

# AS.280.101 – Introduction to Public Health

Johns Hopkins University

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Request appointment: <https://kit.jhu.edu/PHSCal>

## Course Description

This course provides a broad overview of the field of public health. Topics include the major causes of morbidity and mortality; the socioeconomic, behavioral, and environmental factors that affect health; the role of governmental and non-governmental organizations in protecting the public's health; key features of the U.S. health care system; and current challenges in the field. The course introduces students to the basic analytical methods used in the field as well as conceptual models and approaches that are central to public health research and practice. This is a writing-intensive course in which students complete a series of assignments and exercises replicating realistic scenarios relating to current public health issues.

## Course Learning Objectives

Upon successful completion of this course, students will be able to:

1. Describe the structure and functions of major components of the public health system in the United States.
2. Explain the public health approach to solving health problems and recognize the analytical tools used at each stage of this approach.
3. Locate and synthesize credible data and publications about a specific public health topic and produce an issue brief summarizing that information.
4. Describe the major causes of morbidity and mortality and key socioeconomic, behavioral, biological, and environmental factors that affect health.
5. Use conceptual models to identify opportunities for primary, secondary, and tertiary prevention and give examples of each prevention strategy.
6. Evaluate and compare policies aimed at addressing a particular public health problem.
7. Discuss controversies in public health and the major challenges facing public health professionals today.

## Communication

Important information will be communicated to you via email, so please check your official JHU email frequently and always read emails from Dr. B. and your TA. When you have questions about logistical matters, your TA should be your first point of contact. If you would like to meet with me (Dr. B.) about substantive matters (and I hope you do), I am available for office hours by appointment. The Public Health Studies program uses a scheduling system called "PHSCal," which you can access at <https://kit.jhu.edu/PHSCal>. PHSCal allows you to view my availability and request a meeting time slot. There is no need for you to email me first to ask if you can schedule an appointment—the answer is yes. PHSCal will automatically send me an email notifying me of your request. Please request meetings at least a day in advance, if possible, as I cannot always accommodate meeting requests on short notice. Note: by default, PHSCal limits my availability to regular business hours. If you cannot meet during those hours, please email me. With enough notice, I can usually be available for an early morning meeting or an evening meeting if necessary.

## How this class works

### General principles.

- As the course instructor, my role is to help you achieve the course learning objectives by structuring the course in a way that encourages you to actively engage with accessible content. I provide instructional materials that present and explain fundamental public health concepts, assign tasks that mirror real-world public health practice, and offer guidance on how to approach it all.
- Your responsibility is to demonstrate that you have achieved the course learning objectives. Thoughtfully and consistently engaging with the instructional materials, participating in the class activities, and completing the assignments will maximize your chances of succeeding in this course. The course instructor and teaching assistants are here to support you, so if you need or want additional guidance, please take advantage of our office hours.
- Grades should reflect your ability to demonstrate that you have achieved the course learning objectives. Accordingly, grades for this course are based more on your outputs than your inputs, and more on your later attempts than your earlier attempts.
- Learning requires reflection. Reflection requires effort. Throughout this course, you will be prompted to reflect on the material and activities, sometimes through writing and sometimes through discussion with your classmates. Taking time to think about these prompts and compose careful responses to them will deepen your learning. Essentially, what you get out of this class will be determined largely by what you put into it.

**Format.** This course will follow an in-person format with two lectures and one lab each week taking place on the Homewood campus. Out of respect for your privacy, class meetings will not be recorded. Course materials are organized into modules, labs, and assignments on Canvas. Note that this format differs from previous semesters. Please read this syllabus carefully to familiarize yourself with the course structure, policies, and expectations.

**Online Modules.** The online modules essentially take the place of a textbook. Much of the course content is delivered in these modules through annotated slides, video recordings, and readings. In the annotated slides I will walk you through the material (with my "voice" in this font). These files are designed to be viewed as a slide show. To optimize your experience, use a device that allows you to flip back and forth through the slides, if possible, rather than scrolling up and down. Begin each module with the slides because they will direct you to specific sections of the readings where those readings are most relevant and when it will be most helpful to consult them. Some modules are longer than others.

