



PUBH 3010, SECTION 1

Public Health Approaches to HIV/AIDS
Fall 2019

COURSE & CONTACT INFORMATION

Credits: 2

Meeting Day(s): Tuesday and Thursday

Meeting Time: Tuesday, 9:05am - 9:55am and Thursday, 9:05am - 9:55am

Meeting Place: [Phillips-Wangenstn Bldg 2-470](#)

Instructor: B. R. Simon Rosser, PhD, MPH, LP

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Office Hours: Tuesday 1:00-2:00 pm or by appointment

Office Location: WBOB 1300 S. 2nd St., Minneapolis, MN 55454

COURSE DESCRIPTION

The purpose of this undergraduate level course is to learn about the epidemiology and biology of HIV/AIDS and the community response to the epidemic, with an emphasis on translating scientific findings into primary (preventing HIV infection in those who are uninfected) and secondary (preventing development of HIV disease in those who are HIV-infected) prevention practices. We will explore the social, medical, and political correlates and consequences of the HIV epidemic through in class discussions, assigned readings, and guest lectures. This course is designed to give undergraduates interested in pursuing public health, experience in epidemiology, disease surveillance and community health promotion, and showcases a range of careers working on HIV in the government, university and community sectors.

COURSE PREREQUISITES

None

COURSE GOALS & OBJECTIVES

Learning objectives for this course include a greater appreciation and understanding of:

- The defining criteria for HIV infection and AIDS
- The local, national, and global epidemiology of HIV/AIDS
- The pathogenesis and natural history of HIV infection and disease
- Modes of HIV transmission
- Strategies to prevent HIV infection
- Strategies to prevent HIV disease progression
- The global response to HIV/AIDS
- The scientific bases of HIV prevention

METHODS OF INSTRUCTION AND WORK EXPECTATIONS

Course Workload Expectations

This is a 2 credit course and, therefore, students can expect to spend approximately 6 hours per week outside of class preparing for class discussions, assignments, quizzes, and exams.

Learning Community

Methods of instruction include lectures, in-class discussions, a weekly seminar and course readings. In addition, public health practitioners and experts working in the field of HIV/AIDS will be invited to give presentations that address concepts discussed in class. Students are expected to attend class, seminars, complete reading assignments, participate in class discussions, complete homework on time, and contribute to an atmosphere of curiosity and learning.

In this course, students are expected to engage with each other in respectful and thoughtful ways.

In group work, this can mean:

- Setting expectations with your groups about communication and response time during the first week of the semester (or as soon as groups are assigned) and contacting the TA or instructor if scheduling problems cannot be overcome.
- Setting clear deadlines and holding yourself and each other accountable.
- Determining the roles group members need to fulfill to successfully complete the project on time.
- Developing a rapport prior to beginning the project (what prior experience are you bringing to the project, what are your strengths as they apply to the project, what do you like to work on?)

In group discussion, this can mean:

- Respecting the identities and experiences of your classmates.
- Avoid broad statements and generalizations. Group discussions are another form of academic communication and responses to instructor questions in a group discussion are evaluated. Apply the same rigor to crafting discussion posts as you would for a paper.
- Consider your tone and language, especially when communicating in text format, as the lack of other cues can lead to misinterpretation.

Like other work in the course, all student to student communication is covered by the Student Conduct Code (<https://z.umn.edu/studentconduct>).

COURSE TEXT & READINGS

Readings and handouts, including scientific studies and other articles from peer-review journals and other public health publications will be assigned during the course. Links to *some* assigned readings will be posted on the course web site (<https://moodle.umn.edu/course/view.php?id=20358>), which students are expected to check on a weekly basis. **If you have problems accessing the course website, please contact the teaching assistant by 12:00 p.m. (noon) on Friday since they may not be available to assist you on weekends**

This course uses journal articles, which are available via the University Libraries' E-Reserves and will be linked from the course site. It is good practice to use a citation manager to keep track of your readings. More information about citation managers is available at <https://www.lib.umn.edu/pim/citation>.

