Department of ENVIRONMENTAL

HEALTH

THE PHD IN POPULATION HEALTH SCIENCES

















CURRICULUM GUIDE 2023-24

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Courses – General Information

A note about semesters. Harvard Schools have various semester systems as noted below. The Harvard T.H. Chan School of Public Health (HSPH) uses the following semesters:

- Full Fall
- Fall 1
- Fall 2
- Winter Session/January Term
- Full Spring
- Spring 1
- Spring 2

Check the HSPH academic calendar for the start and end dates of each of these semesters/terms.

When registering and cross-registering [registering for courses not offered by FAS/Graduate School of Arts and Sciences (GSAS)], be aware of the **different registration and add/drop dates for each of the schools** and their related courses and deadlines. You need to follow the deadlines set by the school that is offering the course.

When courses are cross- listed, the same course is offered at two or more Harvard Schools with a different course code (i.e., Human Physiology is offered through FAS/GSAS as BPH 208 and is also offered through the Harvard Chan School - HSPH) as EH 205. When this is the case, register for the course that is offered through FAS/GSAS. If a course is only offered through a non-FAS/GSAS School, you will need to cross-register for that course.

Credit Conversion Table

A note about course credits across Harvard. Harvard Schools use different credit systems for their courses. The two main groups of courses you will be taking are offered through the Arts and Sciences/Graduate School of Arts and Sciences (GSAS) and the Harvard T.H. Chan School of Public

Health. Below is a chart indicating their course credit systems.

School	Terms Available	Credit Per Course at the Host School	Harvard T.H Chan Equivalent
Arts and Sciences	Full Year Semester	1 credit	1.25 credits
Arts and Sciences	Full Teal Semester	2 credits	2.5 credits
		4 credits	5 – 7.5 credits
		6 credits	8-9 credits
		8 credits	10 - 11 credits
		10 credits	12 – 14 credits
		12 credits	15 – 16 credits
		14 credits	17 – 19 credits
		16 credits	20 credits
		10 Clouds	20 credits
Business	Semester	1.5 credits (MBA)	2.5 credits
	Half-semester	3.0 credits (MBA)	5.0 credits
	Trair-semester	2.0 credits (DOC)	2.5 credits
		4.0 credits (DOC)	5.0 credits
Dental	Semester	2-3 credits	2.5 credits
		4.0 credits	5.0 credits
Design	Semester	2.0 credits	2.5 credits
_		3.0 credits	2.75 credits
		4.0 credits	5.0 credits
		8.0 credits	10.0 credits
Divinity	Semester	4.0 credits	5.0 credits
Education	Full Year	2.0 credits	2.5 credits
	Semester	4.0 credits	5.0 credits
Kennedy	Half-semester	2.0 credits	2.5 credits
•	Semester	4.0 credits	5.0 credits

Law	Semester Half-semester Winter Session	1.0 credits 2.0 credits 3.0 credits 4.0 credits 5.0 credits	1.25 credits 2.5 credits 3.75 credits 5.0 credits 6.25 credits
Medical	Full Year Semester	2-3 credits 4.0 credits	2.5 credits 5.0 credits
Fletcher & Friedman (Tufts)	Half-semester	1.5 credits 3.0 credits	2.5 credits 5.0 credits
M.I.T	Half-semester	1-4 credits 5-8 credits 9-12 credits 13-16 credits 18.0 credits	1.7 credits 3.3 credits 5.0 credits 7.0 credits 8.0 credits

 $[{]f 1}_{\mbox{Total}}$ number of units equals lecture and lab.

HARVARD UNIVERSITY The Graduate School of Arts and Sciences	HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH
1 credit	1.25 credits
2 credits	2.5 credits
4 credits	5 – 7.5 credits
6 credits	8 – 9 credits
8 credits	10 - 11 credits
10 credits	12 – 14 credits
12 credits	15 – 16 credits

14 credits	17 – 19 credits
16 credits	20 credits

Waiving Department of Environmental Health Required Courses

Students who believe they have fulfilled requirements for required courses – either school-wide or department/program required courses, need to follow the instructions below and complete the necessary forms with attached documentation.

Waiving a required course <u>does not</u> transfer any credits. If you waive a required course, it means you do not have to retake that course to fulfill your degree requirements.

These EH courses can include such required courses as those listed below amongst others. All required courses must be taken for an ordinal grade.

EH 205 Human Physiology

EH 257 Water Pollution

EH 297 Atmospheric Environment

EH 504 Principles of Toxicology

EH 510 Fundamentals of Human Environmental Exposure Assessment

ID 215 Environmental and Occupational Epidemiology

RDS 500 Risk Assessment

To waive these courses, complete the Department of Environmental Health Waiver Form

- 1. Include with the form:
 - a. A copy of the syllabus of the course(s) you took that you believe fulfills this requirement and has covered the course content of the department course.
 - b. An unofficial copy of your transcript indicating the grade you received in this course.
- 2. Email the completed waiver form and related documentation to Barbara Zuckerman (<u>bzuckerm@hsph.harvard.edu</u>) and your advisor. Ask your advisor to email Barbara permission to sign on their behalf. Barbara will contact the instructor who will evaluate your request and let you know the decision.

Waiving Biostatistics and/or Epidemiology Core Course Requirement

Students who have previously completed a graduate-level Biostatistics and/or Epidemiologic Methods course go to the following link for additional information about requesting a waiver of the biostatistics and/or epidemiology core course requirement:

https://www.hsph.harvard.edu/epidemiology/waiving-school-wide-biostatistics-and-epidemiology-core-course-requirement/

To complete the waiver form, go to Survey link

The respective departments will determine if the previous coursework is equivalent to the Harvard Chan School-Wide Core Courses.

About the Ph.D. in Population Health Sciences

https://www.hsph.harvard.edu/phdphs/

Introduction

Welcome to the PhD in Population Health Sciences (PHS). This full-time degree is a collaboration between the Harvard Faculty of Arts and Sciences (FAS) and the Harvard T.H. Chan School of Public Health to offer a Doctor of Philosophy (PhD) in Population Health Sciences. The program is designed to encourage students to benefit from connections between public health disciplines and a broader range of academic disciplines represented across the Graduate School of Arts and Sciences (GSAS).

The PhD in PHS offers advanced doctoral-level research training that builds on multiple disciplinary perspectives to understanding origins and determinants of health and disease across populations. Students in this program will be based at the Harvard T.H. Chan School of Public Health, and belong to one of the following Fields of Study associated with the departments of:

- Environmental Health (EH)
- Epidemiology (EPI)
- Global Health and Population (GHP)
- Nutrition (NUT)
- Social and Behavioral Sciences (SBS)

This PhD in Population Health Sciences is primarily intended for students likely to pursue careers in academia in these Fields of Study or in departments related to population health, or in research-related positions outside of academia. In addition to nurturing the development of the next generation of population health researchers and scientists, the program will provide opportunities for students to build scientific communication, and mentoring and teaching skills, thereby becoming educators in their field.

Population Health Sciences Overview

The overarching goal of this program is to foster scholarship in developing new and innovative ideas in population health sciences, improve communication of those ideas effectively, and understand changing health needs in different societies and contexts.

What is Population Health Sciences (PHS)?

'Population Health' captures the social and biological dimensions of human groups. It also demonstrates the common perspective that underlies the Fields of Study with 'population' as the object of study, target of inference, intervention, and improvement. Thus, Population Health Sciences presents an umbrella framework to reflect the general changes in our understanding of population health worldwide, to answer a call for multidisciplinary researchers in the health sciences, and also to respect the need for depth in a particular area of expertise.

Who are PHS students at Harvard?

PHS students at Harvard have the benefit of affiliation with two vibrant academic communities. As PhD students at Harvard University, students are formally enrolled in the Graduate School of Arts and Sciences (GSAS) and become part of GSAS's expansive community of scholars. At the same time, students maintain an academic affiliation with the Harvard T.H. Chan School of Public Health, home to the five academic departments whose faculty provide the research, teaching, and advising expertise that form the foundation of the Fields of Study for this PhD: Environmental Health, Epidemiology, Global Health & Population, Nutrition, and Social & Behavioral Sciences.

Department of Environmental Health

Students in this field of study will be affiliated with the Department of Environmental Health at the Harvard T.H. Chan School of Public Health. The Department of Environmental Health pursues innovative research and offers interdisciplinary training in environmental health, emphasizing the role of air, water, contaminants in food and consumer products, the built environment, and the workplace as critical determinants of public health. Faculty members study the pathogenesis and prevention of environmentally produced illnesses, injury and disability, ergonomics and safety, climate change, occupational hygiene, environmental management and sustainability, and are leaders in, and facilitators of, scientifically based public health advances. Faculty research areas include a multi-disciplinary approach ranging from molecular and physiologic studies, exposure assessment and control, engineering, epidemiology, risk assessment to policy evaluation.

The department examines complex problems that require the contributions of many specialties. The faculty, research staff, and students reflect the multidisciplinary nature of the field and include chemists, engineers, epidemiologists, practitioners, occupational hygienists, urban planners, climatologists, applied mathematicians, physicians, nurses, physiologists, cell biologists, molecular biologists, and microbiologists.

Areas of Specialization

- Environmental Health Bioengineering or Mechanisms of Disease: this area focuses on the biophysical interactions of cells, tissues and organisms with each other and with environmental exposures and agents, and how these physical processes determine biologic responses in tissue development, repair and disease. Mechanisms of Disease focuses on understanding the molecular and cellular basis for disease, especially those related to environmental exposures and agents.
- Environmental Health Environmental Justice: This area of study will focus on the disparities in environmental exposure and associated health outcomes, considering macro- and micro-level factors that impact communities and strategies for solution-oriented approaches, including discussion of research translation, implementation science, environmental health literacy, and other key topic areas. Theoretical frameworks, analytic approaches, and practical applications will be addressed in the context of sociohistorical processes, stakeholders, and agency that can be learned from and engaged with to improve environmental health inequities.
- Environmental Health Epidemiology/Environmental Epidemiology: this area focuses on identifying and measuring the influence of physical, chemical, and biological environmental factors on human disease in communities to provide scientific evidence for sound environmental and health policies.
- <u>Environmental Health Exposures/Exposure Assessment</u>: this area emphasizes the chemical, physical, microbiological, and engineering aspects of environmental and occupational exposures and the identification and characterization of human and ecological exposures to environmental contaminants, and in modeling their fate and transport, to develop strategies to control environmental hazards, allergens, and pathogens.
- Environmental Health Molecular Epidemiology: this interdisciplinary area combines molecular and genetic laboratory assessments with epidemiology to clarify gene-environment interactions, as well as assessment of epigenetic, functional genomic, metabolomic, transcriptomic and other "omic" technologies into environmental epidemiology study designs.
- Environmental Health Molecular Physiology: this area emphasizes understanding the functional outcomes of environmental and agents exposures on cells, tissues and organs, especially as disease manifestations
- Environmental Health Occupational Health/Occupational Epidemiology: this area focuses on the anticipation, identification, evaluation, and quantification of diseases and injuries due to workplace exposures and to provide the scientific basis for occupational health and safety policies to control occupational hazards/assessing hazardous exposures in the workplace (chemical, physical, biological) in human population studies.
- Environmental Health Risk Sciences: this area emphasizes integrated education in risk and decision science in the context of environmental health including exposure assessment, epidemiology, and toxicology built on the principles of decision analysis and intended to support and advance decision-making under uncertainty.

