PHG 301: INTRODUCTION TO GENETIC EPIDEMIOLOGY

- Lectures:
 - Synchronous in-person lectures will resume second week of quarter (11:30-12:50, Tuesdays in Health Sciences T435 and Thursdays in D209).
 - Asynchronous recordings will continue to be available on Panopto as alternatives throughout for students who prefer them, for any reason.
- Synchronous discussion Fridays (AA/AB: 10:30-12:20, AC/AD: 12:30-2:20, AE: 2:30-4:20)
 - First four week all sections will be held via zoom
 - Subsequent weeks in person for sections AB (HSB T435) and AD (HSB D209)
 Sections AA and AC and AE will continue to meet remotely on zoom

Course Session Schedule, Winter 2022					
XV/ 1	(Panopto-recorded) Lecture 1	(Panopto-recorded) Lecture 2	Homework due Thursday		Friday
Week			Problem set	Literature search	Discussion section
1	January 4 – (asynchronous recording only, plus bonus zoom office hours) Lecture 1: course overview; definition of genetic epidemiology	January 6 (asynchronous recording only)– Lecture 2: Introduction to epidemiology			January 7 (zoom)- Introductions, Finding/reading scientific literature tutorial. decide on section topics for the quarter
2	January 11– Lecture 3: Epidemiological study designs, Establishing causation	January 13– Lecture 4: Introduction to genetics (historical approach)	HW #1 (covering week 1)	Paper #1 Popular press vs primary epidemiolog y research	January 14- discuss causality in <u>Doll and Hill</u> <u>1950</u> classic paper
3	January 18– Lecture 5: Familial Aggregation studies	January 20– Lecture 6: Taking a family health history	HW#0, HW #2	Paper #2 Familial aggregation (primary literature)	January 21- Presentations: popular press vs original research
4	January 25– Lecture 7: Estimating heritability from twin (and adoption/migrant) studies	January 27– Lecture 8: Estimating heritability from twin (and adoption/migrant) studies	HW #3	Paper #3 Heritability study (primary literature)	January 28- Presentations: familial aggregation
5	February 1– Lecture 9: Segregation analysis: Autosomal modes of inheritance	February 3– Lecture 10: Segregation analysis II: Sex-linked modes of inheritance	HW#4	Paper #4 Segregation analysis (primary literature)	February 4- Presentations: heritability studies

6	February 8–	February 10–	HW#5	Paper #5	February 11-	
	Lecture 11: complex	Lecture 12: Linkage		Linkage	Presentations:	
	inheritance and PTC lab	analysis		analysis	segregation	
				(primary	analyses	
				literature)		
7	February 15–	February 17–	HW#6	Paper #6	February 18-	
	Lecture 13:	Lecture 14:		Association	Presentations:	
	Genomewide Association	Ancestry analysis		Study	linkage studies	
	studies			(primary		
				literature)		
8	February 22– Lecture 15:	February 24– Lecture 16:	HW#7	Paper #7	February 25	
	Exome sequencing	Whole-genome		Sequencing	Presentations:	
		sequencing		Study	association	
				(primary	studies	
				literature)		
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9	March 1– Lecture 17:	March 5– Lecture 18:	HW#8	Paper #8:	March 4-	
	where do we go from a	where do we go from			sequencing	
	disease gene: drug design,	complex genes: gene-		interactions	studies	
	gene therapy	environment interactions,		/treatment	studies	
		paradigm for complex		/ incatificati		
		disease		(secondary		
		Ad hoc presentation -		nterature)		
10			TINULLO		25 1 44	
10	March 8– Lecture 19	March 10– Lecture 20:	HW#9		March 11-	
	Genetic epidemiology of	infactious disease:			Presentations:	
	infectious disease: host side	nifectious disease.			gene therapy,	
		patriogen side			environmental	
					tactors or other	
					treatments	
Final	UW scheduled for Wedne	UW scheduled for Wednesday, March 16 from 4:30pm-6:20pm but will likely take an online format.				
	Note: an online exam will be open-notes and you will have three times as long as an in person exam to					
	take it once you open it (far longer than we actually expect it to take you to account for caregiving					
	responsibilities, server slowdowns and other unavoidable interruptions because distraction-free					

environments are hard to come by these days). Disclaimer: This schedule and the rest of this syllabus may be revised or updated the quarter unfolds. Such

changes will be announced in lecture/announcements, and additionally an updated version of this document will be posted on the course website: <u>https://canvas.uw.edu/courses/1518723/</u>