**Lectures.** Twice per week—Tuesdays and Thursdays, 3:00-4:15—we will meet in person as a large group. While officially referred to as "lectures," these class meetings will consist of a mix of presentation, discussion, case studies, and conversations. For some lectures, you will be asked to complete an online module in preparation for the class meeting. For other lectures, you may be asked to review some background materials and prepare questions for a guest speaker. If you are unable to attend a lecture, please ask a classmate for notes. Do not email me to ask what you missed.

**Labs.** Once per week, your class section will meet in person for a "lab" led by your Teaching Assistant (TA). You will meet at the time and place listed in SIS for your section. These labs provide an opportunity to explore topics in depth and from multiple perspectives. Some weeks you will be asked to prepare for lab by completing a module, reading an article or chapter, watching a video, or reflecting on some questions in advance. These materials and instructions are on Canvas under "Labs." During lab, you will be asked to complete a lab exercise as a group. Lab exercises generally consist of brief activities, questions, reflection, and guided discussion. Please bring your laptop with you to lab each week, as you will need to access Canvas and other online resources. You will submit your final lab write-up individually. Lab write-

ups will be assessed as satisfactory/unsatisfactory. You must attend lab and submit your completed write-up within one week of that lab meeting to receive credit. You may revise and resubmit up to three lab write-ups initially deemed unsatisfactory. The number of satisfactory lab exercises you submit factors into your course grade. If you are unable to attend a lab meeting, please ask a classmate for notes and follow up with your TA. Do not email me to ask what you missed. If you miss a lab, you may complete the lab exercise on your own, but you may not submit a write-up for credit.

**Discussions.** Discussion is an important part of lectures and labs. The purpose of discussion is to reflect *collectively* on the course material in order to deepen your understanding of public health concepts and broaden your thinking. Discussion requires actively engaging with your classmates, your instructors, and the course material. Discussion is a process of thoughtful exploration, not merely the act of generating an acceptable answer to a question as quickly as possible. Discussion involves a back-and-forth exchange of idea. That means making an insightful comment, asking a thought-provoking question, responding to someone else's comment or question, debating a point with someone else, and the like—essentially digging deeper and thinking about the material at a higher level.

**Assignments.** Three major assignments will provide an opportunity for you to apply key course concepts to a specific public health issue in depth. You will be given a choice of two topics. Whichever topic you choose, you must stay with that topic for all three assignments. The modules, lectures, readings, and labs, along with assignment guidelines, are intended to equip you with the information you need to complete each assignment. Still, the assignments are designed to challenge you by requiring you to learn and practice new skills. Each assignment will involve locating credible information, analyzing relevant evidence, and producing a written document that will be assessed on a satisfactory/unsatisfactory basis. The expectations for satisfactory work are quite high. Thus, an unsatisfactory first attempt should not be viewed as a failure; it simply means that more work is needed to meet the required specifications. You are allowed (and expected) to revise your assignment and submit a second attempt. Incomplete assignments will not be graded. While your first attempt need not be perfect, you must make a good-faith attempt to submit a high-quality, polished piece of work. If you do not earn a satisfactory grade on your second attempt, you may petition for a third attempt. However, a third attempt will be allowed only if you have clearly made a good-faith effort on the first two attempts and only after you have met with your TA or Dr. B. Each assignment builds on the previous ones, so you must complete each assignment satisfactorily before moving on to the next one. It is important to submit all assignments on time, as multiple late submissions will negatively impact your course grade and can result in you not completing all of the assignments by the last day of classes, which will result in a failing grade for the course. Instructions and guidelines for each assignment will be provided on Canvas.

