ncbi.nlm.nih.gov/pubmed/20582573 Evaluation of the Center for Disease Control and Prevention's HIV behavioral surveillance of men who have sex with men: sampling issues.	

Session/ Date	Topics	Readings To be completed BEFORE class	Assignment Due
		<p>Pollack LM, Osmond DH, Paul JP, Catania JA. Sex Transm Dis. 2005 Sep;32(9):581-9</p> <p>Lansky et al. 2006 https://www.ncbi.nlm.nih.gov/pubmed/16565646</p> <p>Henderson et al. 2019 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6740154/</p> <p>Meyer and Wilson, 2009. http://www.columbia.edu/~im15/papers/sampling.pdf</p> <p>Optional: Arayasirikul , https://www.ncbi.nlm.nih.gov/pubmed/26499337 Raymond et al. https://www.ncbi.nlm.nih.gov/pubmed/30328063</p>	
11. HR 11/12	Formative assessment	Johnston et al. http://dx.doi.org/10.1080/09540120903373557	Innovation section due
12. CY pull from D and I 11/19	Mixed methods	<p>Palinkas LA, Aarons GA, Horwitz S, et al. Mixed method designs in implementation research. <i>Adm Policy Ment Health</i>. 2011;38(1):44-53.</p> <p>Nation Cancer Institute. <i>Qualitative methods in implementation science</i> (https://cancercontrol.cancer.gov/IS/docs/NCI-DCCPS-ImplementationScience-WhitePaper.pdf).</p> <p>Activity: Qualitative interview guide</p> <p>Online 30: NCI Webinar “Mixed methods in implementation science”: https://cancercontrol.cancer.gov/IS/training-education/Details.aspx?ID=26</p>	
13. HR 12/3	Ethics	<p>Mustanski B. Ethical and regulatory issues with conducting sexuality research with LGBT adolescents: a call to action for a scientifically informed Approach. <i>Arch Sex Behav</i> 2011;40:673-686 https://www.ncbi.nlm.nih.gov/pubmed/21528402</p> <p>Semaan et al. doi: 10.1016/j.drugpo.2007.12.006 https://www.ncbi.nlm.nih.gov/pubmed/18243679</p> <p>Optional:</p>	Approach Page Due

Session/ Date	Topics	Readings To be completed BEFORE class	Assignment Due
		<p>Tufford L et al., Conducting research with lesbian, gay, and bisexual populations: navigating research ethics board reviews. J Gay & Lesbian Social Services 2012;24:221-240. https://www.tandfonline.com/doi/full/10.1080/10538720.2012.697039</p> <p>Online 30: https://www.youtube.com/watch?v=-O5gsF5oyls</p> <p>Online 30: Dr. Anthony Fauci "Addressing the HIV/AIDS Pandemic: Ethical challenges" https://www.youtube.com/watch?v=Y3RpG-4_3IE</p>	
14. CY 12/10	Dissemination / Advocacy	<p>https://depts.washington.edu/ccph/pdf_files/CARE_Dissemination_Strategies_FINAL_eversion.pdf</p> <p>Chen PG¹, et al. https://www.ncbi.nlm.nih.gov/pubmed/20837290</p>	RDS analysis due
15. CY HR 12/17	Presentations Debrief and Wrap Up	Final presentations. Debrief Wrap Up	Lay abstract due

Course Expectations:

1. Attend and actively participate in all lectures and activities of this course. If you cannot attend a certain lecture or activity, it is your responsibility to notify the instructor. All other absences will be considered unexcused and will impact the final grade.
2. Arrive to class on time to prevent disrupting the lecture and classroom activities.
3. Complete all assigned readings prior to class.
4. Complete all assignments; due dates are noted on the Course Schedule.

Late assignments will not be accepted

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