COURSE OUTLINE/WEEKLY SCHEDULE

Week	Topic	Readings	Activities/Assignments
Week 1 9/03/19-9/5/19	Introductions and the History of HIV/AIDS	<p><u>Required Viewing (for Monday's class discussion):</u> Watch "The Age of AIDS" at: http://www.pbs.org/wqbh/pages/frontline/aids/</p> <p><u>Required Readings</u> CDC. Kaposi's sarcoma and Pneumocystis pneumonia among homosexual men--New York City and California. <i>MMWR</i> 1981;30:305-8.</p> <p><u>Optional Additional Reading</u> Koop, C. E. The Early Days of AIDS, As I Remember Them. <i>Annals of the Forum for Collaborative HIV Research</i>.</p>	<p>9:05-9:55am: Syllabus Overview and Introduction to the History of HIV/AIDS</p> <p>9:05-9:55am: History of the HIV/AIDS Epidemic (Class discussion of "The Age of AIDS")</p> <p>(Come to class having watched the video and ready to discuss)</p>
Week 2 9/10/19-9/12/19	History of the HIV/AIDS Epidemic (key facts Simon) Introduction to HIV Biology and Transmission	<p><u>Optional Additional Readings</u> Dosekun, O. & Fox, J. (2010). An overview of the relative risks of different sexual behaviors on HIV transmission. <i>Current Opinion in HIV & AIDS</i>, 5(4): 291-297.</p> <p>Fact sheet: US Department of Health & Human Services (2017). How do you get HIV or AIDS? At: https://www.aids.gov/hiv-aids-basics/hiv-aids-101/how-you-get-hiv-aids/</p> <p>Fact sheet: Centers for Disease Control and Prevention (2017). Oral Sex and HIV Risk. At: http://www.cdc.gov/hiv/risk/oralsex.html</p>	<p>9:05am - 9:55am: This class summarizes a timeline and 5 key stages of the pandemic from its inception to now.</p> <p>9:05am - 9:55am: HIV transmission and correlates of transmission <i>Lecture (Simon)</i></p>
Week 3 9/17/19-9/19/19	Introduction to HIV Biology and Transmission Epidemiology of HIV – National and Local Primary Prevention	<p><u>Optional Reference Reading:</u> Centers for Disease Control and Prevention. <i>HIV Surveillance Report, 2018</i>; vol. 29. http://www.cdc.gov/hiv/library/reports/surveillance. Published November 2018</p>	<p>9:05am - 9:55am: The Biology of HIV/AIDS (Guest Speaker: Alan Lifson, M.D.)</p> <p>Prof. Alan Lifson, MD is an HIV research epidemiologist whose areas of specialty includes working in developing world countries on such issues as HIV and TB co-infection and medication access in rural Ethiopia</p> <p>9:05am - 9:55am: HIV Surveillance and contact tracing in Minnesota (<i>Guest Speakers: Jared Shenk Minnesota Department of Health</i>)</p> <p>This guest lecture focuses on how data are collected at the local level, what MDH does with them, and how and what data becomes part of the national data base. It also reviews the latest epidemiological data at the state level.</p>
Week 4 9/24/19-9/26/19	The Epidemiology of HIV/AIDS	<u>Required Reading</u>	9:05am - 9:55am: The Epidemiology of HIV/AIDS in