**Final Exam.** A cumulative final exam will round out the semester, giving you a chance to consolidate what you have learned throughout this class. The exam will consist of essay questions covering course material from the entire semester. It will be a take-home exam, meaning that it will be an open-note exam that you do not have to complete in one sitting. The exam questions will be posted on Canvas on the first day of final exam period and will be due on the last day of final exam period. You must work on the exam independently, meaning that you are not permitted to collaborate with anyone on any aspect of the exam. You will have only one attempt to earn credit for your responses. Canvas will allow you to upload your exam multiple times before the deadline, but we will not provide you with feedback on any early submissions. Only your last on-time submission will be graded. Submitting an exam late will result in a grade penalty. Exceptions may be made in the event of a medical or family emergency. However, exceptions will not be made for technology problems or travel, so please plan accordingly and do not wait until the last hour to submit your completed exam.

**Grading.** This course uses specifications-based grading. Under this grading approach, most work will be assessed as satisfactory/unsatisfactory, and only work that meets or exceeds pre-specified criteria will be deemed satisfactory. With some limits, you have a chance to revise and resubmit unsatisfactory work. Your course grade is determined by how many pieces of your work are ultimately deemed satisfactory. Specifically:

To earn a grade of A you must do all of the following:

- Earn satisfactory on Assignments 1, 2, and 3 – no more than 2 late submissions (first or second attempt)

- Earn satisfactory on  $\geq 10$  Lab Write-ups
- Earn a score of  $\geq 80\%$  on the Final Exam

To earn a grade of **B** you must do all of the following:

- Earn satisfactory on Assignments 1, 2, and 3 – no more than 3 late submissions (first or second attempt)
- Earn satisfactory on  $\geq 9$  Lab Write-ups
- Earn a score of  $\geq 70\%$  on the Final Exam

To earn a grade of **C** you must do all of the following:

- Earn satisfactory on Assignments 1, 2, and 3 – no more than 4 late submissions (first or second attempt)
- Earn satisfactory on  $\geq 7$  Lab Write-ups
- Earn a score of  $\geq 50\%$  on the Final Exam

Completing anything less than the requirements for a C will result in a failing course grade.

## Academic Integrity

Academic integrity is expected of all students. Integrity is not only a matter of University policy, it is essential for scientists and public health practitioners to be truthful, authentic, and competent to advance knowledge and protect human lives. Dishonesty and incompetence contribute to wide-spread lack of trust in the scientific and public health communities, the consequences of which are very real and can be serious. Many children have contracted measles (a 100% preventable disease) because of a single fraudulent study. Thousands of lives have been lost to COVID-19 because of misinformation and distrust. Academic honesty therefore is as important in preparing you for employment or further study as any course content or skill development.

Please familiarize yourself with the University's academic ethics policy which states, in part:

*Undergraduate students enrolled in the Krieger School of Arts and Sciences or the Whiting School of Engineering at the Johns Hopkins University assume a duty to conduct themselves in a manner appropriate to the University's mission as an institution of higher learning. Students are obliged to refrain from acts which they know, or under circumstances have reason to know, violate the academic integrity of the University. Violations of academic ethics include, but are not limited to:*

- *cheating;*
- *plagiarism; submitting the same or substantially similar work to satisfy the requirements of more than one course without permission; submitting as one's own the same or substantially similar work of another;*
- *knowingly furnishing false information to any agent of the University for inclusion in academic records;*
- *falsification, forgery, alteration, destruction or misuse of official University documents or seal.*

Unauthorized collaboration is also an academic ethics violation. Please work on independent assignments independently to avoid misunderstandings and unintentional duplication. Major assignments and exams for this class will be submitted through Turnitin, a plagiarism detection tool that works with Canvas. Suspected violations will be handled according to the procedures outlined in the University's policy, which can be found at: <https://studentaffairs.jhu.edu/policies-guidelines/undergrad-ethics/>

As a member of an academic community, it is vital that you respect the intellectual property of others and that others respect your intellectual property. Intellectual property refers not only to discoveries and developments resulting from scientific research, but all scholarly work, including student papers and course materials. Faculty and other instructors

may not circulate or publish student papers without the student's permission. Similarly, you are asked not to circulate or post any course materials created by your instructor without the instructor's written permission. Course materials created by the instructor of this class include, but are not limited to, the course syllabus, all lecture slides, recordings of lectures, lab exercises, assignment instructions, and exams.