Instructor:

Jennifer Morris Gogarten (she/her)

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Email: gogarten@uw.edu

Zoom: gogarten (or 404 259 5980)

Office: Health Sciences Building H-wing 6th floor room 690E

Phone: 206-795-3996 (text okay if brief answer, otherwise email)

Office hours: Tuesday and Thursdays 1:30-3:00 after class ... or

other times by appointment!

Directions for PHG office suite (for instructor and all TA in-person office hours):

Navigate to the Rotunda cafeteria (labeled as I court), which has entrances on either side. Starting at the south end of the Rotunda, head to the adjacent entrance marked on the map with a red arrow (it will be on your left if you are exiting the Rotunda headed south, or on your right if you are facing north looking into the Rotunda from outside). Immediately after you enter the H-wing, you will see an elevator in front of you (or adjacent stairs). Take either to the 6th floor. Immediately as you exit the elevator (or stairwell) you'll see the H-690 office suite, home of PHG!

Alternative: if coming from the bridge from upper campus (into the T wing) or trying to navigate the building internally, **go to the 3rd or 4th floors** which are contiguous through all wings. Once you're in the H wing, head to the periphery of the building (turn off the main central arterial running the length of the building and go as far south as you can). From there, take the elevator or stairs to the 6th floor. This is confusing and you can get lost: feel free to call your instructor for navigation help!



Teaching assistants:

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Austin Hammermeister Suger (he/him) MS student in Genetic Epidemiology Sections led: AA and AC Email: <u>hammea2@uw.edu</u> *Office hours (for <u>all sections)</u>:* PHG office suite H-690, Mondays and Wednesdays 11:30am-12:30pm (and zoom 991 7174 2819).

Miranda Reed (she/her) MS student in Genetic Epidemiology Sections led: AB and AD Email: <u>mlainie@uw.edu</u> *Office hours (for <u>all</u> sections):* PHG office suite H-690, Tuesdays/Thursdays 9-10am (and zoom id 961 2852

Olivia Sommers (she/her) MPH student Section led: AE Email: <u>osommers@uw.edu</u> *Office hours (for <u>all</u> sections):* PHG office suite Thursdays 2-3pm (and zoom id 928 2783 9486).

Course catalog description:

This course offered by the Institute for Public Health Genetics will survey a wide range of approaches for investigating the genetic and environmental causes of disease, and provide examples of how genetic epidemiologic research findings can be used in public health and clinical practice to improve the health of individuals and populations. We will also touch on the ethical, societal, political and legal dimensions that can arise when using information on genetic and environmental factors in research and practice. This course will develop students' ability to understand the basic approaches used to identify genetic and environmental factors in health and disease, and how the application of this information can be used improve population health, as well as to appreciate the ethical, legal and social implications that can arise in both research and translation to practice. *Prerequisites:* none.

Course learning objectives:

By the end of the course each student will be able to:

- Define genetic epidemiology and its relationship to other disciplines
- Describe and apply fundamental concepts (in math, biology and epidemiology) critical to genetic epidemiology
- Describe, compare and interpret major study designs used in genetic epidemiology, including assessing quality and limitations of a particular experiment
- Differentiate types of genetic testing and their advantages and disadvantages
- Be able to draw and interpret a pedigree to represent family relationships and health history Explain how genetic epidemiologic findings can be applied in public health using current examples Analyze presentations of genetic epidemiology in popular media and scientific literature.