Curriculum

The curriculum for the PhD in Population Health Sciences strives to strengthen and formalize students' breadth of foundational knowledge and skills in population health (the common core training), and, at the same time, enhance and inform depth of knowledge and skills (Field of Study training).

The program requirements include:

- Completion of courses that are common across the program and that are required within the student's Field of Study and Area of Specialization;
- Participation in research assistantships and teaching fellowships;
- Successful completion of program-wide and field of study assessments (e.g. qualifying exam), dissertation prospectus, and dissertation and oral defense.
- For a more detailed overview of all our degree requirements, you can refer to our Student Handbook.

Program-wide Training is delivered by courses, seminars, and workshops. Themes include:

- Conceptual foundations of population health;
- Research methods;
- Ethics of scientific research;
- Scientific communication and pedagogy (in writing, speaking, visual presentation, and teaching)

Field of Study Training specific to a student's Field of Study (and Area of Specialization) is delivered through a variety of methods. The distribution of required methods courses, research assistantships, assessments, and seminars, etc. varies according to the Field of Study.

Dissertation: Each student will be expected to complete a body of original research of publishable quality. This may take one of two forms: (a) a minimum of three individual publishable papers, or (b) a traditional thesis-style submission with at least three original and innovative chapters, including an introduction and a conclusion that cogently ties it all together. Papers do not have to be published as single-author papers to fulfill dissertation requirements. The dissertation must be successfully defended before three examiners.

Courses

Pre-Program Requirement

All students should have prior coursework in biostatistics equivalent to at least BIO201 (Introduction to Biostatistics) at the entry into the program. Admitted students will be required to take an online biostatistics pre-test to assess competency with the BIO201 material. Students who score below a certain threshold will be required to either (i) take an online biostatistics module during the summer preceding program entry or (ii) register for an inperson summer biostatistics course at the school. Students who do particularly poorly on the pretest will be strongly encouraged to pursue the in-class option.

Regardless of the pre-test outcome, the PHS Program will encourage students to attend a biostatistics "bootcamp" in late August during program orientation to ensure all students are adequately prepared for the required quantitative research methods sequence (see below).

Electives

Students in this program may take other courses offered at the Harvard T.H. Chan School of Public Health and any of the Harvard schools as well as the Massachusetts Institute of Technology (MIT). Consult with your advisor in the selection of your electives. A list of potential EH related electives are noted at the end of this *Curriculum Guide*. The link to the University-wide course listings is at hsrph.harvard.edu click on my.harvard at the top of the page and then choose Course Catalog.

Course Enrollment Requirements

Please note that credit numbers are different between the Graduate School of Arts and Sciences (GSAS) and the Harvard Chan School. GSAS uses a 2, 4, 8 credit system while the Harvard Chan School uses a 2.5, 5, and 10 credit system. For the purposes of PHS courses, 4/5 credit courses will be referred to as a "semester course" and 2/2.5 credit courses as a "quarter courses." Overall, GSAS students need to enroll in a minimum of a total of 16 GSAS credits/20 HSPH credits per semester. As students of the Graduate School of Arts and Sciences, PHS students will register directly into any PHS-specific (or other FAS) courses, such as PHS 2000A and PHS 2000B; and will cross-register into any Chan School courses (predominantly Field of Study requirements).

Program-Wide Required Courses and Credits

All students in the PhD Program in Population Health Sciences (regardless of field of study) are expected to complete the following PHS Program requirements:

- Quantitative Research Methods in Population Health Sciences (PHS 2000 A and B Fall and Spring; Year 1), a year-long course to be taken in the first year (see note below). This course forms the core of the PhD coursework in research methods. Methods from different disciplines with relevance to all five fields of study are included (see below for details). (5 HSPH credits/ 4 FAS credits each semester)
- Introduction to Epidemiology (EPI 201 Fall 1) and Elements of Epidemiological Research (EPI 202 Fall 2): to be taken in the Fall of the first year. This sequence equips all students with understanding of basic research concepts, causal theory, epidemiology, and study design. (5 HSPH credits/ 4 FAS credits)
- Foundations for Public Health (ID 100P): providing an introduction to the social and scientific context, content, and implications of theories of disease distribution, past and present. This course starts online during July/August of the first year and continues in the Fall. Register for this course during Fall course enrollment. (0 HSPH credits)
- An Introduction to History, Politics, and Public Health: Theories of Disease Distribution and Health Inequities (SBS 506 Fall 1; Year 1): This course offers an introduction to the social and scientific contexts, content, and implications of theories of disease distribution, past and present. It considers how these theories shape questions people ask about—and explanations and interventions they offer for patterns of health, disease, and well-being in their societies. (2.5 HSPH credits/2 FAS credits)

• Responsible Conduct of Research (HPM 548): introducing basic ethical and regulatory requirements for conducting bench, animal, clinical, and public health research. (1.25 credits). Can also be taken for no credit.

Quantitative Research Methods

PHS 2000 A and B*: This is the core year-long quantitative methods course for the Population Health Science PhD students at the School of Public Health. The course integrates methods and concepts from the various disciplines represented by population health sciences to equip students with the methodological tools to conduct their own research as well as collaborate across fields of study and areas of specialization. The course will cover foundational statistical methods including linear and logistic regression, generalized linear models, survival analysis, longitudinal data analysis, and multilevel modeling. Discussion will be given to important concepts including study design, sampling, scientific inference, causal reasoning, measurement, and replication. The course will also provide an overview of a number of additional and sometimes more advanced methods including Bayesian statistics, big data methods, missing data, sensitivity analysis, propensity scores, time-varying exposures, interaction, mediation, instrumental variables, regression discontinuity designs, difference-in-difference methods, selection models, time series, bootstrapping, simulations, and meta-analysis. With these latter topics, emphasis will be placed on understanding the basic definitions, assumptions, and methodology. Students will be referred to further readings and courses to gain more detailed understanding. Various software resources will be used throughout the course. The course will prepare students to critically read through the empirical population health science literature, and to implement a number of different methods in their own research. *Prerequisites: This course is restricted to first-year PhD students in Population Health Sciences*.

***NOTE:** Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023 BST	r 201 Introduction	on to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024 BST	Γ 210 Applied Re	egression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

Environmental Health Field of Study Required Courses for <u>All</u> EH PhD PHS Students (All required courses need to be taken for an ordinal grade unless otherwise noted).

- EH 205 Human Physiology
- EH 504 Principles of Toxicology
- EH 510 Fundamentals of Human Environmental Exposure Assessment
- EH 520 Research Design in Environmental Health
- ID 215 Environmental and Occupational Epidemiology

- RDS 500 Risk Assessment
- HPM 548 Responsible Conduct of Research
- An additional intermediate/advanced course in biostatistics/quantitative methods chosen with the approval of your advisor (5 HSPH credits/4 GSAS credits).

In addition, EH students are expected to take coursework

- that fulfill your Area of Specialization (major) requirements (at least 16 GSAS/20 Harvard Chan credits ordinal grades only)
- that fulfills the course requirements of your two (2) minors (each minor requires at least 8 GSAS/10 Harvard Chan credits ordinal grades only)
- that fulfills training grant requirements as relevant
- any additional coursework recommended by your advisor, Dissertation Advisory Committee (DAC), Associate Chair, Assistant Director of Faculty and Academic Affairs or Academic Coordinator

Forms

Students may locate all required forms in the PhD PHS Student Tool Kit. Students should speak with their advisor, Barbara Zuckerman and/or Shaun Heller (shaunheller@hsph.harvard.edu) before completing any forms. Submit completed forms via email to Barbara Zuckerman (bzuckerm@hsph.harvard.edu) and cc your advisor and any other faculty requiring their signature. In that email ask your advisor and other faculty to email Barbara with permission to sign the form on their behalf.

Responsible Conduct of Research (RCR)

(FAS-Offered January or August Sessions - RECOMMENDED, HPM 548, or DMS-Offered MEDSCI 300qc)

Any chosen RCR method of study from either the list above or another approved equivalent should introduce the basic ethical and regulatory requirements for conducting bench, animal, clinical, and public health research. The course must fulfill the National Science Foundation (NSF) and National Institute of Health (NIH) requirements for RCR instruction. All three options listed above meet NIH and NSF requirements. (The FAS-Offered Course is the one most highly recommended by a majority of PHS students.

Please note: Different courses meeting this requirement are offered via FAS, Harvard Chan, and the Harvard Division of Medical Sciences (DMS). **PHS students need only choose one PHS-approved course**; however, this course must be completed by the end of the second year for all students (in some cases, within the first year of study), except in circumstances where a student has already taken HPM548 during a prior Harvard Chan master's degree program. Students may also be required to take a 'refresher' course to update their research conduct knowledge during year three or year four.

Statistical Methods/Analyses Requirements

Statistical methods are a key part of PHS PhD training for ALL EH PhD students, and MS theses for that matter.

- All EH PhD Students
- Actual statistical analyses/processes (programming, results summary and interpretation) should be done by the student.
- Outsourcing for data entry, and for certain operations such as bio informatics processing and cleanup of high dimensional data would be
 reasonable, with PI/faculty advisor approval, to contract out. Details of contract should be specified and approved by PI/faculty advisor*
- Cannot have an outside statistician do the analysis, the student is expected to do these analyses themselves
- Students who are collecting original data need to perform their own analyses
- Students who are using data from other sources need to perform their own analyses
- * Note. that is not a given or an expectation, but an option that must be approved by Principal Investigator (PI), e.g., a smaller data set may not be reasonable financially to outsource and the PI may want trainees to get experience in bioinformatics programming.

Advising

All incoming students are assigned a faculty adviser based on their chosen Area of Specialization and information provided in their application.

In addition to the faculty advisor, the following Environmental Health individuals can assist with program progress/requirements and course selection:

- Associate Chair: Francine Laden <u>fladen@hsph.harvard.edu</u>
- Director of Faculty and Academic Affairs: Barbara Zuckerman bzuckerm@hsph.harvard.edu)
- Academic Coordinator: Rose West (<u>rwest@hsph.harvard.edu</u>)
- Faculty and Academic Affairs Coordinator: Shaun Heller (shaunheller@hsph.harvard.edu)

Milestones

To obtain a PhD through the proposed program, students must successfully complete all common program milestones during their training pathway including completion of all required coursework, assessment of program-wide and field-specific competencies, oral defense of dissertation proposal, and dissertation defense. Below are the milestones and related due dates.

NOTE: All forms are completed by the student, approved/signed by their advisor, and submitted to Barbara Zuckerman (bzuckerm@hsph.harvard.edu) for review and signature.

