# **Fundamentals of Public Health**

# PHS 3050 – Fall 2022

## Tuesdays & Thursdays, 12:30-1:45pm, C1 Classroom, Old Medical School

Instructor: Paige P. Hornsby, Ph.D.

Email: [pph8c@virginia.edu](mailto:pph8c@virginia.edu) (note: I will do my best to respond within 24 hours)

Office hours: T 2:00 – 3:30 (in person) & W 10:30 – 12:00 (on Zoom), or by appointment

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Office hours: M 3:30 – 4:30 & Th 9:00 – 10:00, or by appointment

# Why enroll in this course?

Public health is both difficult to define and all around us. What has operated in the background of our lives suddenly became our national focus when the SARS-CoV-2 pandemic arrived. Yet there’s so much more to public health than viruses and infectious diseases. You may have friends or family (or may yourself be) impacted by an unhealthy diet, substance abuse, diabetes, or depression. Or maybe you’ve heard (or read) that climate change is causing higher rates of asthma, or that disease-causing organisms are becoming increasingly resistant to antibiotics. What health information can you trust?

I am an epidemiologist who loves to excite others about my field (and public health in general). Epidemiology is one of the core disciplines of Public Health, but it’s not the only one. Epidemiology, Biostatistics, Biomedical Sciences, Social & Behavioral Sciences, Environmental Science, and Health Policy & Management make up the field of public health. Each of these disciplines contributes valuable information and perspectives, so we’ll hear from some other public health professionals during the semester. We’ll also explore graduate training and potential careers in the field.

My overarching goal in this course is to equip you to be an informed citizen who recognizes the value of public health and sees public health in action (or not) all around you. I hope that some of you are even inspired to become public health professionals!

# What will you learn?

By the end of the course, you will be able to:

1. Explain the contributions of each of the public health disciplines.
2. Determine the impact of health issues & risk factors on a given population.
3. Describe programs to address a given health issue.
4. Connect course material to your own health behavior & professional goals.
5. Collaborate respectfully and effectively with a team to apply and integrate course concepts.
6. Identify & evaluate public health activities in a broad range of settings.
7. Identify sources for accurate information on a given health topic.

# How will we work together?

I recognize and value the many perspectives my students bring to the classroom. Many factors—social identities, visible and invisible disabilities, family circumstances, physical location, mental health, access to the internet—influence the experiences that every individual can have. I am committed to building an inclusive environment, where you feel that you belong and in which you can succeed.

The work of public health is rarely done alone. To mimic working in the field and to demonstrate the benefits of working on a team, you will be assigned to a small group of ~4 students for the semester. On Tuesdays, you will work with your small group to discuss articles, documentaries, and other materials that illustrate the course content and to complete a semester-long project. On Thursdays, we will have interactive lecture and whole-class discussion.

Please be considerate of others in our classroom community by arriving on time and using electronic devices only for course-related purposes and activities.

# What resources will we use?

We will use one general textbook and numerous articles, videos, and documentaries to inform our learning and discussions. Readings and viewings for each class are listed by date at the end of this syllabus and will also be available (and updated if necessary) on the last slide for each class session.

**Required text**: Schneider M. Introduction to Public Health. 6th ed. Boston, MA: J&B Learning; 2021. (Note: an earlier edition of the textbook may be used, but chapter numbers may have changed.)

This course will take part in the inclusive access program with the UVA Bookstore which allows you instant access to the required textbook at the lowest price. You will have immediate access through Collab for the first 2 weeks of class—for free. Login to the PHS 3050 Collab site and follow the instructions to access the textbook. **After September 6,** your student account will be charged **$37.04.** You will receive an email from UVA Inclusive Access with detailed information about accessing the materials, costs, and opting out. This program is optional, but you must actively opt out by the deadline to not be charged and to not lose access to the materials. If you have any questions regarding the program, please email [UVAInclusiveAccess@virginia.edu](mailto:UVAInclusiveAccess@virginia.edu).

**Other readings, course materials, and links to videos and documentaries** will be posted on the course Collab site, under the Resources tab in a folder for that class date.

If you need any help accessing or navigating Collab, please let me or our course grader know, or visit: <https://uvacollab.screenstepslive.com/m/students>.