My general teaching objectives are to:

- Present topics at an understandable but rigorous level.
- Help you develop the ability to think like a scientist by honing your observational, quantitative and critical analysis skills.
- Assist you in mastering the fundamental concepts of genetic epidemiology, and challenge you to apply these concepts to new situations as well as your own lives.

Required materials:

- The entire course is being operated from the hub of canvas, so be sure to send notifications to a device or account you check often.
- A computer, laptop, tablet or other device for accessing canvas and submitting assignments (phone may be clumsy but workable)
- Internet access with sufficient bandwidth to stream pre-recorded lectures
- A phone or microphone-containing internet-connected device for participating in zoom meetings (discussions, office hours).
- Note that camera use is preferred but not required. If you don't have a camera containing device and are phoning in, please make sure your TA knows the number you're calling from.
- A calculator which could be in a spreadsheet does not need to be super-fancy (i.e. graphing not necessary), but you should be able to use it to calculate a logarithm.
- Optional but recommended: access to a printer for printing out your readings, or alternately a separate device from the one you are using to access the zoom meeting which allows you to consult your marked-up reading.

Textbooks for reference:

We do not have a required textbook in this course, because there are none at an undergraduate level that comprehensively cover the material (this course is quite unique!). Lecture slides (available for download from the Files section on canvas) will contain all necessary content and references! However, for those who like having textbooks to refer to and who don't mind grappling with focus for a more graduate/professional audience, there are many related texts available for you to access (without additional charge). Don't feel like you need to read these cover to cover, but if you are seeking alternate explanations to clarify points from lecture these might be a useful place to look.

- Human genome epidemiology building the evidence for using genetic information to improve health and prevent disease by Khoury et al.
 - o https://www.cdc.gov/genomics/resources/books/2010 huge/index.htm
- Genetic Epidemiology by M. Dawn Teare o http://link.springer.com.offcampus.lib.washington.edu/book/10.1007%2F978-1-60327-416-6
- *Statistical Methods in Genetic Epidemiology* by Duncan C. Thomas.
 - <u>https://ebookcentral-proquest-</u> com/lib/washington/detail.action?pqorigsite=primo&docID=3053710
- A Statistical Approach to Genetic Epidemiology by Andreas Ziegler and Inke R. König. o <u>https://onlinelibrary-wileycom.offcampus.lib.washington.edu/doi/pdfdirect/10.1002/9783527633654</u>
- *Medical Genetics* (4th edition) by Lynn B. Jorde, John C. Carey, and Michael J. Bamshad o <u>https://ebookcentral.proquest.com/lib/washington/detail.action?docID=1429818</u>

Additional supplemental readings:

Again, these are not required but may be helpful as alternate explanations to what is provided by lecture.

- Overall: comprehensive article on genetic basis of disease:
 - o https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6279436/
- Week 1: o Scihub: <u>https://doi.org/10.1002/asi.24351</u>
 - Epidemiology history: http://samples.jbpub.com/9780763766221/66221_CH02_5398.pdf
 - RR: <u>http://www.pitt.edu/~bertsch/risk.pdf</u>
 - What constitutes a serious condition/disease: <u>https://www.nature.com/articles/s41431-021-00962-2.pdf</u> (patients' own views), <u>https://doi.org/10.1377/hlthaff.2020.01452</u> (doctors), <u>https://doi.org/10.1002/ajmg.a.34054</u> (genetic counselors)
- Week 2: o https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section7.html
- Week 3: Pedigree nomenclature: <u>http://dx.doi.org/10.1007/s10897-008-9169-9</u>
- Week 4: Heritability calculations: <u>http://dx.doi.org/10.1038/nrg932</u>, explore <u>http://match.ctglab.nl/#/home</u>
 - Mendelian inheritance patterns: <u>http://www.nature.com/scitable/topicpage/mendelian-geneticspatterns-of-inheritance-and-single-966</u>
- Week 5:
 - PTC paper: <u>https://www.genetics.org/content/172/4/2015</u>, <u>https://www.frontiersin.org/articles/10.3389/fgene.2019.01272/full</u>
 - Complex disease: <u>http://www.nature.com/scitable/topicpage/complex-diseases-research-andapplications-748</u>
- Week 6: O Linkage analysis to identify Huntington's Disease: <u>http://www.nature.com/scitable/content/History-of-genetic-disease-The-molecular-genetics-15297</u>
- Week 7:

- GWAS: <u>https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1002822</u> o Missing heritability in GWAS: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2831613/</u> o Indigenous people and the Human Genome Diversity Project: <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC479208/</u>
- Week 8:
 - Exome sequencing: <u>https://www.nature.com/articles/nrg3031</u> <u>https://www.nature.com/articles/ejhg2011258</u>
 Whole genome sequencing: <u>https://ojrd.biomedcentral.com/articles/10.1186/s13023-019-1127-0</u>
- Week 9: 0 Gene therapy: https://science.sciencemag.org/content/359/6372/eaan4672/tab-pdf
- Week 10:
 - Anencephaly cluster in WA state and identifying environmental causes: <u>https://www.doh.wa.gov/Portals/1/Documents/Pubs/210-092-NTDReport.pdf</u>
 - Infectious disease: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2640252/</u> and <u>https://www.nature.com/articles/s41576-020-00297-6</u> and <u>https://www.genetics.org/content/208/2/779</u> and <u>https://pubmed.ncbi.nlm.nih.gov/29288441/</u>

Grading:

Your course grade will be based upon the following activities:

- Discussion section = 39%
 - **Presentations** ~23% total (lowest score dropped).

Reviews of scientific literature selected by the student, applying the course topic from the previous week's lectures to a trait/disease of interest. Presentations of the selected paper will consist of summarizing the work, answering a list of questions (posted on canvas) connecting the paper to the specific techniques learned in lectures, then directing the critique and analysis from peers to stimulate an active discussion.

- Literature finding: 9%

Searching for papers in the primary literature which fit the topic of interest and type of experiment covered in lecture. (1 point for right kind of paper, 1 pt for relevant to phenotype assigned, 1 point for finding and uploading full pdf.)

- **Citizenship** = 7% total

Self- and TA-evaluated performance as an audience member in others' presentations and discussions, plus participation in TA-led literature reading tutorial and causality discussion in the first two weeks.

• **Problem sets** = 36% total (lowest score dropped)

These are canvas "quizzes" you may take at home, covering the previous week's lectures. (One homework assignment is going to office hours and taking a family health history.) They are posted on Thursday after class. If there are issues with the automated grading by the canvas algorithm, please contact the TA. Late assignments will be marked down 10% per day unless arrangements have been made **in advance** with the TA.

• **Final exam** = 22% total

The final exam will based heavily off material from homework sets (same types of problems, data the questions are using may be different). It will be open-notes (including lecture recordings).

• Surveys = 3%

Helping out instructors by participating in surveys and evaluations throughout the quarter!

Grading mistakes:

Though I try to record scores accurately, mistakes could happen. It is your responsibility to check your scores in the gradebook on Canvas. If there's an error in grade entry, let me know before the final exam. You should also check your final course grade, which will be calculated using the table below.

If you think a mistake was made in grading a question (in an in-class exercise, a homework assignment, a quiz or the final exam), you may ask for a question to be regraded. To do so, attach a note to your paper outlining which question you want regraded and why. Be specific about what you don't understand or why your answer deserves more credit. Turn this request in *to the member of the teaching team who is responsible for grading this assignment*.

Criteria for grading:

Your final grade will be calculated as a percentage of the total possible points in this class (expected to be 300 points) that you earn. This percentage will be converted to a final decimal grade according to the attached grade schedule. This class will thus <u>not</u> be graded on a curve; grading will instead be to criteria. Grading will be based on the following criteria:

- Did you complete all parts of the assignment and answer all questions fully?
- Are your answers comprehensible? If we can't understand what you are trying to say, we have to assume you don't, either. This isn't a writing or public speaking class but being able to clearly communicate ideas is still important, because we can only grade your understanding based on your answer as given.
- Are your methods logical? We cannot provide assessment based on your thinking process unless you accurately record it. A big part of this is showing your work and explaining your reasoning on paper, so that even if your final answer is wrong, we can still provide partial credit.
- Did you understand the main point of the assignment? Did you correctly incorporate previously learned information from lectures and readings? Is your answer fully in your own words?
- Do your final answers make sense? Are facts stated in your assignment correct?
- Is your work on time? Late homework assignments will be 10% off each day unless prior arrangements have been made.