	EH PhD PHS Doctoral Student Timetable								
	PROGRESS	DUE DATE-GI (Those students who have not completed a Master of Science degree at the Harvard Chan School of Public Health)	DUE DATE-G3 (Those students who have completed a SM degree at the Harvard Chan School of Public Health. Applicable to mos G3s; contact field of study administrator for confirmation						
1	Submission of Prospective Program Form	End of 2nd semester	By the end of Fall 2						
2	Field of Study Written Qualifying Examination (PQE I)	Late May/Early June of 2 nd year	Late May/Early June of 1st year						
3	Submission of Final Program Form	End of 4 th semester following successful completion of the Field of Study written exam.	End of 2nd Semester following successful completion of the Field of Study written exam.						
4	Present your Dissertation Proposal to the EH Faculty. [Contact Shaun Heller (shaunheller@hsph.harvard.edu) regarding scheduling your presentation]	Prior to the Oral/PQE Exam	Prior to the Oral/PQE Exam						
5	Submission of PhD PHS Program Oral Qualifying (PQE II) Examination Scheduling Form	At least 4 weeks prior to the oral exam	At least 4 weeks prior to the oral exam						
6	Completion of PhD PHS Program Oral Qualifying (PQE) Exam	Must be taken and passed prior to the end of the 5 th semester	Must be taken and passed prior to the end of the 3 rd semester						
7	Submission of Nominations for Dissertation Advisory Committee (DAC)	By January 15 th of the 6 th semester	By January 15 th of the 4 th semester						
8	Submission of <i>Progress Report Form</i> and In-Person Meetings with Dissertation Advisory Committee (DAC)	Due <u>every 3 months</u> from the date of the PhD PHS Program oral qualifying exam through dissertation defense date	Due <u>every 3 months</u> from the date of the PhD PHS Program oral qualifying exam through dissertation defense date						
9	Submission of Application for Degree Form	See GSAS deadlines and procedures	See GSAS deadlines and procedures						
10	Submission of <i>Dissertation Scheduling Form</i>	Send signed form to Barbara at least 4 weeks prior to defense date. Include electronic draft copy of dissertation with introduction, 3 papers, and conclusion	Send signed form to Barbara at least 4 weeks prior to defense date. Include electronic draft copy of dissertation with introduction, 3 papers, and conclusion						
11	Dissertation Defense	Prior to the end of the 8 th semester in accordance with GSAS deadlines and procedures for submission of electronic dissertation	Prior to the end of the 8 th semester in accordance with GSAS deadlines and procedures for submission of electronic dissertation. NOTE: it is expected that G3s may complete their dissertation prior to the end of the 8 th semester.						

Teaching Fellow (TF) Requirements

Year Entered Program	Required TF Credits by End of Year 4	Credits To Be Fulfilled If a 5 th Year Is Needed	How Credits Can Be Fulfilled
2021, 2022, 2023	12.5 HSPH credits	15 HSPH credits If graduating in March of the 5 th year 17.5 HSPH credits If graduating in May of the 5 th year	 5.0 HSPH credits must be via a TF position Additional credits can be fulfilled by TF and/or RA (research assistant) positions If dissertation is submitted by the September deadline for November graduation, no additional TF/RA credits are needed. If graduating in March of the 5th year, an extra 2.5 HSPH TF/RA credits needed for the Fall Semester for a total of 15 HSPH TF/RA credits. If graduating in May of the 5th year, an additional 5 HSPH TF/RA credits needed for a total of 17.5 HSPH TF/RA credits.

Year Entered Program	# of Credits to Fulfill by end of year 4 if Opted Out of 5th Year*	# of Credits to Fulfill by end of year 4 if Opted Into 5 th Year	Credits To Be Fulfilled If a 5 th Year Is Needed
2019, 2020	5 HSPH credits	10 HSPH credits	12.5 HSPH credits if graduating in March of the 5 th year 15 HSPH credits if graduating in May of the 5 th year •

^{*}If a student has Opted-Out and needs a 5th year in the program, all financial costs of the program and living expenses are the responsibility of the student. The last stipend check will be received May 1st of the 4th Year. Health insurance will end July 31st.

For any students that Opt-In and need to go beyond their 5th year, all financial costs of the program and living expenses are the responsibility of the student. The last stipend check will be received May 1st of the 5th Year. Health insurance will end July 31st. Students may get support from the department but will need to consult with their advisor to ensure funds are available.

Students requesting 5^{th} year funding need to complete and submit to their department/field Academic Administrator the 5^{th} Year Extension Request Form by March 31^{st} of the 4^{th} Year.

Research Assistant (RA) Option

Students, regardless of G-year, may have the option of substituting RA work for up to 7.5 credits of the TF requirement. Students may use the amount of RA work as a substitute for the course equivalent for which compensation would equal the TF compensation

amount of \$5,690 (junior rate)/\$6,385 (senior rate) for a 5 credit course and \$2,845(junior rate/\$3,192.50 (senior rate) for a 2.5 credit course. The RA work cannot be related to your dissertation research.

For example: If an RA is paid \$21.00/hr, they would apply 135 hours of RA work to get credit for one 2.5 credit course, which is about 6.7 weeks of work (using a 20 hr/week maximum for student employment).

Masters in Passing

Biostatistics

Requirements for One-Year Master's Degree (42.5 credits) in Passing in Biostatistics for PhD Students at HSPH
In certain cases, the Biostatistics Department may entertain applications for a co-terminal SM 42.5 degree in Biostatistics from students enrolled in a PHS PhD program. The student would be required to fulfill the SM 42.5 degree requirements described at https://cdn1.sph.harvard.edu/wp-content/uploads/sites/59/2022/08/SM1 withPhD Biostatistics Epidemiology 2022-23.pdf Students interested in pursuing a SM in Biostatistics during their PhD should contact Jelena Follweiler (tillots@hsph.harvard.edu) to answer any questions.

Epidemiology

Requirements for One-Year Master's Degree in Epidemiology for PhD Students at HSPH

In certain cases, the Epidemiology Department may entertain applications for an SM1 degree in Epidemiology from students enrolled in a PhD program based at HSPH (including PHS for those *not* in the Epidemiology field of study). The student would need to meet the eligibility requirements for the SM1 program (in this setting the concurrent PhD counts as the prior degree) and would be required to fulfill the SM1 degree requirements described at https://cdn1.sph.harvard.edu/wp-content/uploads/sites/59/2022/08/SM1 withPhD Biostatistics Epidemiology 2022-23.pdf
Students who are eligible and interested in pursuing a SM in Epidemiology during their PhD should contact Eric DiGiovanni (edigiova@hsph.harvard.edu) to set up a meeting.

Stipend Policy

Starting Fall 2022 the new stipend policy provides continued stipend payments through the first of the month of the date of degree conferral for students finishing in 4 years (or 5 years if opted into the Guaranteed Extended Research Funding). In order to be eligible for these continued stipend payments, students must provide written verification that they are continuing their research or completion of their dissertation writing (verification forms will be available through the PHS Office). If a student secures employment, they would no longer be eligible to receive stipend payments. Additional information about this new policy can be found in the PHS 2023-24 Student Handbook, which is undergoing final review and will be released soon.

External Funding Incentive

The external funding policy is designed to encourage students to apply for funding from sources outside of HSPH. The external funding policy awards students with \$4,000 for annual funding of \$24,000 or more and \$3,000 for annual funding of \$10,000 to \$23,999. The funds must be obtained by the

student, serve as replacement funds for your current scholarship, and be external to HSPH. The PHS program office will decide which funds meet the criteria and additional information about the requirements is available in the upcoming PHS 2022-23 Student Handbook. This external funding policy is a pilot program that will be reassessed after three years.

We are excited to share these two new opportunities for further support with you and hope that these new financial policies will serve to provide additional student support, strengthen the PHS program, and help PHS to better fulfill its mission.

Consult the PhD PHS Handbook for additional information https://indd.adobe.com/view/bbc96d5a-5c99-4bd4-acd8-4be71c72b429

If you have questions re: either of these new policies, please reach out to Paul Francis, PHS Manager of Finance & Administration, via pfrancis@hsph.harvard.edu

Informal Training

The program encourages students to engage with any of the research centers at Harvard T.H. Chan School of Public Health as well as with any of the centers or institutes at any of the Harvard schools. A non-exhaustive list is provided below.

Harvard T.H. Chan School of Public Health

- Harvard Center for Population and Development Studies
- Center for Health Communication
- Center for Health Decision Science
- François-Xavier Bagnoud Center for Health and Human Rights
- Harvard Injury Control Research Center
- Harvard T.H. Chan School of Public Health AIDS Initiative
- Harvard T.H. Chan School of Public Health Center for Work, Health, & Well-being
- John B. Little Center for Radiation Sciences
- Center for Biostatistics in AIDS Research
- Center for Communicable Disease Dynamics
- Center for Global Tobacco Control
- Harvard Education and Research Center for Occupational Safety and Health
- Harvard Center for Risk Analysis
- Harvard Prevention Research Center on Nutrition and Physical Activity
- Harvard NIEHS Center for Environmental Health
- Harvard Preparedness and Emergency Response Learning Center
- Center for Climate, Health and the Global Environment (C-Change)
- Harvard School of Public Health Prevention Research Center

- Lee Kum Sheung Center for Health and Happiness
- Superfund Research Center
- Center for Nanotechnology and Nanotoxicology

Other Harvard University Centers

- Institute for Quantitative Social Science, which houses the Center for Geographic Analysis and the Harvard-MIT Data Center
- Harvard Humanitarian Initiative
- Harvard Global Health Institute
- Weatherhead Center for International Affairs
- Malcolm Weiner Center for Social Policy
- Center on the Developing Child
- Center for International Development
- Harvard University Center for the Environment
- David Rockefeller Center for Latin American Studies
- South Asia Initiative

Career Outlook

Graduates assume a multitude of positions after they graduate including post-doctoral fellows, faculty members, and researchers in graduate schools, medical schools, research institutes, schools of public health, industry, consulting, non-governmental organizations, and local, regional national, and international agencies.

PHS students have access to the GSAS Office of Career Services for resources regarding non-academic pathways such as well as more traditional academic pathways, ranging from career fairs to interviewing skills.

Research roles and positions outside of academia, such as:

- Leadership positions in local, state, and federal agencies, and international governmental institutions, including ministries of health
- Research scientists with federal agencies such as the Environmental Protection Agency, National Institutes of Health, and the Centers for Disease Control and Prevention, as well as in private industry
- Research scientists and leaders of philanthropic foundations such as the American Cancer Society and American Heart Association
- Directors and program officers for international organizations such as the United Nations and the World Bank
- Epidemiologists for local and federal agencies as well as international governmental institutions, or Directors of nongovernmental agencies and consulting organizations.

GSAS Career Services

- GSAS Office of Career Services
- Career Pathways Resources

GSAS Advising Resources

Harvard Chan School's Office of Career Services:

- Log onto CareerConnect (SPH site) for job, fellowship, & internship opportunities
- Check out the Careers Resources on the Career Advancement Website for comprehensive public health job search tools
- Check the HSPH Alumni Community and the Harvard Wide Alumni Community for alumni contacts/mentors

Useful Forms and Documents:

- Sample CV for Academe
- Sample CV for Industry
- CV, Resume or Something in-between (Powerpoint)

Tips:

- The Perfect Elevator Pitch to Land a Job (Source: Forbes)
- 10 Steps to Career Fair Success (Source: SPH Office for Career Advancement)
- 7 Things You Need to Do After Attending a Career Fair (Source: Rasmussen)
- Your Body Language Shapes Who You Are (Source: Professor Amy Cuddy, HBS @ TEDGlobal 2012)
- Winning a Job With Your Unique Selling Proposition (USP) (Source: Bloomberg Business)

Environmental Health Bioengineering or Mechanisms of Disease

Year 1 Fall - Environmental Health Bioengineering or Mechanisms of Disease

Semester	Course Cde	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes	
Required Courses									
Summer/ Fall 1	ID 100P	Foundations for Public Health	0					Starts July/August: online. Continues in Fall. Register during Fall registration.	
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences	5 (4 GSAS)	Tu/Th	11:30-1:00				
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences (Lab)		М	11:30-1:00				
Fall 1	EPI 201*	Introduction to Epidemiology: Methods I	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required	
Fall 2	EPI 202*	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required	
Fall	EH 205/BPH 208**	Human Physiology	5	MW	9:45-11:15			Register for BHP 208	
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	Tu/Th	2:00-3:30				
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	9:30-12:30				
Fall 1	RDS 500**	Risk Assessment	2.5	Tu//Th	2:00-3:30 1:00-3:30				

NOTE: Electives courses chosen in consultation with your advisor.