# How will your learning be assessed?

**Small group discussion notes**: To further solidify your understanding of foundational knowledge, allow you to develop teamwork skills, and facilitate discussion of course concepts, each Tuesday you will work in your small groups. Discussion questions and prompts will be provided in class. One member of each group will submit notes for the ideas and questions that arise from your small group’s discussion; you will rotate this responsibility.

(5% of course grade)

**Prep question answers**: To help you prepare for your small group discussion sessions and solidify your grasp of foundational public health knowledge, you will submit brief answers to 2 questions about the content of the article, documentary, or other material assigned for group discussion that week. You will also submit a brief written description, image, video, or other media representation of a public health activity that you noticed. Further guidelines and examples will be provided in class.

(5% of course grade)

**Small group collaboration goals**: Regardless of prior experience, each of us can learn how to be a more effective team member. Using a template provided in class, you will set personal goals for your collaboration with your small group at the beginning of the semester. You will then assess your progress toward these goals mid-semester and at the end of the course.

(5% of course grade)

**Small group project**: The purpose of the small group project is to help you understand and apply information from the different disciplines of public health, develop your research and visual presentation skills, and enhance your ability to collaborate effectively on a team. This assignment allows you to take a deep dive into a topic of your group’s choosing. Mid-semester, you will give feedback on another group’s project and self-assess your own. At the end of the course, you will vote on your favorite projects. More detailed information will be presented in class.

(30% of course grade)

**Quizzes**: There will be 3 quizzes to assess your grasp of the course material as we progress through the semester. Quizzes will be posted on Collab and are due by class time on the date indicated. These assessments are open-book and will include multiple choice, T/F, matching, and short answer questions. You will have the opportunity to submit revisions for any quiz score below 75%. Example questions will be provided in class.

(10% of course grade, each)

**Final exam**: There will be a final, cumulative, open-book exam, formatted like the quizzes. The exam will be available on Collab from 9 am – midnight on the date indicated.

(25% of course grade)

# Course policies

**Participation**: We each benefit from full engagement in the course, both for ourselves individually and as a group. Therefore, attendance at all class meetings, participation in small group activities, and on-time completion of assignments are expected. However, if you are not feeling well, are otherwise unable to attend class, or if you need more time to complete an assignment, please email me at least 24 hours in advance (if possible). There is no penalty for absences and late submissions for reasons that comply with UVA guidelines (available online), however, a 10% reduction may be applied to your overall course grade for multiple unexcused absences and/or unapproved late assignments.

**Honor Code**: Trust is a key value delineated in the “Principles of the Ethical Practice of Public Health” developed by the Public Health Leadership Society (available on the course Collab site). We each benefit from being part of a community of trust. Acting in a manner consistent with the principles of honor benefits every member of our community here in the classroom and will benefit you as a professional in whatever field you pursue. Prep question answers, quizzes, and the final exam are open-book and should be completed independently. Discussion question answers and the group project will be completed with your small group members. For more information regarding the Honor System, please consult the Honor Committee website at: [www.virginia.edu/honor](http://www.virginia.edu/honor).

**Grading**: Please see [Default Grading Basis Thresholds in UVA Collab](https://virginia.service-now.com/its?id=itsweb_kb_article&sys_id=1153c16fdba41f444f32fb671d961934).

# Resources if you need help at any time

I will do everything I can to support you and connect you with UVA well-being resources if you are feeling overwhelmed, stressed, or isolated. The Student Health and Wellness Center offers [Counseling and Psychological Services (CAPS)](https://studenthealth.virginia.edu/caps) for its students; call 434-243-5150 to speak with an on-call counselor and/or schedule an appointment. If you prefer to speak anonymously, you can call Madison House’s [HELP Line](http://www.helplineuva.com/) at any hour of any day: 434-295-TALK. Alternatively, you can call or text the [Disaster Distress Helpline](https://www.samhsa.gov/find-help/disaster-distress-helpline) (1-800-985-59900) or text TalkWithUs (to 66746) to connect with a trained crisis counselor. This resource is toll free, multilingual, and confidential.

For information on CARES Act Student Emergency Funding, Bridge Scholarships, and Emergency Loans, please visit [Student Financial Services Operational Updates](https://sfs.virginia.edu/sfs-operational-updates). You might also be eligible for an [Honor Loan](https://odos.virginia.edu/honor-loan-application). Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or lacks a safe, stable place to live and believes this may affect their performance in the course is urged to contact the [Dean of Students](https://odos.virginia.edu/food-insecurity) for support. Furthermore, please notify me if you are comfortable doing so.