	in the United States. (Simon)	<p>Denning, P. and DiNenno, E. (2019) Communities in Crisis: Is there a generalized HIV epidemic in impoverished urban areas of the United States? At: https://www.cdc.gov/hiv/group/poverty.html</p> <p>Centers for Disease Control and Prevention. <i>HIV Surveillance Report, 2015</i>; vol. 27. http://www.cdc.gov/hiv/library/reports/surveillance. Published November 2016</p>	<p>the United States ***Synthesis Articles due***</p> <p>9:05am - 9:55am: The Epidemiology of HIV/AIDS in the United States (cont.).</p> <p>This interactive lecture reviews the CDC data on HIV in the US. Students will gain experience interpreting prevalence, incidence and mortality data on HIV/AIDS in the US</p>
Week 5 10/1/19- 10/3/19	Epidemiology of HIV – Global and National	<p><u>Optional Additional Readings:</u> Fact Sheet: Kaiser Family Foundation (January 28, 2018) The Global HIV/AIDS Epidemic. http://kff.org/global-health-policy/fact-sheet/the-global-hivaids-epidemic</p> <p>Penazzato, M., Irvine, C., Vicari, M., Essajee, S.M., Sharma, A., Puthanakit, T., Abrams, E.J. and Doherty, M., 2018. A global research agenda for pediatric HIV. <i>Journal of acquired immune deficiency syndromes</i>, 78(1), p.S10-S15</p>	<p>9:05am - 9:55am: Epidemiology - Global HIV/AIDS Pandemic (Simon)</p> <p>9:05am - 9:55am: Epidemiology -Global HIV/AIDS Pandemic (cont.)</p>
Week 6 10/8/19- 10/10/19	Targeted prevention to high risk populations	<p><u>Required Readings</u> Centers for Disease Control and Promotion (CDC) (2019). HIV and African Americans Fact Sheet https://www.cdc.gov/hiv/group/raciaethnic/africanamericans/index.html</p> <p>Centers for Disease Control and Promotion (CDC) (2019). HIV and Gay and Bisexual Men Fact Sheet. https://www.cdc.gov/hiv/group/msm/index.html</p> <p><u>Optional Additional Readings:</u> Coates, T. J. (2013). An Expanded Behavioral Paradigm for Prevention and Treatment of HIV-1 Infection. <i>JAIDS Journal of Acquired Immune Deficiency Syndromes</i>, 63, S179-S182.</p>	<p>9:05am - 9:55am: Prevention basics – Theory and Practice (Simon)</p> <p>This lecture will focus on principles of primary, secondary and tertiary prevention while highlight key theories driving HIV prevention practice.</p> <p>9:05am - 9:55am: Preventing sexual transmission through condom promotion (<i>Guest presenter: William C. Grier</i>)</p> <p>William Grier is a counsellor at Minnesota's largest HIV/STI testing site, the <i>Red Door</i> where he prevents primary infection through condom promotion.</p>
Week 7 10/15/19 - 10/17/19	Targeted prevention to high risk populations	<p><u>Required Readings:</u> Centers for Disease Control and Promotion (CDC) (2019). HIV Among People who Inject Drugs Fact Sheet. https://www.cdc.gov/hiv/group/hiv-idu.html</p> <p>Centers for Disease Control and Prevention. HIV testing. At: https://www.cdc.gov/hiv/testing/index.html. Accessed May, 2017.</p>	<p>9:05am - 9:55am: Interventions with IDUs (<i>Guest Speaker: TBA, JustUs Health</i>)</p> <p>This presentation will focus on harm reduction approaches for injecting drug users both locally and nationally, including syringe exchange, and behavioral, biomedical and structural approaches to reducing overdose.</p> <p>9:05am - 9:55am: HIV Testing demonstration,</p>

			<p>(Raquelle Paulsen: JustUs Health)</p> <p>*** Synthesis and Reflection paper due***</p>
<p>Week 8 10/22/19 - 10/24/19</p>	<p>Interventions across the ecologic and prevention spectrum</p>	<p><u>Required Readings:</u> Baral, S., Logie, C. H., Grosso, A., Wirtz, A. L., & Beyrer, C. (2013). Modified social ecological model: a tool to guide the assessment of the risks and risk contexts of HIV epidemics. <i>BMC Public Health</i>, 13(1),4821</p> <p><u>Optional Additional Readings:</u> Centers for Disease Prevention and Control (CDC). Sexually Transmitted Diseases Guidelines, 2010. HIV Infection: Detection, counseling and referral. http://www.cdc.gov/std/treatment/2010/hiv.htm</p> <p>Trickett, E.J., Beehler, S., Deutsch, C. et al. (2011). Advancing the science of community-level interventions. <i>American Journal of Public Health</i>, 101(8), 1410-1419.</p> <p>Lombardo, A. P. & Leger, Y.A. (2007). Thinking about “Think Again” in Canada: assessing a social marketing HIV/AIDS prevention campaign. <i>Journal of Health Communication</i>, 12: 377-397.</p> <p>Sullivan, P. S., Grey, J. A., & Rosser, B. R. S. (2013). Emerging Technologies for HIV Prevention for MSM: What We have Learned, and Ways Forward. <i>JAIDS Journal of Acquired Immune Deficiency Syndromes</i>, 63, S102-S107</p>	<p>9:05am - 9:55am: Lecture on HIV testing (Simon)</p> <p>9:05am - 9:55am: Intervention Strategies across the Ecological Continuum (Simon)</p> <p>Graduate Presentations during lecture</p> <p>Individual level – Social and sexual networks – Community level – Public Policy – HIV epidemic stage –</p>
<p>Week 9 10/29/19 - 10/31/19</p>	<p>Midterm Exam Week</p>		<p>9:05am - 9:55am: Midterm exam review</p> <p>9:05am - 9:55am: MIDTERM EXAM</p>
<p>Week 10 11/5/19- 11/7/19</p>	<p>Medical, Psychological and Social Aspects of Living with HIV</p>	<p><u>Reading References for the Fact Sheet Assignment:</u> Center for Rural Health (2016) Communication Tools: Fact Sheets. At: https://ruralhealth.und.edu/communication/factsheets.</p>	<p>9:05am - 9:55am: Panel of persons living with HIV/AIDS.</p> <p>A panel of persons living with HIV/AIDS will present on their experience of living with this disease. In the first hour, panelists will introduce themselves and share a little of their experience living with HIV/AIDS, after which students will have the opportunity to ask questions.</p> <p>10:05 -11:00am: Panel continued. To permit sufficient time for students to ask questions, an optional second hour is reserved today. Depending on the time the panel concludes, 6010 will meet to reflect on the panel.</p> <p>9:05am - 9:55am: Fact Sheet presentations (3010 Fact Sheets due today).</p>