## Civility

Civility is expected of all members of the JHU community at all times. A good learning environment requires mutual respect on the part of everyone in the class, students and instructors alike. Johns Hopkins University is committed to the values of diversity and inclusion. You will have classmates and instructors with backgrounds and perspectives that differ from your own. In public health classes, we frequently discuss controversial topics, and that can feel uncomfortable, especially in a group with diverse points of view, but it can also be a very positive force for learning and growth as long as everyone is civil. Please keep your comments and questions relevant to the topic at hand and use courteous language when you are communicating, whether speaking or writing. Behavior that is rude, disruptive, intimidating, or demeaning has no place in this class and will not be tolerated. Such behavior may result in being ejected from the classroom. You should all expect to be challenged intellectually by others in this class, but at no time should someone be singled out or treated unequally or disrespectfully on the basis of any part of their identity.

If you ever have concerns in this course about harassment, discrimination, or any unequal treatment, I invite you to share your concerns directly with me or with your TA. Expressing such concerns will never impact your course grade. If you do not feel comfortable sharing your concerns with me—as your instructor and as the PHS program director—or your TA, you may also share your concerns with Dr. Katie Henry, PHS assistant director ([kheberl2@jhu.edu](mailto:kheberl2@jhu.edu)), or the Office of Institutional Equity ([oe@jhu.edu](mailto:oe@jhu.edu)). In handling reports, people will protect your privacy as much as possible, but note that faculty and staff are required to officially report information in some cases (e.g. sexual harassment).

## Student Disability Services Accommodations

Reasonable accommodations may be provided for students registered with the Homewood office of Student Disability Services. If you are a student with a disability or believe you might have a disability that requires accommodations, please contact Student Disability Services (101 Shaffer Hall; 410-516-4720; [studentdisabilityservices@jhu.edu](mailto:studentdisabilityservices@jhu.edu)) to obtain an accommodation letter. Student Disability Services will inform me of any accommodations for which you are eligible. You should also talk to your TA about accommodations we can make for you in this class. You should do this as soon as possible, as accommodations are not granted retroactively. For more information, please visit the SDS web site: <https://studentaffairs.jhu.edu/disabilities/>.

## Other Accommodations & Student Support

We will make reasonable accommodations for any student experiencing an unanticipated difficult situation, such as a personal health problem or family emergency. If you experience an unexpected situation that you think might impede your ability to attend class, complete an assignment on time, or take an exam as scheduled, you should notify your TA as soon as possible. Given the difficulties and uncertainties we all continue to experience due to COVID-19, and circumstances that can change quickly, we will be as flexible as possible in accommodating your individual needs if you inform us about whatever those needs might be. Note, however, that extensions are not granted retroactively except in cases of circumstances truly beyond your control.

If you are struggling with anxiety, stress, depression or other mental health related concerns, please consider reaching out to the JHU Counseling Center at <http://studentaffairs.jhu.edu/counselingcenter/> or Student Outreach & Support (SOS) at <https://studentaffairs.jhu.edu/student-life/student-outreach-support/>. If you are concerned about a fellow student, you may also notify SOS about someone anonymously through this site.