Letter grade	Cutoff %	Decimal grade
А	98	4.0
	96	3.9
А-	94	3.8
	92	3.7
	91	3.6
	90	3.5
B+	89	3.4
	88	3.3
	87	3.2
В	86	3.1
	85	3.0
	84	2.9
В-	83	2.8
	82	2.7
	81	2.6
	80	2.5
C+	78	2.4

Letter grade	Cutoff %	Decimal grade
C+	76	2.3
	74	2.2
С	72	2.1
S	70	2.0 = S
NS	68	1.9 = NS
C-	66	1.8
	64	1.7
	62	1.6
	60	1.5
D+	58	1.4
	56	1.3
	54	1.2
D	52	1.1
	50	1.0
	48	0.9
D-	45	0.8
	42	0.7

The following scale maps this percentage to a numerical grade on the 4.0 scale.

The following list (from Faculty Resource on Grading) characterizes the numeric grades in words:

• 3.9 - 4.0 Superior performance in all aspects of the course with work exemplifying the highest quality. Unquestionably prepared for subsequent courses in field.

- 3.5 3.8 Superior performance in most aspects of the course; high quality work in the remainder. Unquestionably prepared for subsequent courses in field.
- 3.2 3.4 High quality performance in all or most aspects of the course. Very good chance of success in subsequent courses in field.
- 2.9 3.1 High quality performance in some of the course; satisfactory performance in the remainder. Good chance of success in subsequent courses in field.
- 2.5 2.8 Satisfactory performance in the course. Evidence of sufficient learning to succeed in subsequent courses in field.
- 2.2 2.4 Satisfactory performance in most of the course, with the remainder being somewhat substandard. Evidence of sufficient learning to succeed in subsequent courses in field with effort.
- 1.9 2.1 Evidence of some learning but generally marginal performance. Marginal chance of success in subsequent courses in field.

Incomplete: An Incomplete is generally given only when the student has been in attendance and has done satisfactory work until within two weeks of the end of the quarter and has furnished proof satisfactory to the instructor that the work cannot be completed because of illness or other circumstances beyond the student's control. A written statement of the reason for the giving of the Incomplete, listing the work that the student will need to do to remove it, must be filed by the instructor with the head of the department or the dean of the college in which the course is given. <u>http://www.washington.edu/students/gencat/front/Grading_Sys.html#I</u>

Satisfactory/Not satisfactory:

The last day to switch to S/NS grading is typically the end of the seventh week of the quarter. However, Autumn 2020 has been designated an Extraordinary Circumstances Quarter which leaves the ability to change to S/NS grading left in the hands of students after that point. Note that this means the instructor will assign decimal grades as above, but that by arrangement with the registrar you will be able to convert a grade of 2.0 or above to showing up on your transcript as an S if preferred (e.g. for GPA reasons). During an extraordinary circumstances quarter S grades can count towards degree requirements. <u>https://registrar.washington.edu/students/ec-gradingchange-request/</u>

Attendance:

This class has only the weekly discussion section conducted synchronously, recognizing the difficult life circumstances we find ourselves in amidst a pandemic. This emphasis on asynchronicity is to facilitate as much as possible your ability to cram this class around the edges of the other things you doubtless have going on right now. That being said, regular "attendance" continues to be expected in the virtual realm. For the asynchronous lectures, that consists of actually viewing the lectures, and participating in the in-lecture questions in panopto when you do so. For the synchronous meeting, that consists of participating in the discussions via the zoom meeting. You get graded for participation, not for attendance, but you cannot participate if you do not attend.