***NOTE:** Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses on Page 5.

DOCTORAL TIMETABLE NOTES

G3s

• Prospective Program due at the end of the Year 1 Fall semester

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses on Page 4 and complete the EH Department *Course Waiver Form*.

Year 1 Spring - Environmental Health Bioengineering or Mechanisms of Disease											
Course Code	rse Code Course Title HSPH Day Time Completed/ Waived		Grade	Notes							
Required Courses											
PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00							
PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		М	11:30-1:00							
EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5 5	Tu/Th or W/F	9:45-11:15 <u>or</u> 11:30-1:00			Can be taken 1 st or 2 nd year				
ID 271	Advanced Regression for Environmental Epidemiology	2.5	Tu/Th	Tu 2:00-3:30 Th 1:00-3:30			Can be taken in Year 1 or Year 2				
EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.				
ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30							
	PHS 2000B PHS 2000B# EH 257 Or EH 297 ID 271 EH 520	Course Code Course Title PHS 2000B Quantitative Research Methods in Population Health Science II Quantitative Research Methods in Population Health Sciences (Lab) EH 257 Water Pollution or EH 297 Atmospheric Environment Advanced Regression for Environmental Epidemiology EH 520 Research Design in Environmental Health Environmental and Occupational	Course Code Course Title Recordits Recordits PHS 2000B Quantitative Research Methods in Population Health Science II PHS 2000B# Quantitative Research Methods in Population Health Sciences (Lab) EH 257 Water Pollution or EH 297 Atmospheric Environment ID 271 Research Design in Environmental Health EH 520 Research Design in Environmental Health Environmental and Occupational 2.5	Course Code Course Title Required Course Foundation Health Science II PHS 2000B# Quantitative Research Methods in Population Health Sciences (Lab) Foundation Health Sciences (Lab) Research Design in Environment Full 271 Research Design in Environmental Health Research Design in Environmental Health Environmental and Occupational Research Design in Environmental Supplies Environmental and Occupational Research Design in Environmental Supplies Environmental and Occupational Research Design in Environmental Supplies Environmental and Occupational	Course CodeCourse TitleHSPH CreditsDayTimeRequired CoursesPHS 2000BQuantitative Research Methods in Population Health Science II5Tu/Th11:30-1:00PHS 2000B#Quantitative Research Methods in Population Health Sciences (Lab)M11:30-1:00EH 257Water Pollution5Tu/Th9:45-11:15or EH 297Or Atmospheric Environment5W/F11:30-1:00ID 271Advanced Regression for Environmental Epidemiology2.5Tu/ThTu 2:00-3:30EH 520Research Design in Environmental Health2.5F2:00-3:30ID 215Environmental and Occupational2.5W2:00-3:30	Course Code Course Title Completed/Credits Required Courses Required Courses PHS 2000B Quantitative Research Methods in Population Health Science II PHS 2000B# Quantitative Research Methods in Population Health Sciences (Lab) EH 257 Water Pollution Or O	Course Code Course Title Completed/ Vaived Required Courses Required Courses PHS 2000B Quantitative Research Methods in Population Health Science II PHS 2000B# Quantitative Research Methods in Population Health Sciences (Lab) PHS 2000B# Quantitative Research Methods in Population Health Sciences (Lab) EH 257 Water Pollution Or O				

DOCTORAL TIMETABLE NOTES

<u>G3s</u>

- * Take the Written Exam (PQE I) at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date

G1s

Prospective Program due at the end of Year 1 Spring semester.

	Year 2 Fall - Environmental Health Bioengineering or Mechanisms of Disease										
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Required Courses										
Fall	EH 512/BPH 305QC	Interdisciplinary Training in Pulmonary Sciences Part I	2.5	Tu/F	9:45-10:45 1:00-2:00			Register for BPH 305QC – consult with your advisor about registering for this course or an alternative			
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215			
		*Students must also take an approved Scourses ma			r advanced biosta tation with your ac	-	ve method:	s course.			
			-		sultation with you						
Fall	EH 300	Independent Study						G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams			

DOCTORAL TIMETABLE NOTES

G3s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE Exam will be held before the end of Year 2 Fall semester.
 - Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

Year 2 Spring - Environmental Health Bioengineering or Mechanisms of Disease											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
Required Courses											
	EH 257	Water Pollution	5	Tu/Th	9:45-11:15						
Spring	<u>or</u> EH 297	<u>or</u> Atmospheric Environment	5	<u>or</u> W/F	<u>or</u> 11:30-1:00			If not taken in Year 1			
Spring	EH 513/BPH 302QC	Interdisciplinary Training in Pulmonary Sciences Part II	2.5	Tu/F	9:45-10:45 1:00-2:00			Register for BPH 302QC; consult with your advisor about registering for this course or an alternative			
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring			
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester			

NOTE: Electives courses chosen in consultation with your advisor.

DOCTORAL TIMETABLE NOTES

G3s

DAC meetings held every three months. *Progress Report* form submitted after each meeting.

G1s

- **❖** Take the Written Exam at the end of Year 2 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

	Years 3-4 Environmental Health Bioengineering or Mechanisms of Disease										
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	NOTE: Elective courses chosen in consultation with your advisor.										
	Ty	pically, no additional coursework is take	en so stude	nt can focus	on completing th	eir dissertation	during Yea	rs 3 and 4.			
All Semesters	ЕН 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester			
Fall	ЕН 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams			

DOCTORAL TIMETABLE NOTES

G1s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE) Exam

- DAC meetings held every three months. Progress Report form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- Review GSAS dates for Applying for Graduation and defense date requirements.
- Review GSAS dissertation formatting requirement.

Environmental Health Environmental Justice

Year 1 Fall - Environmental Health Environmental Justice

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes						
	Required Courses													
Summer / Fall 1	ID 100	Foundations for Public Health	1					Starts July/August: online. Continues in Fall. Register during Fall registration.						
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences	5	Tu/Th	11:30-1:00									
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00									
Fall 1	EPI 201*	Introduction to Epidemiology: Methods I	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required						
Fall 2	EPI 202*	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required						
Fall	EH 205/BPH 208**	Human Physiology	5	M/W	9:45-11:15			Register for BHP 208						
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	Tu/Th	2:00-3:30									
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	9:30 – 12:30									
Fall 1	RDS 500**	Risk Assessment	2.5	Tu/Th	2:00-3:30 1:00-3:30									

NOTE: Electives courses chosen in consultation with your advisor.

#NOTE: Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

DOCTORAL TIMETABLE NOTES

G3s

• Prospective Program due at the end of the Year 1 Fall semester

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and return it to Barbara (bzuckerm@hsph.harvard.edu) with required documentation.

		Year 1 Spring -	Environn	nental Hea	alth Environmer	ntal Justice		
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
			Re	equired Cou	rses			
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00			
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00			
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5 5	Tu/Th or W/F	9:45-11:15 <u>or</u> 11:30-1:00			Can be taken in Year 1 or Year 2
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.
Spring 1	EH 525	Environmental Justice: Concepts and Practice	2.5	M	9:45-1:00			Check when the PHS 2000B lab is given. If conflicts, take EH 525 in Year 2
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			Can be taken in Year 1 or Year 2 (NOTE: Needs to be taken prior to the written exam)
Over	the course of y	our studies, students should take at l See the elective lis				_	s below –	consult with your advisor.
Fall	SBS 245	Social and Behavioral Research Methods	5	F F	2:00 – 5:00	be of interest.		NOTE: Conflicts with EH 520
Fall 1	SBS 201	Society and Health	2.5	M/W	3:45 -5:15			Additional Lab Required
Fall 1	SBS 288	Qualitative Research Methods in Public Health	2.5	F	9:45 – 12:45			
Fall 2	EH 245	Statistical Methods for Environmental Mixtures and Exposome Research	2.5	W/F	11:30-1:00			
Fall 2	SBS 207	Race, Ethnicity and Health: Perspectives from the Social and Behavioral Sciences	2.5	Tu	3:45-6:45			
Fall 2	SBS 521	Qualitative Data Analysis for Public Health	2.5	Tu/Th	11:30-1:00			

January	EH 286	Environmental Health Literacy and	2.5	M/Tu/W	9:00-12:00		
		Science Communication		/Th			
Spring 1	SBS 220	Social and Structural Inequities and	2.5	Tu/Th	2:00-3:30		
		Children's Health					
		Multi-Level Theoretical Approaches to					Conflicts with ID215 in Spring 1st
Spring 1	SBS 522	Population Health and Health-Related	2.5	M/W	2:00-3:30		year; no conflicts 2 nd year
		Behavior Change					

NOTE: Electives courses chosen in consultation with your advisor.

DOCTORAL TIMETABLE NOTES

G3s

- * Take the Written Exam at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date

G1s

* Prospective Program due at the end of Year 1 Spring semester.

		Year 2 Fall - E	nvironme	ental Healt	h Environment	al Justice		
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
			R	equired Cou	rses			
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215
Fall 2	SBS 207	Race, Ethnicity and Health: Perspectives from the Social and Behavioral Sciences	2.5	Th	3:45-6:45			
		*Students must also take an approved 5			r advanced biosta ation with your a	-	ve methods	course.
Over t	he course of y	our studies, students should take at l					s below –	consult with your advisor.
	•	See the elective lis				_		·
Fall 1	SBS 201	Society and Health	2.5	M/W	3:45 -5:15			Additional Lab Required
Fall	SBS 245	Social and Behavioral Research Methods	5	F	2:00 – 5:00			NOTE: Conflicts with EH 520
Fall 1	SBS 288	Qualitative Research Methods in Public Health	2.5	F	9:45 – 12:45			
Fall 2	EH 245	Statistical Methods for Environmental Mixtures and Exposome Research	2.5	W/F	11:30-1:00			
Fall 2	SBS 207	Race, Ethnicity and Health: Perspectives from the Social and Behavioral Sciences	2.5	Tu	3:45-6:45			
Fall 2	SBS 521	Qualitative Data Analysis for Public Health	2.5	Tu/Th	11:30-1:00			
January	EH 286	Environmental Health Literacy and Science Communication	2.5	M/Tu/W /TH	9:00-12:00			
Spring 1	SBS 220	Social and Structural Inequities and Children's Health	2.5	Tu/Th	2:00-3:30			

Spring 1	SBS 522	Multi-Level Theoretical Approaches to Population Health and Health-Related Behavior Change	2.5	M/W	2:00-3:30		Conflicts with ID215 in Spring 1 st year; no conflicts 2 nd year				
	NOTE: Elective courses chosen in consultation with your advisor										
	EH 300	Independent Study					G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal in preparation for their oral exams				