<p>Week 11 11/12/19 - 11/14/19</p>	<p>HIV Treatment</p>	<p><u>Optional Additional Readings</u>:: Hess, K. L., Hu, X., Lansky, A., Mermin, J., & Hall, H. I. (2017). Lifetime risk of a diagnosis of HIV infection in the United States. <i>Annals of Epidemiology</i>.</p> <p>Horvath, K.J., Oakes, J. M., Rosser, B.R.S., Danilenko, G., Vezina, H., Amico, K.R., Williams, M.L., & Simoni, J. (2013). Feasibility, acceptability and preliminary efficacy of an online peer-to-peer support ART adherence intervention. <i>AIDS and Behavior</i>, 17(6), 2031-44</p>	<p>9:05am - 9:55am: HIV/AIDS Treatment - Medical Aspects of Treatment</p> <p><i>(Guest Speaker: Brian Goodroad, DNP, RN, CNP)</i></p> <p>Dr. Brian Goodroad is an RN who has specialized in treating HIV/AIDS patients at the <i>Positive Care Center</i> (HCMC, the state's largest and most diverse HIV clinic). This lecture will focus on secondary prevention, addressing such aspects as classes of HIV treatment medications, when to initiate and/or defer treatment, and a comprehensive approach to the health care of persons with HIV.</p> <p>9:05am - 9:55am: The Challenge of Medication Adherence</p>
<p>Week 12 11/19/19 - 11/21/19</p>	<p>The Future of HIV prevention, advances in research and treatment</p>		<p>9:05am - 9:55am: Critical Research Studies in HIV/AIDS (Rosser)</p> <p>9:05am - 9:55am: Critical Issues in HIV/AIDS – Biomedical Interventions & the Future of HIV/ AIDS</p> <p>6010 graduate students guest lecture this class, with each student covering a biomedical development or area of HIV/AIDS research.</p>
<p>Week 13 11/26/19 - 11/28/19</p>	<p>Treatment and Prevention and Pre-exposure Prophylaxis</p>		<p>9:05am - 9:55am: Living with HIV and the HIV care continuum</p> <p>This class examines the HIV care continuum and data on ending the HIV epidemic. Note: This class will be held unless students vote otherwise. There will be no extra credit quiz this class. To facilitate students who may need to travel for Thanksgiving will be able to view an audio-lecture of this class.</p> <p>11/28/19 Thanksgiving (no class)</p>
<p>Week 14 12/03/19 - 12/05/19</p>	<p>HIV Policy, Advocacy, and legislative</p>	<p><u>Required Readings</u> Fauci AS, Redfield RR, Sigounas G, Weahkee MD, Giroir BP. Ending the HIV Epidemic: A Plan for the United States. <i>JAMA</i>. Published online February 07, 2019;321(9):844–845. doi:10.1001/jama.2019.</p>	<p>9:05am - 9:55am: HIV/AIDS Advocacy and the National HIV Prevention Strategy (Simon)</p>

	approaches to Ending HIV/AIDS	1343 Executive Summary of the National HIV/AIDS Strategy for the United States: http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf	
	Exam Review Evaluation	<p><u>Optional Additional Readings</u></p> <p>Horvath, K.J., Meyer C., Rosser, B.R.S. (2016). Men who have sex with men who believe that their state has an HIV-specific criminal law report higher condomless anal sex than those who are unsure of the law in their state. <i>AIDS & Behavior</i>, 21:51. org/10.1007/s10461-016-1286-0.</p> <p>Buris, S & Cameron, E. (2008). The case against criminalization of HIV transmission. <i>Journal of the American Medical Association</i>, 300 (5), 578-581.</p>	9:05am - 9:55am:Final Exam Review and Class Wrap
Week 15 12/10/19	Final Exam		9:05am - 9:55am: FINAL EXAM

SPH AND UNIVERSITY POLICIES & RESOURCES

The School of Public Health maintains up-to-date information about resources available to students, as well as formal course policies, on our website at www.sph.umn.edu/student-policies/. Students are expected to read and understand all policy information available at this link and are encouraged to make use of the resources available.