Please look over the calendar on the first page at the beginning of the quarter: if it is clear in advance that you must miss a synchronous session or deadline due to a legitimate, unavoidable reason (such as a professional obligation or UW-sponsored event), contact the instructor with the details of your absence to make alternate arrangements. If conflicts arise as the quarter progresses, please let us know as soon as you know: we know that work and caregiver schedules are more in flux than ever right now, and we can be flexible if you let us know in advance!

If an unforeseeable medical, family or personal emergency happens, contact your instructors **as soon as you are able** to make arrangements for coming up with alternate assessment plans. In doing so you are encouraged to provide documentation. Documentation need NOT be a doctor's note (even if you were already requiring the care of a medical professional, but the medical care system tends to be busy performing more essential functions),

but can <u>instead include self-documentation</u>. Self-documentation is your honor-code-abiding description of the nature of the absence, optionally accompanied by corroborating evidence that it is easy for you to collect. (Examples might include a screenshot of message about needing to be a caregiver for a child, a photo of the tree that fell across your driveway, a program for an event, etc.) We don't want to invade your privacy: just give enough detail that the grading team can have something on file to justify waiving deadlines or prorating assignments for you while being fair to others in the course.

If you have an unavoidable, adequately communicated conflict during more than one of the scheduled quiz sections, your presentation grade will instead be based upon submission of notes about answers to the discussion prompts.

Classroom etiquette:

In this class, we will (likely) have very diverse students from diverse backgrounds representing many different perspectives on the course material. I view this as an asset for the course, because we can learn a great deal from one another. However, this requires that you come to class prepared to participate in class discussions, and also that you maintain a respectful attitude towards one another and your instructors throughout the class.

To ensure a positive, effective learning environment:

- Please arrive promptly to synchronous meetings, especially when they are being led by your peers, and do not pack up your things or leave until the lesson is over. If an exception is unavoidable, do so unobtrusively.
- Class participation is critical and expected. Contribute to the learning atmosphere, ask/answer questions, engage in group work, and come prepared. Preparation may include having done any assigned readings, having had adequate sleep and/or caffeine so you are *mentally* present not just physically in front of a camera!
- In zoom we welcome the use of the chat feature to buttress points or ask questions without feeling like you're interrupting. Chat counts as a means for contributing to the discussion, so when you're presenting consider assigning someone from your group to the task of monitoring the chat for questions!
- Turn video resolution down, call in for audio if you there are possible bandwidth issues anticipated.
- Fully engaging in the course means that you should NOT be text messaging, writing emails, surfing the web, doing work for other classes, or socializing during our class time. Using technology for purposes not related to the particular class impacts your own learning negatively (<u>dx.doi.org/10.1080/03634523.2015.1038727</u>)... and when classes meet in rooms it is also distracting to everyone seated around you (<u>dx.doi.org/10.1016/j.compedu.2012.10.003</u>)
- If instructors deem your behavior disruptive, you may be asked to leave. If you are bothered by someone else's classroom conduct, feel free to speak to them (respectfully) and don't hesitate to tell me if it continues.
- Eating and drinking during remote meetings is fine. I'm not allowed to let students eat during in-person class right now, but you can pull your mask down to drink because hydration is important. There's no dress code and you can take bathroom breaks when you need to.
- If your kids/pets/other valued member of your quaranteam need to come to discussion/office hours with you, the rest of the class enjoys your mute button (although it sadly doesn't work when they're in the room with you ☺).
- If something during class is unclear to you are probably not the only one confused; please get the attention of the person leading the discussion and ask for clarification. We greatly appreciate the ability to improve right away. This is the big downside of asynchronous lectures, use office hours or email instead, and there will be some addendum video clarifications posted as needed.

- Seriously, please take advantage of office hours! Your instructors really want to help you master the material and succeed in the course. If you have questions that veer outside of the scope of our class, we would love to discuss them with you during office hours!
- Check your UW email, or whatever other device you are choosing to have Canvas notifications sent to!