G3s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

		Year 2 Spring -	Environn	nental Hea	alth Environme	ntal Justice					
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Required Courses										
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5	Tu/Th or W/F	9:45-11:15 <u>or</u> 11:30-1:00			If not taken in Year 1			
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring.			
Spring 1	EH 525	Environmental Justice: Concepts and Practice	2.5	М	9:45-1:00			If not taken in Year 1			
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester			
Spring	EH 291	Community Practice in Environmental Health	5	F	8:00-11:15						
Spring 1	SBS 535	Global Perspectives on Racism, Poverty, and Power	2.5	M/W	9:45-11:15						
Spring 2	SBS 210	Introduction to Dissemination and Implementation Science	2.5	Tu/Th	11:30-1:00						
Over	the course of y	our studies, students should take at l See the elective li				-	s below -	- consult with your advisor.			
Fall 1	SBS 201	Society and Health	2.5	M/W	3:45 -5:15	of interest.		Additional Lab Required			
Fall	SBS 245	Social and Behavioral Research Methods	5	F	2:00 – 5:00						
Fall 1	SBS 288	Qualitative Research Methods in Public Health	2.5	F	9:45 – 12:45						
Fall 2	EH 245	Statistical Methods for Environmental Mixtures and Exposome Research	2.5	W/F	11:30-1:00						

Fall 2	SBS 521	Qualitative Data Analysis for Public	2.5	Tu/Th	11:30-1:00		
		Health					
January	EH 286	Environmental Health Literacy and	2.5	M/Tu/W	9:00-12:00		
		Science Communication		/TH			
Spring 1	SBS 220	Social and Structural Inequities and	2.5	Tu/Th	2:00-3:30		
		Children's Health					
		Multi-Level Theoretical Approaches to					Conflicts with ID215 in Spring 1st
Spring 1	SBS 522	Population Health and Health-Related	2.5	M/W	2:00-3:30		year; no conflicts 2 nd year
		Behavior Change					

NOTE: Elective courses chosen in consultation with your advisor.

DOCTORAL TIMETABLE NOTES

G3s

DAC meetings held every three months. Progress Report form submitted after each meeting.

G1s

- * Take the Written Exam at the end of Year 2 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

	Years 3-4 Environmental Health Environmental Justice										
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Elective & TA courses chosen in consultation with your advisor. Typically, no additional coursework is taken so students can focus on completing their dissertation during Years 3 and 4.										
All Semesters	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester			
Fall	EH 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams			

G1s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE) Exam

- DAC meetings held every three months. Progress Report form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- Review GSAS dates for Applying for Graduation and defense date requirements.
- Review GSAS dissertation formatting requirement.

	Environmental Health Environmental Justice Electives											
School	Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed / Waived	Grade	Notes			
HSPH	Spring 2	EH 278	Human Health and Global Environmental Change	2.5	Tu/Th	2:00 –3:30						
GSD	Fall Full Term	DES 3348	The Idea of Environment	5	F	9:00-11:45						
HKS	Fall Full Term	IGA 385	Strategizing for Human Rights: Moving from Ideals to Practice	5	Tu/Th	12:00-1:15						
HKS	Fall Full Term	IGA 513	Science, Power, and Politics	5	W	2:00-4:00						
HLS	Spring Full Term	3114	Environmental Justice	3.75	Th/F	10:30-12:00						

Environmental Health Epidemiology/Environmental Epidemiology Year 1 Fall - Environmental Health Epidemiology/Environmental Epidemiology **HSPH** Completed/ Course Code **Course Title** Grade Semester Day Time Notes Credits Waived **Required Courses** Starts July/August: online. Summer / Continues in Fall. Register during ID 100 Foundations for Public Health 1 Fall 1 Fall registration. Quantitative Research Methods in PHS 2000A# 5 Tu/Th 11:30-1:00 Fall **Population Health Sciences** Quantitative Research Methods in PHS 2000A# Fall М 11:30-1:00 Population Health Sciences (Lab) Introduction to Epidemiology: 9:45-11:15 <u>or</u> **EPI 201*** Fall 1 2.5 Tu/Th Additional Lab Section Required Methods I 11:30-1:00 Epidemiologic Methods 2: Elements 9:45-11:15 <u>or</u> Fall 2 **EPI 202*** 2.5 Tu/Th Additional Lab Section Required of Epidemiologic Research 11:30-1:00 EH 205/BPH **Human Physiology** Fall 5/4 M/W 9:45-11:15 Register for BPH 208 208** Fundamentals of Human Fall 2 EH 510** Tu/Th **Environmental Exposure** 2.5 2:00-3:30 Assessment 2:00-3:30 **RDS 500**** Fall 1 Tu/Th Risk Assessment 2.5 1:00-3:30 An Intro to History, Politics, & Fall 1 **SBS 506** Public Health: Theories of Disease 2.5 F 9:30-12:30 Distr. & Health Inequities

G3s

• Prospective Program due at the end of the Year 1 Fall semester

#NOTE: Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and send it to Barbara (<u>bzuckerm@hsph.harvard.edu</u>) with the required documentation.

		Year 1 Spring - Environme	ental Hea	lth Epidem	niology/Environ	mental Epide	miology			
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Required Courses									
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00					
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00					
	EH 257	Water Pollution	5	Tu/Th	9:45-11:15					
Spring	<u>or</u> EH 297	<u>or</u> Atmospheric Environment	5	or W/F	<u>or</u> 11:30-1:00			Can be taken in Year 1 or Year 2		
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.		
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30					
Spring 1	ID 271	Advanced Regression for Environmental Epidemiology	2.5	Tu/Th	Tu 2:00-3:30 Th 1:00-3:30			Can be taken in Year 1 or Year 2		
Spring 2	EPI 203	Study Design in Epidemiologic Research	2.5	Tu/Th	3:45-5:15			Can be taken in Year 1 or Year 2		
Over t	he course of you	degree program, an additional appro Course selection should be						mited to one of the following.		
Spring 1	EPI 213	Epidemiology of Cancer <u>or</u>	2.5	Tu/Th <u>or</u>	2:00-3:30 <u>or</u>			These courses can be taken in		
Spring 2	EPI 223	Cardiovascular Epidemiology I <u>or</u>	2.5	M/W or	2:00-3:30			Year 1 or Year 2		
Fall 2	<u>or</u> EPI 269	Reproductive and Perinatal Epidemiology I	2.5	Tu/Th	<u>or</u> 2:00-3:30					
	Electives courses chosen in consultation with your advisor.									

<u>G3s</u>

- **❖** Take the *Written Exam* at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQEII Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date

G1s

Prospective Program due at the end of Year 1 Spring semester.

	Year 2 Fall - Environmental Health Epidemiology/Environmental Epidemiology									
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Required Courses									
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215		
	Students must also take an approved <u>5 credit</u> intermediate or advanced biostatistics/qualitative methods course. Courses may be selected in consultation with your advisor									
		NOTE: Elective	courses ch	nosen in con	sultation with you	r advisor				
	EH 300	Independent Study						G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams		

<u>G3s</u>

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam.

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
			Re	equired Cou	rses			
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5	Tu/Th or W/F	9:45-11:15 <u>or</u> 11:30-1:00			If not taken in Year 1
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring.
Spring 1	ID 271	Advanced Regression for Environmental Epidemiology	2.5	Tu/Th	Tu 2:00-3:30 Th 1:00-3:30			If not taken in Year 1.
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary bring their course load to 16 GSAS/20 HSPH credits each semester
Spring 2	EPI 203	Study Design in Epidemiologic Research	2.5	Tu/Th	3:45-5:15			If not taken in Year 1.

G3s

DAC meetings held every three months. *Progress Report* form submitted after each meeting.

<u>G1s</u>

- * Take the Written Exam at the end of Year 2 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

	Years 3-4 Environmental Health Epidemiology/Environmental Epidemiology										
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Elective & TA courses chosen in consultation with your advisor.										
	Ту	pically, no additional coursework is take	n so studei	nts can focu	s on completing t	heir dissertation	during Yed	ars 3 and 4.			
All Semesters	ЕН 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester			
Fall	EH 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams			

G1s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE) Exam

- ❖ DAC meetings held every three months. *Progress Report* form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- Review GSAS dates for Applying for Graduation and defense date requirements.
- **Review GSAS dissertation formatting requirement.**

Environmental Health Exposures/Exposure Assessment

Year 1 Fall – Environmental Health Exposures/Exposure Assessment

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Required Courses									
Summer / Fall 1	ID 100	Foundations for Public Health	1					Starts July/August: online. Continues in Fall. Register during Fall registration.		
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences	5	Tu/Th	11:30-1:00					
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00					
Fall 1	EPI 201*	Introduction to Epidemiology: Methods I	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required		
Fall 2	EPI 202*	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required		
Fall	EH 205/BPH 208**	Human Physiology	5	M/W	9:45-11:15			Register for BHP 208		
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	Tu/Th	2:00-3:30					
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	9:30-12:30					
Fall 1	RDS 500**	Risk Assessment	2.5	Tu/Th	2:00-3:30 1:00-3:30					

G3s

• Prospective Program due at the end of the Year 1 Fall semester

#NOTE: Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023 BS	ST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024 BS	ST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and send to Barbara (bzuckerm@hsph.harvard.edu) with the required documentation.

	Year 1 Spring – Environmental Health Exposures/Exposure Assessment										
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
Required Courses											
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00						
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00						
Spring	EH 257	Water Pollution	5	Tu/Th	9:45-11:15			Take both EH 257 and EH 297. You can take one in Year 1 and one in Year 2 or both in Year 1. Consult with your advisor about taking both courses in Year 1.			
Spring	EH 297	Atmospheric Environment	5	W/F	11:30-1:00			Take both EH 257 and EH 297. You can take one in Year 1 and one in Year 2 or both in Year 1. Consult with your advisor about taking both courses in Year 1.			
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.			
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30						

^{*}Students must also take an approved environmental law/policy course sometime during the first two years. A course may be selected in consultation with your advisor.

G3s

- Take the Written Exam at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
- Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

G1s

Prospective Program due at the end of Year 1 Spring semester.

	Year 2 Fall – Environmental Health Exposures/Exposure Assessment											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes				
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215				

^{*}Students must also take an approved environmental law/policy course sometime during the first two years. A course may be selected in consultation with your advisor.

*Students must also take an approved <u>5 credit</u> intermediate or advanced biostatistics/qualitative methods course.

Courses may be selected in consultation with your advisor*

NOTE: Elective courses chosen in consultation with your advisor

DOCTORAL TIMETABLE NOTES

G3s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

	Year 2 Spring – Environmental Health Exposures/Exposure Assessment											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes				
	Required Courses											
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring.				
Spring 1	ID 271	Advanced Regression for Environmental Epidemiology	2.5	Tu/Th	Tu 2:00-3:30 Th 1:00-3:30			If not taken in Year 1.				
Spring	EH 257	Water Pollution	5	Tu/Th	9:45-11:15			If not taken in Year 1.				
Spring	EH 297	Atmospheric Environment	5	W/F	11:30-1:00			If not taken in Year 1.				
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester				

^{*}Students must also take an approved environmental law/policy course sometime during the first two years. A course may be selected in consultation with your advisor.

G3s

DAC meetings held every three months. *Progress Report* form submitted after each meeting.