The University of Minnesota has official policies, including but not limited to the following:

- Grade definitions
- Scholastic dishonesty
- Makeup work for legitimate absences
- Student conduct code
- Sexual harassment, sexual assault, stalking and relationship violence
- Equity, diversity, equal employment opportunity, and affirmative action
- Disability services
- Academic freedom and responsibility

Resources available for students include:

- Confidential mental health services
- Disability accommodations
- Housing and financial instability resources
- Technology help
- Academic support

EVALUATION & GRADING

Final Grades for the class will be calculated based on performance in the following areas:

Examinations (60% of grade):

An in-class mid-term examination and a final examination will constitute 60% of your grade (30% for the midterm examination and 30% for the final examination). The exams will review your knowledge and understanding of material presented in the course up to the time of the exam. The exams will consist of true/false and multiple choice questions. More information about the examinations will be provided during the semester.

Reflection and synthesis paper (25% of grade):

Students will be asked to submit a reflection and synthesis papers during the semester. The paper will be no more than 4 pages in length (double spaced, 1 inch margins, times new roman), and consist of one page summaries of two *related* articles from peer-reviewed academic journals (2 pages, so each summary should be about 1 page each) and a 1-2 page synthesis of the articles with class material. Students may choose the articles, and it must be clear how the topics fit into the material learned in-class.

This assignment is completed in two phases. In phase 1, on or before 9/26/19 you must submit electronic pdfs of the two articles to the

TA for pre-approval. They will confirm if the articles you have chosen meet the criteria for scientific peer-reviewed article. In phase 2 of the assignment, on 10/17/19, the synthesis and reflection paper is due to the TA.

In-Class "Surprise" Quizzes (5 quizzes at 1 points each for 4+ correct answers, 5 % extra credit):

Five unannounced 3-point quizzes will be given throughout the semester. The goals of the quizzes are to 1) encourage students to stay up-to-date on readings and lecture material and 2) to reward students for attending class lectures. If you miss (i.e., skip) class, you will be given 0 points for the quiz. If you are unable to attend a lecture because of unavoidable and/or unforeseen circumstances (e.g., a family emergency; death; dismemberment), it is your responsibility to notify the teaching assistant as soon as possible to arrange an alternative time to make up the quiz. A missed quiz for a credible reason can be made up for a period of 2 weeks, after which you will receive a 0 on the quiz. Only 2 quizzes may be missed for credible reasons throughout the semester, after which 0 points will be given for missed quizzes. The instructor reserves the right to determine whether a given reason is credible for missing a quiz.

HIV Fact Sheet (15%: 10% fact sheet; 5% group discussion):

Students will be asked to create a "fact sheet" based on a topic of their choice in the area of HIV. Fact sheets are a common and useful way practitioners and researchers communicate with each other in public health. Students will create a 1-2 page fact sheet on a topic, and present the fact sheet in small group discussions during class.

Grading Scale

The University uses plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following, and you can expect the grade lines to be drawn as follows:

% In Class	Grade	GPA
93 - 100%	A	4.000
90 - 92%	A-	3.667
87 - 89%	B+	3.333
83 - 86%	B	3.000
80 - 82%	B-	2.667
77 - 79%	C+	2.333
73 - 76%	C	2.000
70 - 72%	C-	1.667
67 - 69%	D+	1.333
63 - 66%	D	1.000
< 62%	F	

- A = achievement that is outstanding relative to the level necessary to meet course requirements.
- B = achievement that is significantly above the level necessary to meet course requirements.
- C = achievement that meets the course requirements in every respect.
- D = achievement that is worthy of credit even though it fails to meet fully the course requirements.
- F = failure because work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (Incomplete).
- S = achievement that is satisfactory, which is equivalent to a C- or better
- N = achievement that is not satisfactory and signifies that the work was either 1) completed but at a level that is not worthy of credit, or 2) not completed and there was no agreement between the instructor and student that the student would receive an I (Incomplete).

Evaluation/Grading Policy	Evaluation/Grading Policy Description
<p>Scholastic Dishonesty, Plagiarism, Cheating, etc.</p>	<p>You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis (As defined in the Student Conduct Code). For additional information, please see https://z.umn.edu/dishonesty</p> <p>The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: https://z.umn.edu/integrity.</p> <p>If you have additional questions, please clarify with your instructor. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.</p> <p>Indiana University offers a clear description of plagiarism and an online quiz to check your understanding (http://z.umn.edu/iuplagiarism).</p>
<p>Late Assignments</p>	
<p>Attendance Requirements</p>	
<p>Extra Credit</p>	