Recordings:

Lectures are recorded, but office hours and discussion sections are not. This is to provide privacy and to allow students to feel less apprehensive about asking questions and discussing controversial topics. Students who have DRS accommodations which specifically mention their rights to audio recordings may record the sound only of discussion sections for their own personal use. Enrolling in this course means that you agree NOT to make or share video recordings of online office hour or discussion spaces.

Respecting intellectual property:

You may download course content (lectures, slides, handout documents, discussion posts) for your own personal use in this course and for future reference. However, these materials remain the intellectual property of the people who created them. Whether generated by your instructor(s) or by your peers, you may not share course materials more widely without permission, particularly for personal profit. The legalese follows.

All of the expressions of ideas in this class that are fixed in any tangible medium such as digital and physical documents are protected by copyright law as embodied in title 17 of the United States Code. These expressions include the work product of both: (1) your student colleagues (e.g., any assignments published here in the course environment or statements committed to text in a discussion forum); and, (2) your instructors (e.g., the syllabus, assignments, reading lists, and lectures). Within the constraints of "fair use", you may copy these copyrighted expressions for your personal intellectual use in support of your education here in the SPH department. Such fair use by you does not include further distribution by any means of copying, performance or presentation beyond the circle of your close acquaintances, student colleagues in this class and your family. If you have any questions regarding whether a use to which you wish to put one of these expressions violates the creator's copyright interests, please feel free to ask the instructor for guidance.

Expectations for collaborations:

The ability to work well in a group is an important skill, and you are encouraged to work in small groups on all assignments, both in and outside of this class.

- <u>Homework</u> and <u>in-class</u> assignments may be completed in consultation with classmate(s), but each person must submit their own answers representing their own understanding. That is, you can discuss your methods, logic and answers with as many people as you like, but you must formulate your final answers yourself: put them in your own words, show your own work for calculations. You may **not** simply copy someone else's answers or turn in identical work.
- <u>Exams</u> may not involve any collaboration, whatsoever. The final consists of questions that are taken from the homework problem sets, so you will have had ample opportunity to prepare with the help of others... the exam is your chance to demonstrate your independent mastery of the material. In a distance learning setting, we are making the final open notes but relying on the UW honor code (rather than exam proctoring services) to ensure that students are complying with the request to work independently.

Academic Integrity Statement:

Students at the University of Washington (UW) are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity.

The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university's policies on cheating and plagiarism, and the SPH Academic Integrity Policy (found at http://sph.washington.edu/students/academicintegrity/). Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington Community Standards and Student Conduct website (http://www.washington.edu/cssc/).

Diversity:

Diverse backgrounds, embodiments and experiences are essential to the critical thinking endeavor at the heart of University education. In the SPH, students are expected:

- 1. To respect individual differences, which may include, but are not limited to, age, cultural background, disability, ethnicity, family status, gender, immigration status, national origin, race, religion, sex, sexual orientation, socioeconomic status and veteran status.
- 2. To engage respectfully in the discussion of diverse worldviews and ideologies embedded in course readings, presentations and artifacts, including those course materials that are at odds with personal beliefs and values.
- 3. To encourage students with concerns about classroom climate to talk to their instructor, adviser, a member of the departmental or SPH Equity, Diversity and Inclusion (EDI) Committee, the Assistant Dean for EDI, or the program's director.

Please talk with me right away if you experience disrespect in this class (including from me!) and I will work to address it.

Bias:

The Office of the Dean has a student concern policy along with a faculty concern policy and standard HR procedures for staff concerns. Their 2018 climate survey states that most people in SPH do not report bias incidents because they do not know where to go. Students are encouraged to report any incidents of bias to someone they feel comfortable with, including instructors, advisers or department staff. Emailing <u>dcinfo@uw.edu</u> is a resource for immediate follow up for students with classroom climate concerns. Bias concerns can be anonymously and confidentially reported at <u>https://sph.washington.edu/about/diversity/bias-concerns</u>. Data is collected by the Assistant Dean for EDI as well as the Director of Program Operations for Student and Academic Services. This data is tracked for resolution and areas are identified for further training.