<u>G1s</u>

- * Take the Written Exam at the end of Year 2 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

	Year 3-4 – Environmental Health Exposures/Exposure Assessment											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes				
					sultation with you							
	Ty	ypically, no additional coursework is tak	en so student	can focus	on completing th	eir dissertation	during Yea	rs 3 and 4.				
All Semesters	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester				
Fall	EH 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams				

G1s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE) Exam

- DAC meetings held every three months. Progress Report form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- Review GSAS dates for Applying for Graduation and defense date requirements.
- **Review GSAS dissertation formatting requirement.**
- Review GSAS dates for Applying for Graduation and defense date requirements.
- Review GSAS dissertation formatting requirement.

Environmental Health Molecular Epidemiology Year 1 Fall - Environmental Health Molecular Epidemiology **HSPH** Completed/ **Course Title** Semester Course Code Day Time Grade **Notes Credits** Waived **Required Courses** Starts July/August: online. Summer / Continues in Fall. Register during **ID 100** Foundations for Public Health 1 Fall 1 Fall registration. Quantitative Research Methods in 5 Fall PHS 2000A# Tu/Th 11:30-1:00 **Population Health Sciences** Quantitative Research Methods in Fall PHS 2000A# M 11:30-1:00 Population Health Sciences (Lab) Introduction to Epidemiology: 9:45-11:15 or **EPI 201*** 2.5 Fall 1 Tu/Th Additional Lab Section Required 11:30-1:00 Methods I Epidemiologic Methods 2: Elements of 9:45-11:15 or **EPI 202*** Fall 2 2.5 Tu/Th Additional Lab Section Required **Epidemiologic Research** 11:30-1:00 EH 205/BPH **Human Physiology** Register for BHP 208 Fall 5 M/W 9:45-11:15 208** Fundamentals of Human EH 510** 2.5 Tu/Th 2:00-3:30 Fall 2 **Environmental Exposure Assessment** An Intro to History, Politics, & Public Fall 1 **SBS 506** Health: Theories of Disease Distr. & 2.5 F 9:30-12:30 **Health Inequities**

NOTE: Elective courses chosen in consultation with your advisor.

Tu/Th

2.5

Fall 1

RDS 500**

Risk Assessment

2:00-3:30

1:00-3:30

***NOTE:** Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

DOCTORAL TIMETABLE NOTES

G3s

Prospective Program due at the end of the Year 1 Fall semester

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and return it to Barbara (bzuckerm@hsph.harvard.edu) with required documentation.

	Year 1 Spring - Environmental Health Molecular Epidemiology											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes				
	Required Courses											
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00							
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		М	11:30-1:00							
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			Year 1 or Year 2				
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.				
Spring 2	EPI 203	Study Design in Epidemiologic Research	2.5	Tu/Th	3:45-5:15			Can be taken 1 st or 2 nd year				
		An additional approved 2.5 cl					_					
		Course selection should be	basea on yo	our aissertai	ion research. Con	suit with your a	avisor.					
Spring 1	EPI 213	Epidemiology of Cancer	2.5	Tu/Th	2:00-3:30							
Spring 2	<u>or</u> EPI 223	<u>or</u> Cardiovascular Epidemiology I <i>or</i>	<u>or</u> 2.5	<u>or</u> M/W	<u>or</u> 2:00-3:30			Can be taken 1 st or 2 nd year				
Fall 2	<u>or</u> EPI 269	Reproductive and Perinatal Epidemiology I	<u>or</u> 2.5	<u>or</u> Tu/Th	<u>or</u> 2:00-3:30							
		NOTE: Elective	s courses ch	osen in con	sultation with you	ır advisor.						

G3s

- **Take the Written Exam** at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date

G1s

Prospective Program due at the end of Year 1 Spring semester.

	Year 2 Fall - Environmental Health Molecular Epidemiology											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes				
	Required Courses											
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215				
Fall 1	EPI 249	Molecular Biology for Epidemiologists	2.5	W/F	11:30 - 1:00							
		*Students must also take an approved & Courses ma			r advanced biosta tation with your a	-	ve methods	course.				
		NOTE: Elective	courses ch	osen in con	sultation with you	r advisor.						
Fall	EH 300	Independent Study						G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams				

<u>G3s</u>

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam.

		Year 2 Spring -	Environm	ental Heal	th Molecular Ep	oidemiology		
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			Year 1 or Year 2
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester
Spring 2	EPI 203	Study Design in Epidemiologic Research	2.5	Tu/Th	3:45-5:15			If not taken in Year 1.
		An additional approved 2.5 credit <u>suk</u> taken ii	ostantive co n Year 1.	ourse in Epid	lemiology if not			

G3s

DAC meetings held every three months. Progress Report form submitted after each meeting.

G1s

- * Take the Written Exam at the end of Year 2 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

	Years 3-4 Environmental Health Molecular Epidemiology											
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes				
	NOTE: Elective courses chosen in consultation with your advisor.											
	T	ypically, no additional coursework is tak	en so stude	nt can focus	on completing th	eir dissertation	during Yea	rs 3 and 4.				
All Semesters	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester				
Fall	ЕН 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams				

<u>G1s</u>

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE II) Exam

- DAC meetings held every three months. Progress Report form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- * Review GSAS dates for Applying for Graduation and defense date requirements.
- **Review GSAS dissertation formatting requirement.**

Environmental Health Molecular Physiology

Year 1 Fall – Environmental Health Molecular Physiology

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes					
	Required Courses												
Summer / Fall 1	ID 100	Foundations for Public Health	1					Starts July/August: online. Continues in Fall. Register during Fall registration.					
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences	5	Tu/Th	11:30-1:00								
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00								
Fall 1	EPI 201*	Introduction to Epidemiology: Methods I	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required					
Fall 2	EPI 202*	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required					
Fall	EH 205/BPH 208**	Human Physiology	5	M/W	9:45-11:15			Register for BHP 208					
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	Tu/Th	2:00-3:30								
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	9:30-12:30								
Fall 1	RDS 500**	Risk Assessment	2.5	Tu/Th	2:00-3:30 1:00-3:30								

***NOTE:** Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

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DOCTORAL TIMETABLE NOTES

G3s

• Prospective Program due at the end of the Year 1 Fall semester

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and return it to Barbara (bzuckerm@hsph.harvard.edu) with required documentation.

	Year 1 Spring — Environmental Health Molecular Physiology									
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
Required Courses										
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00					
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		М	11:30-1:00					
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5 5	Tu/Th or W/F	9:45-11:15 <u>or</u> 11:30-1:00			Can be taken 1 st or 2 nd year		
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.		
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			Can be taken 1 st or 2 nd year		

NOTE: Elective courses chosen in consultation with your advisor.

G3s

- * Take the Written Exam at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date

G1s

Prospective Program due at the end of Year 1 Spring semester.

		Year 2 Fall –	Environm	ental Heal	th Molecular Ph	nysiology				
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Required Courses									
Fall	EH 512/BPH 305QC	Interdisciplinary Training in Pulmonary Sciences Part I	2.5	Tu/F	9:45-10:45 1:00-2:00			Register for BPH 305QC – consult with your advisor about registering for this course or an alternative		
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215		
		*Students must also take an approved g			r advanced biosta tation with your ac	-	ve methods	s course.		
		NOTE: Elective	courses ch	osen in cons	sultation with you	r advisor.				
Fall	EH 300	Independent Study						G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams		

G3s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

	Year 2 Spring – Environmental Health Molecular Physiology									
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
Required Courses										
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5	Tu/Th <u>or</u> W/F	9:45-11:15 <u>or</u> 11:30-1:00			If not taken in Year 1		
Spring	EH 513/BPH 302QC	Interdisciplinary Training in Pulmonary Sciences Part II	2.5	Tu/F	9:45-10:45 1:00-2:00			Register for BPH 302QC; consult with your advisor about registering for this course or an alternative		
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring		
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			Can be taken 1 st or 2 nd year		
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester		

NOTE: Elective courses chosen in consultation with your advisor.

G3s

DAC meetings held every three months. *Progress Report* form submitted after each meeting.

G1s

- * Take the Written Exam at the end of Year 2 Spring semester in May/June.
- Final Program is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam

	Years 3-4 Environmental Health Molecular Physiology									
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Elective & TA courses chosen in consultation with your advisor.									
	<i>T</i> y	ypically, no additional coursework is tak	en so stude	nt can focus	on completing th	eir dissertation	during Yea	rs 3 and 4.		
All Semesters	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester		
Fall	EH 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams		

<u>G1s</u>

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE II) Exam

- DAC meetings held every three months. Progress Report form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- * Review GSAS dates for Applying for Graduation and defense date requirements.
- **Review GSAS dissertation formatting requirement.**

Environmental Health Occupational Health/Occupational Epidemiology

Year 1 Fall - Environmental Health Occupational Health/Occupational Epidemiology

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Required Courses										
Summer / Fall 1	ID 100	Foundations for Public Health	1					Starts July/August: online. Continues in Fall. Register during Fall registration.			
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences	5	Tu/Th	11:30-1:00						
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00						
Fall 1	EPI 201*	Introduction to Epidemiology: Methods I	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required			
Fall 2	EPI 202*	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required			
Fall	EH 205/BPH 208**	Human Physiology	5	M/W	9:45-11:15			Register for BHP 208			
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	Tu/Th	2:00-3:30						
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	9:30-12:30						
Fall 1	RDS 500**	Risk Assessment	2.5	Tu/Th	2:00-3:30 1:00-3:30						

NOTE: Elective courses chosen in consultation with your advisor.

***NOTE:** Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

DOCTORAL TIMETABLE NOTES

G3s

• Prospective Program due at the end of the Year 1 Fall semester

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and return it to Barbara (bzuckerm@hsph.harvard.edu) with required documentation.

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
			Re	equired Cou	rses			
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00			
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		М	11:30-1:00			
	EH 257	Water Pollution	5	Tu/Th	9:45-11:15			
Spring	<u>or</u> EH 297	<u>or</u> Atmospheric Environment	5	or W/F	<u>or</u> 11:30-1:00			Can be taken 1 st or 2 nd year
Spring	EH 236	Epidemiology of Environmental and Occupational Health Regulations	5	F	9:45-1:00			Can be taken 1 st or 2 nd year
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			Can be taken 1 st or 2 nd year
Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			Can be taken 1 st or 2 nd year
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students tak this course in Year 2 Spring.
	NOTE:	Consult with your advisor about sequer	_		•		al EPI Cours	ses (see below)
		An additional approved 2.5			nd which to take i		llowing	
Spring 2	EPI 203	Study Design in Epidemiologic Research	2.5	Tu/Th	3:45-5:15	de one of the job	nowing	Can be taken 1 st or 2 nd year
		An additional approved 2.5 cr	edit <u>substa</u>	intive course	which could incl	ude one of the f	ollowing.	
		Course selection should be	based on yo	our dissertat	tion research. Cor	sult with your a	dvisor.	
Spring 1	EPI 213 or	Epidemiology of Cancer <u>or</u>	2.5	Tu/Th	2:00-3:30 <u>or</u>			These courses can be taken 1 st o
Spring 2	EPI 223	Cardiovascular Epidemiology I <u>or</u>	<u>or</u> 2.5	<u>or</u> M/W	2:00-3:30			2 nd year
Fall 2	or EPI 269	Reproductive and Perinatal Epidemiology I	<u>or</u> 2.5	<u>or</u> Tu/Th	<u>or</u> 2:00-3:30			

G3s

- * Take the Written Exam at the end of Year 1 Spring semester in May/June.
- ❖ Final Program is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date

G1s

Prospective Program due at the end of Year 1 Spring semester.