In accordance with the ADA, as Amended, and Section 504 of the Rehabilitation Act, UVA offers an array of individualized accommodations and services to qualified students with disabilities. Accommodations are determined using an interactive process between the student and Student Health – Student Disability Access Center staff. If you would like more information, please contact the Student Disability Center at [SDAC@virginia.edu](mailto:SDAC@virginia.edu) or 434-243-5180.

# Our schedule

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| **Date:** | **Class Topic:** | **Readings & Assignments:** | **Format:** |
| 8/23 | What is Public Health? | * syllabus * ch. 1 * Collab | lecture &  class discussion |
| 8/25 | Brief History of Public Health  & Epidemiology | * ch. 4 * Collab | lecture &  class discussion |
| 8/30 | Disease Outbreaks & Cholera | * Collab * prep questions | small group  discussion |
| 9/1 | Epidemiology:  Principles & Methods | * ch. 5 * small group goals * discussion notes | lecture &  class discussion |
| 9/6 | Epidemiologic Investigation | * Collab * prep questions | small group  discussion |
| 9/8 | What are the limits  of Epidemiology? | * ch. 6 * discussion notes | lecture &  class discussion |
| 9/13 | How do we interpret  a Public Health headline? | * Collab * prep questions * **quiz 1** | small group  discussion |
| 9/15 | What is the  government’s role? | * ch.s 2 & 3 * discussion notes | guest lecture |
| 9/20 | What does a Health  Department do? | * Collab * prep questions | small group  discussion |
| 9/22 | Biostatistics:  Quantifying Health  & Assessing Uncertainty | * ch. 7 * Collab * discussion notes | lecture &  class discussion |
| 9/27 | How do we interpret  Public Health research? | * Collab * prep questions | small group  discussion |
| 9/29 | Where does health  information come from? | * ch. 8 * Collab * discussion notes | lecture &  class discussion |
| 10/4 | -- Reading day -- | -- none -- | -- no class -- |
| 10/6 | Biomedical Sciences:  Infectious Diseases | * ch.s 9-10 * goals update #1 * **project topic** | lecture &  class discussion |
| 10/11 | Vaccines | * Collab * prep questions * **quiz 2** | small group  discussion  **on ZOOM** |

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| 10/13 | Biomedical Sciences:  Chronic Diseases | * ch. 11 * Collab | lecture &  class discussion  **on ZOOM** |
| 10/18 | Small Group Project | * individual research * prep questions | small group  work session |
| 10/20 | Social & Behavioral Sciences:  The Social  Determinants of Health | * ch.s 13 & 14 * Collab * discussion notes | guest lecture |
| 10/25 | Heart Disease, Sex, & Gender | * Collab * prep questions | small group  discussion |
| 10/27 | Public Health Enemies 1 & 2 | * ch.s 15 & 16 * discussion notes * **project part 1** | lecture &  class discussion |
| 11/1 | Diet in the U.S. | * Collab * prep questions * **quiz 3** | small group  discussion |
| 11/3 | Environmental Science:  The Role of the  Environment in Public Health | * ch. 20 * Collab * discussion notes | guest lecture |
| 11/8 | -- Election Day -- | -- none -- | -- no class -- |
| 11/10 | Emergency  Preparedness & Response | * ch. 30 * Collab | lecture &  class discussion |
| 11/15 | One Health & Climate Change | * Collab * prep questions | small group  discussion |
| 11/17 | Health Policy & Management:  Medical Care & Public Health | * ch.s 26 & 27 * Collab * discussion notes | guest lecture |
| 11/22 | Small Group Project | * individual research * prep questions | small group  work session |
| 11/24 | -- Thanksgiving -- | -- none -- | -- no class -- |
| 11/29 | Pediatric Asthma | * Collab * prep questions | small group  discussion |
| 12/1 | Pulling It All Together:  the Example of  Maternal & Child Health | * ch. 18 * Collab * discussion notes * **infographic** | lecture &  class discussion |
| 12/6 | The Future of Public Health  & Public Health Careers | * ch. 31 * Collab * goals update #2 * **complete project** | brief lecture  & careers panel |
| 12/12 | Final Exam | * **final exam** | due by midnight |