Access and Accommodations:

Your experience in this class is important to us. If you have already established accommodations with DRS, well done! At the start of the quarter your instructor was notified by DRS about your approved accommodations, and we are delighted to work with them. Please communicate with your instructor at your earliest convenience so we can discuss specifics about how to best meet your needs in this particular course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or <u>uwdrs@uw.edu</u> or <u>http://disability.uw.edu</u>. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

Safety:

Call SafeCampus at 206-685-7233 anytime – no matter where you work or study – to anonymously discuss safety and well-being concerns for yourself or others.

Mental health resources:

Being overwhelmed by issues such as significant stress, mood changes, excessive worry, or problems with eating and/or sleeping can interfere with optimal academic performance. (And yes, that probably covers each and every one of us.) Sometimes the cause of stress itself might be related to your academics: if so, please speak with your instructors about what we can do within the parameters of the course to help. However, problems with relationships, family worries, loss, or a personal crisis can have a far bigger impact than PHG301 does. The UW has resources to support UW students in all aspects of their development. Whether it's preventative measures and coping skills, support groups, individual counseling, or pharmaceutical help, there are a lot of options provided by different entities around campus, and they're all consolidated at (https://wellbeing.uw.edu/topic/mental-health/). Your tuition is already paying for these services, so please consider using them. Getting help is a smart and courageous thing to do -- for yourself *and* for those who care about you.

Religious Accommodations:

Washington state law requires accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at <u>Religious Accommodations Policy</u>

(https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the <u>Religious Accommodations Request form</u> (https://registrar.washington.edu/students/religious-accommodations-request/).

Land Acknowledgment:

"The University of Washington acknowledges the Coast Salish people of this land, the land which touches the shared waters of all tribes and bands within the Duwamish, Suquamish, Tulalip and Muckleshoot nations." **Students physically located outside of the US:**

Faculty members at U.S. universities – including the University of Washington – have the right to academic freedom which includes presenting and exploring topics and content that other governments may consider to be illegal and, therefore, choose to censor. Examples may include topics and content involving religion, gender and sexuality, human rights, democracy and representative government, and historic events.

If, as a UW student, you are living outside of the United States while taking courses remotely, you are subject to the laws of your local jurisdiction. Local authorities may limit your access to course material and take punitive action towards you. Unfortunately, the University of Washington has no authority over the laws in your jurisdictions or how local authorities enforce those laws.

If you are taking UW courses outside of the United States, you have reason to exercise caution when enrolling in courses that cover topics and issues censored in your jurisdiction. If you have concerns regarding a course or courses that you have registered for, please contact your academic advisor who will assist you in exploring options.

COVID-related policies:

Note SPH specific guidance here: <u>https://sph.washington.edu/sites/default/files/2021-09/SPH Syllabus Template including required and expected statments 9.2021 v2.docx</u>

All UW students are expected to complete their <u>vaccine attestation</u> before arriving on campus and to follow the campus-wide face-covering policy at all times. You are expected to follow state, local, and UW COVID-19 policies and recommendations. If you feel ill or exhibit possible COVID symptoms, you should not come to class. If you need to temporarily quarantine or isolate per CDC guidance and/or <u>campus policy</u>, you are responsible for notifying your instructors as soon as possible by email. If you receive a positive COVID-19 test result, you must report to campus Environmental Health & Safety (EH&S) by emailing <u>covidehc@uw.edu</u> or calling 206-626-3344.

Food is not allowed in the classroom. Drinks may be sipped with lifting or removal of your facemask for a brief moment, and immediate re-masking after drinking.

<u>Please check your email daily BEFORE coming to class</u>. If we need to conduct class remotely because the instructor or a guest speaker is complying with UW policies and unable to attend in person, we will send all registered students an email with a Zoom link for remote instruction. Thank you for your patience and support as we all transition together back to in-person learning!