	Year 2 Fall – Environmental Health Occupational Health/Occupational Epidemiology									
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Required Courses									
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215		
	Students must also take an approved <u>5 credit</u> intermediate or advanced biostatistics/qualitative methods course. Courses may be selected in consultation with your advisor									
		NOTE: Elective Consult with your advisor about se			sultation with you , Spring courses a		PI Coursewo	ork		
Fall	EH 300	Independent Study						G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams		

G3s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

		Year 2 Spring – Environment	al Health	Occupatio	nal Health/Occ	cupational Ep	idemiolo	gy		
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	Required Courses									
Spring	EH 236	Epidemiology of Environmental and Occupational Health Regulations	5	F	9:45-1:00			If not taken in Year 1.		
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5 5	Tu/Th <u>or</u> W/F	9:45-11:15 <u>or</u> 11:30-1:00			If not taken in Year 1.		
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			If not taken in Year 1.		
Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			If not taken in Year 1.		
Spring 1	ID 271	Advanced Regression for Environmental Epidemiology	2.5	Tu/Th	Tu 2:00-3:30 Th 1:00-3:30					
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring		
Spring 2	EPI 203	Study Design in Epidemiologic Research	2.5	Tu/Th	3:45-5:15			Can be taken 1 st or 2 nd year		
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester		

NOTE: Elective courses chosen in consultation with your advisor.

Consult with your advisor about sequencing of the Year 1, Spring Courses and additional EPI Coursework

G3s

DAC meetings held every three months. *Progress Report* form submitted after each meeting.

G1s

- **Take the Written Exam** at the end of Year 2 Spring semester in May/June.
- Final Program is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam

	Years 3-4 Environmental Health Occupational Health/Occupational Epidemiology									
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes		
	NOTE: Elective courses chosen in consultation with your advisor.									
	Ty	pically, no additional coursework is take	en so stude	nt can focus	on completing th	eir dissertation	during Yea	rs 3 and 4.		
All Semesters	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester		
Fall	EH 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams		

<u>G1s</u>

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE) Exam

- DAC meetings held every three months. Progress Report form submitted after each meeting.
- Dissertation Scheduling Form due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- Review GSAS dates for Applying for Graduation and defense date requirements.
- Review GSAS dissertation formatting requirement.

Environmental Health Risk Sciences

Year 1 Fall - Environmental Health Risk Sciences

Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Required Courses										
Summer / Fall 1	ID 100	Foundations for Public Health	1					Starts July/August: online. Continues in Fall. Register during Fall registration.			
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences	5	Tu/Th	11:30-1:00						
Fall	PHS 2000A#	Quantitative Research Methods in Population Health Sciences (Lab)		M	11:30-1:00						
Fall 1	EPI 201*	Introduction to Epidemiology: Methods I	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required			
Fall 2	EPI 202*	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Tu/Th	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required			
Fall	EH 205/BPH 208**	Human Physiology	5	M/W	9:45-11:15			Register for BHP 208			
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	9:30-12:30						
Fall 2	RDS 280	Decision Analysis for Health and Medical Practices	2.5	Tu/Th	2:00-3:30						
Fall 1	RDS 500**	Risk Assessment	2.5	Tu/Th	2:00-3:30 1:00-3:30						

NOTE: Elective courses chosen in consultation with your advisor.

G3s

• Prospective Program due at the end of the Year 1 Fall semester

***NOTE:** Fall 2023 Incoming PhD PHS students who, in consultation with Dr. Jarvis Chen, have opted to take PHS 2000A and B in their second year, should register for BST 201 Introduction to Statistical Methods in Fall 2023 and BST 210 Applied Regression Analysis in Spring 2024.

Fall 2023	BST 201	Introduction to Statistical Methods	5	Tu/Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2024	BST 210	Applied Regression Analysis	5	Tu/Th	8:00-9:30	BST 210 Additional Lab Required. BST 210 also offered in the Spring

^{*}Students who believe they have taken coursework that fulfills the requirements for EPI 201 and/or EPI 202, see the section on waiving courses.

^{**}Students who believe they have taken coursework that fulfills the EH Department requirements for EH 205, EH 510, RDS 500 and any other EH required courses see the section on waiving courses and complete the EH Department *Course Waiver Form* and send to Barbara (bzuckerm@hsph.harvard.edu) with the required documentation.

	Year 1 Spring - Environmental Health Risk Sciences							
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
Spring	PHS 2000B	Quantitative Research Methods in Population Health Science II	5	Tu/Th	11:30-1:00			
Spring	PHS 2000B#	Quantitative Research Methods in Population Health Sciences (Lab)		М	11:30-1:00			
	EH 257	Water Pollution	5	Tu/Th	9:45-11:15			
Spring	<u>or</u> EH 297	<u>or</u> Atmospheric Environment	5	<u>or</u> W/F	<u>or</u> 11:30-1:00			Can be taken in Year 1 or Year 2.
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			For G3 students. G1 students take this course in Year 2 Spring.
Spring 2	RDS 282	Economic Evaluation of Health Policy and Program Management	2.5	M/W	2:00-3:30			

^{*}Students must also take an approved environmental law/policy course sometime during the first two years. A course may be selected in consultation with your advisor.

NOTE: Electives courses chosen in consultation with your advisor.

G3s

- * Take the Written Exam at the end of Year 1 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
- Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

<u>G1s</u>

Prospective Program due at the end of Year 1 Spring semester.

	Year 2 Fall - Environmental Health Risk Sciences							
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
Fall 2	EH 510	Fundamentals of Human Environmental Exposure Assessment	2.5	Tu/Th	2:00-3:30			
Fall	EH 504/BPH 215	Principles of Toxicology	5	M/W	9:45 – 11:15			Section 2; Register for BPH 215

^{*}Students must also take an approved environmental law/policy course sometime during the first two years selected in consultation with your advisor.

*Students must also take an approved $\underline{5}$ credit intermediate or advanced biostatistics/qualitative methods course.

Courses may be selected in consultation with your advisor.

EH 300	Independent Study			,		G3 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation
						research/proposal for their oral
						exams

NOTE: Elective courses chosen in consultation with your advisor.

DOCTORAL TIMETABLE NOTES

G3s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II) Exam.

	Year 2 Spring - Environmental Health Risk Sciences							
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
			Re	equired Cou	rses			
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			G1 students take this course in Year 2 Spring.
Spring 1	ID 271	Advanced Regression for Environmental Epidemiology	2.5	Tu/Th	Tu 2:00-3:30 Th 1:00-3:30			
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5	Tu/Th <u>or</u> W/F	9:45-11:15 <u>or</u> 11:30-1:00			If not taken in Year 1.
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30			
Spring	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester

^{*}Students must also take an approved environmental law/policy course sometime during the first two year in consultation with your advisor.

NOTE: Elective courses chosen in consultation with your advisor.

G3s

DAC meetings held every three months. *Progress Report* form submitted after each meeting.

G1s

- **❖** Take the Written Exam at the end of Year 2 Spring semester in May/June.
- **Final Program** is due after successfully completing your written exam.
- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 2 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral Qualifying (PQE II)
 Exam

	Year 3-4 Environmental Health Risk Sciences							
Semester	Course Code	Course Title	HSPH Credits	Day	Time	Completed/ Waived	Grade	Notes
	NOTE: Elective courses chosen in consultation with your advisor. Typically, no additional coursework is taken so student can focus on completing their dissertation during Years 3 and 4.							
All Semesters	EH 350	Research						Students who have passed their oral exams should register for EH 350 Research with their advisor for the number of credits necessary to bring their course load to 16 GSAS/20 HSPH credits each semester
Fall	EH 300	Independent Study						G1 students may choose to register for EH 300 Independent Study with their advisor to focus on their dissertation research/proposal for their oral exams

G1s

- Present your Dissertation Proposal to the EH Faculty prior to submitting your Oral Qualifying (PQE II) Examination Scheduling Form
- ❖ Orals/PQE II Exam will be held before the end of Year 3 Fall semester.
 - o Submit Oral Qualifying (PQE II) Examination Scheduling Form at least 4 weeks before your exam date.
 - Submit Dissertation Advisory Committee (DAC) Nomination Form within one month of successfully passing your Oral
 Qualifying (PQE II) Exam

All Students Who Have Passed their Oral Qualifying (PQE II) Exam

- ❖ DAC meetings held every three months. Progress Report form submitted after each meeting.
- **Dissertation Scheduling Form** due at least 4 weeks prior to the defense date. Include a <u>draft</u> copy of the dissertation, introduction, three papers, and conclusion.
- * Review GSAS dates for Applying for Graduation and defense date requirements.
- Review GSAS dissertation formatting requirement.
- Review GSAS dates for Applying for Graduation and defense date requirements.
- Review GSAS dissertation formatting requirement.

Potential Minor(s)

Air Pollution, Atmospheric Science, Biostatistics, Built And Environment And Health, Cancer Biology, Cancer Genetics, Chronic Disease Epidemiology, Community Engagement, Energy & Buildings Systems, Environmental And Social Health Disparities, Environmental Epidemiology, Environmental Exposure Assessment, Environmental Health Literacy, Environmental Justice, Genome Integrity, Immunology, Maternal And Child Health, Mixed Methods, Nutrition (Nutrient Toxic Interactions), Planetary Health, Quantitative Analysis, Quantitative Methods, Quantitative Research Methods, Reproductive Epidemiology, Social And Behavioral Sciences, Social And Behavioral Studies, Spatial Methods, Statistical Methods, Sustainability

Independent Study and Research Credit Enrollment

With the permission of the Academic Advisor and the PHS Program Office, students are allowed to enroll in 300-level, 350-level, or 400-level coursework as part of their academic course enrollment.

Designation of each course is as follows:

<u>300-Level</u>: If a student is working on an independent study with a faculty member <u>prior to passing their</u> PQE II, they should enroll in the 300-level Harvard Chan course related to their field of study which will be graded Pass/Fail (i.e. EH 300, EPI 300, SBS 300, etc.). The student will choose the specific section number that is assigned to the faculty member with whom they are doing the independent study. The student will need to submit an <u>Independent Study Request</u> form before they are able to enroll in the course. The form helps the student and faculty member determine expectations, outline of work, and number of credits.

It is **typical that a student may need to enroll in this course after they pass their Written Exam (PQE I) and prior to taking their Orals Exam (PQE II), in order to designate time spent writing their proposal and working on research.