## Tentative Course Schedule

| Sunday | Monday   | Tuesday   | Lab (Tu/W/Th)   | Thursday   | Friday  | Saturday |
|--------|--|---|---|--|---|----------|
| 8/28   | 8/29 1 <sup>st</sup> Day of Classes<br>Canvas page opens | 8/30<br>What is public health?                            | 8/30-9/1<br>Lab 1: Why public health?                                   | 9/1 <b>Module 1</b><br>PH systems & COVID-19                         | 9/2   | 9/3      |
| 9/4    | 9/5  | 9/6<br>PH systems, continued                              | 9/6-8<br>Lab 2: Measuring Health  | 9/8 <b>Module 2</b><br>Identifying PH problems                       | 9/9   | 9/10     |
| 9/11   | 9/12   | 9/13 <b>Module 3</b><br>Data sources & descriptive epi    | 9/13-15<br>Lab 3: Data & Descriptive Epi                                | 9/15<br>Scientific writing   | 9/16<br><b>Assignment 1 Due</b>                                 | 9/17     |
| 9/18   | 9/19   | 9/20 <b>Module 4a</b><br>Causes of morbidity & mortality  | 9/20-22 <b>Lab 4 Prep</b><br>Lab 4: Mandatory Vaccination               | 9/22<br>More on vaccination  | 9/23  | 9/24     |
| 9/25   | 9/26   | 9/27<br>Lyme disease case study: Part 1                   | 9/27-29<br>Lab 5: Injury  | 9/29 <b>Module 4b</b><br>OSH case study                              | 9/30<br><b>Assignment 1 Rewrites Due</b>                        | 10/1     |
| 10/2   | 10/3   | 10/4<br>Library Resources: Part 1                         | 10/4-6 <b>Module 5a</b><br>Lab 6: Social Determinants                   | 10/6<br>Guest speaker  | 10/7  | 10/8     |
| 10/9   | 10/10  | 10/11<br>Literature searching                             | 10/11-13 <b>Module 5b</b><br>Lab 7: Environmental Determinants          | 10/13<br>Guest speaker   | 10/14<br><b>Assignment 2 Due</b>                                | 10/15    |
| 10/16  | 10/17  | 10/18 <b>Module 5c</b><br>Lyme disease case study: Part 2 | 10/18-20<br>No labs this week   | 10/20 <b>Module 5d</b><br>Ecological Model                           | 10/21   | 10/22    |
| 10/23  | 10/24  | 10/25 <b>Module 6a</b><br>Prevention                      | 10/25-27 <b>Lab 8 Prep</b><br>Lab 8: Genomics                           | 10/27 <b>Module 6b</b><br>Interventions                              | 10/28<br><b>Assignment 2 Rewrites Due</b>                       | 10/29    |
| 10/30  | 10/31  | 11/1<br>Library Resources: Part 2                         | 11/1-3 <b>Module 7</b><br>Lab 9: Health Care                            | 11/3<br>What is everybody fighting about?                            | 11/4  | 11/5     |
| 11/6   | 11/7   | 11/8 <b>Module 8</b><br>Policies & programs               | 11/8-10<br>No labs this week  | 11/10<br>CBPR  | 11/11<br><b>Assignment 3 Due</b>                                | 11/12    |
| 11/13  | 11/14  | 11/15<br>Lyme disease case study: Part 3                  | 11/15-17<br>Lab 10: Policy Part 1                                       | 11/17<br>TBD   | 11/18   | 11/19    |
| 11/20  | 11/21<br>Fall Recess                                     | 11/22<br>Fall Recess                                      | 11/23<br>Fall Recess  | 11/24<br>Fall Recess   | 11/25<br>Fall Recess  | 11/26    |
| 11/27  | 11/28  | 11/29<br>TBD  | 11/29-12/1<br>Lab 11: Policy Part 2                                     | 12/1<br>TBD  | 12/2<br><b>Assignment 3 Rewrites Due</b>                        | 12/3     |
| 12/4   | 12/5   | 12/6<br>Lyme disease case study: Part 4                   | 12/6-8<br>Lab 12: Past & Future of PH                                   | 12/8<br>Wrap-up  | 12/9 Last day of Classes<br>Last day to submit any missing work | 12/10    |
| 12/11  | <b>12/12</b><br>Reading Period                           | 12/13<br>Reading Period                                   | 12/14 <b>First Day of Finals</b><br><b>Final Exam Posted by 5:00 PM</b> | 12/15  | 12/16   | 12/17    |
| 12/18  | 12/19  | <b>12/20</b>  | 12/21   | 12/22 <b>Last Day of Finals</b><br><b>Final Exam Due by 11:59 PM</b> | 12/23   | 12/24    |
| 12/25  | 12/26  | 12/27   | 12/28   | 12/29  | 12/30   | 12/31    |