350-Level: If a student has passed their Orals Exam (PQE II) and has begun working on research towards their dissertation locally at Harvard, they will enroll in the 350-level Harvard Chan course related to their field of study which will be graded Pass/Fail (i.e. EH 350, GHP 350, NUT 350, etc.). The student will choose the specific section number that is assigned to their academic advisor. Each student can enroll in up to 16 GSAS credits/20 HSPH Credits Per Semester meeting the minimum 16-credit requirement set forth by the FAS Registrar's Office. Unless the student and advisor agree that further coursework would be beneficial in supporting research and/or dissertation writing, no further courses are required for credit; however, should the student opt for additional coursework, the credit/s for additional coursework should be deducted from the initial 16-credits allotted to the 350-level course

400-Level: If a student has passed their Orals Exam (PQE II) and has begun working on research towards their dissertation with approved non-resident status, they will enroll in the 400-level Harvard Chan course related to their field of study which will be graded Pass/Fail (i.e. EH 400, GHP 400, NUT 400, etc.). The student will choose the specific section number that is assigned to their academic advisor. Each student can enroll in up to 16 GSAS/20 HSPH Credits Per Semester, meeting the minimum 16-credit requirement set forth by the FAS Registrar's Office. Unless the student and advisor agree that further coursework would be beneficial in supporting research and/or dissertation writing, no further courses are required for credit; however, should the student opt for additional coursework, the credit/s for additional coursework should be deducted from the initial 16-credits allotted to the 400-level course

IF you	Then you should	How many credits? How will I be graded?
 Are working on an independent study with a faculty member at this school prior to passing your PQEII Have passed your PQEI and are currently working on your PQEII research proposal 	Enroll in the 300 level Harvard Chan course related to your field of study which will be graded Pass/Fail. (i.e. EPI 300 , SBS 300) Choose the specific section number of the course that is assigned to the faculty member with whom you are doing the independent study. It is strongly recommended that you and this faculty are very clear about the work to be accomplished during this independent study.	Students should work with the faculty member listed on the 300 level course to determine expectations, outline of work, and number of credits
	Enroll in the 350 level Harvard Chan course related to your field of study which will be graded Pass/Fail. (ie GHP 350, EH 350, NUT 350). Choose the specific section number of the course that is assigned to the faculty member who is your dissertation advisor.	Students should use these credits to fill the 16 credit GSAS/20 HSPH requirement to keep them listed as Full-time students and meet with their DAC every 3 months to determine process.
Have passed your PQEII and will be working on research for your dissertation with approved non-resident status	Fill out the GSAS Non-Residential Application (NORA). Contact the PHS Coordinator for access to the application. Enroll in the 400 level Harvard Chan course related to your field of study which will be graded Pass/Fail. (ie GHP 400, EH 400, NUT 400). Choose the specific section number of the course that is assigned to the faculty member who is your dissertation advisor.	Students should use these credits to fill the 16 credit GSAS/20 HSPH requirement to keep them listed as Full-time students and meet with their DAC every 3 months to determine process.

When a course has the "Instructor Permission Required" rule the student - Harvard Chan or PHD – will need to submit a petition through my.harvard using the text box provided. The petition will be routed to the course instructor. Once approved, the student will be able return to my.harvard to enroll in the class.

Preparing For The Dissertation Defense

As soon as you are ready to begin planning your dissertation defense, contact Bruce Villineau (bvillineau@hsph.harvard.edu) to begin planning/scheduling your defense. Consult the PHD PHS Handbook at https://indd.adobe.com/view/34217932-e31f-44fb-a884-4ffc9bbbb21c

Currently all dissertation defenses students will have the choice of either a fully-remote defense via Zoom or in-person and scheduled in an on-campus room, which can also incorporate a Zoom format (hybrid format). The defense committee should decide whether they will all be attending in person or via Zoom. Contact Bruce for any changes in these defense format options.

The PHS Program Office will convene a pre-defense planning meeting for all students anticipating a defense to coach them through defense paperwork, format of the dissertation, and submission and timing deadlines for the FAS Registrar's Office. If unable to attend the group meeting, any student is welcome to request a one-on-one meeting at any time, but all PHS students are required to attend a meeting as part of the defense planning process along with the submission of their dissertation scheduling form.

Students preparing to defend their dissertation must review Harvard University requirements, outlined in the Dissertations section of the Graduate School of Arts and Sciences (GSAS) website. The pre-defense planning meeting will cover this information in-depth during the session.

Dissertation Defense Timing & Format

At least six weeks in advance of the Dissertation Defense: The student will work with their DAC and Field to decide the date, time, and on-campus location that is Zoom-enabled for the Defense.

Defense Scheduling Form should be completed and shared with the PHS Office and sent to Barbara Zuckerman (bzuckerm@hsph.harvard.edu) for approval. Environmental Health students need to include a draft copy of their dissertation with the dissertation scheduling form at least 4 weeks prior to the defense date. The student name, title, date, time, and place of the Dissertation Defense will be created and announced via e-Mail to members of the Field and PHS community and publicized via poster throughout Harvard Chan ten days prior to the defense date. An electronic version of the announcement will also be shared with the defender ten days in advance for sharing with friends/family/colleagues.

An advance copy of the Dissertation should be sent for review to committee members and the Field administrator in advance of the defense date. The Field administrator will work with the defending student to determine the timeline for advanced copy sharing. A copy of the dissertation is not required to be sent to the PHS Program Office; the final copy will be collected by PHS post-defense. 51 2022 - 2023 PHS PHD Student Handbook Revision Date: 01 Aug 2022

In advance of the Dissertation Defense: DAC members should contact the Chair if they foresee any issues with preparedness for the dissertation defense; the Chair may also consult the PHS Program Office, which can consult/receive clarification from GSAS, as needed. The PHS Program Office will reach out to the Committee Chair two days in advance of the defense with instructions for filing final post-defense paperwork, which the student does not see/receive for official purposes.

During the Dissertation Defense: The PhD candidate will present a public seminar with members of Harvard community and candidate-invited guests – with an option for participants to attend via Zoom whenever possible.

Please note: While the Dissertation Defense is a public forum, questioning of the dissertation candidate during the proceedings is limited to members of the DAC. The public may ask questions only once/if invited, following the candidate's presentation and questioning by the Dissertation Advisory Committee is complete.

Graduation and Offboarding

Account/Service	Expiration
HarvardKey	HarvardKey credentials including 2-step authorization continue to work indefinitely after graduation.
	Harvard University's central alumni resources at http://www.alumni.harvard.edu utilize the HarvardKey for authentication.
	Most other SPH and University systems are restricted to active students. More information on specific systems may be found below.
Harvard University Identification Cards	Harvard Identification cards are deactivated immediately following commencement.

Account/Service	Expiration
Stipend	For graduating PhD PHS students, stipends will go through the month of their degree conferral.
	Example: If you defend in February and are set to graduate in May your last stipend is in May.
	UNLESS If you have secured employment, then their last stipend check is the month of the start date of employment – the stipend can be pro-rated if you start their new position in the middle of the month. Example: If you start as a postdoc, the doctoral stipend ends in the month
	prior to the start of the appointment.
Student printing	Student printing access is tied to your Harvard University Identification card; therefore, printing access ends immediately following commencement .
O365 email/calendaring including OneDrive, Sharepoint (@hsph.harvard.edu accounts)	The Harvard University policy for Microsoft Office 365 accounts (designated by student@hsph.harvard.edu) states that accounts expire 230 days after a student's graduation*. This grace period gives students time to continue to use their email address after graduation for job searches and other communications.

Account/Service	Expiration
	*For Harvard Chan students graduating in May 2020, the University has granted a one-time extension because of COVID-19, so that emails will expire one year (365 days) from graduation.
	The Department of Information Technology can provide guidance on how to create a personal archive of your mail as well as copy other O365 files to local drives ahead of the end of the grace period.
	Alumni are notified at 10 days prior to account expiration and at 5 days prior to account expiration.
Alumni email forwarding (@alumni.harvard.edu)	The Harvard Alumni Association has retired this service. It is no longer available to graduating students. Further information on policies and how to establish your forwarding may be found at: https://alumni.harvard.edu/help/email-forwarding.
SPH Network and Personal Drives (P/:, S/:, G:/)	Access to services end on June 30th for all graduates including March, May and November graduation dates. The HSPH Helpdesk can provide guidance to assist you in moving any personal files to personal computers or other devices.

Account/Service	Expiration
My.Harvard portal	Access to My.Harvard continues after graduation with information tailored toward alumni. This tab allows students to do items like review course history/grades and print an unofficial transcript.
SPH Virtual Computer Laboratories (VDI)	Access to services end on June 30th for all graduates including March, May and November graduation dates.
Zoom video conferencing	Access ends immediately following commencement for all graduates including March, May and November graduation dates.
Qualtrics	Access ends immediately following commencement. This includes access to any surveys created and survey data. Please see Qualtrics FAQ for off-boarding information.
Canvas courses	Access to courses on Canvas is available for up to two years after graduation . Some collaborative features of courses will be in a "read only" state after the course has concluded (e.g., discussion boards, assignment submissions). Features that rely on student library access privileges will not be available. Please also note that faculty may opt to remove their courses and/or select content ahead of the two-year time period. We recommend copying materials locally to your computer to ensure continued access to content of interest from your courses. If a course was recorded, videos will be available for up to two years after the course was offered. Faculty may opt to remove course videos ahead of the two-year time period. Videos are not available for download.

Account/Service	Expiration				
	If you have questions or problems accessing materials, please contact the Harvard Chan IT Helpdesk at helpdesk@hsph.harvard.edu .				
Harvard Library Access	Student access to Harvard libraries is removed immediately after graduation (March, May or November dates). However, all Harvard alumni now have access to a wide variety of electronic resources from the Harvard Libraries. While this catalog is not comprehensive it does provide access to many of the most popular journals and other resources through the Harvard Libraries.				
	Additionally, alumni can apply for borrowing privileges at Countway and Widener Libraries for a fee, and SPH Office of Alumni Affairs recently launched alumni access to one of the largest publishers of online journals.				
	Your alumni representatives serving on the Harvard Chan School Alumni Council are continuing to seek new ways for Harvard Chan School alumni to access Harvard's vast scholarly resources.				
	<u>Visit the SPH Office of Alumni Affairs benefits page</u> to see what scholarly resources are currently available to our alumni and how to access them.				

Account/Service	Expiration
FAS Odyssey High Performance Research Computing	If you have access to Odyssey for research in collaboration with a faculty sponsor, continued access/decommissioning of your account beyond graduation is determined by your faculty sponsor. Please contact your faculty sponsor for additional information.
SPH WordPress Accounts	Access to any SPH websites that are restricted to an active SPH group (e.g., active SPH students, active SPH community) will expire immediately upon graduation. If you have editing privileges for a particular SPH site, access persist until/if the SPH website owner removes your access.
Harvard Wiki http://wiki.harvard.edu	Access persists to Harvard wikis after graduation utilizing your HarvardKey. Access to particular a wiki is dependent upon the permissions of the wiki. For example, if a wiki is open to "all SPH students," upon graduation, your access to that particular wiki would expire immediately upon graduation. Alternatively, if a wiki was open to you as an individual, your access persists indefinitely until/if the wiki owner removes your access.
Harvard MessageMe	Access ends immediately following commencement.

Frequently Asked Questions

I still have some work to do and need access to Harvard Chan school buildings. What should I do?

Alumni are always welcome to visit the Harvard Chan School campus buildings. Future access to the campus will require either a visitor pass or application for a non-student HUID to be approved by the appropriate department. If you only need access for the day, please identify yourself to the Kresge entrance security guard as a graduate of the Harvard Chan School and the security guard will direct you to the ID office. The ID office will ask for a photo ID and will issue you an alumni visitor pass for the day. Alumni may only receive a single-day pass without making prior arrangements with a department or program administrator, and no more than two-day passes will be issued in any given three-month period. If you require sustained access to the Harvard Chan School buildings after graduation to complete work or for other legitimate business or academic reasons, please see your department or program administrator, who can sponsor you for a temporary ID—for one week or 30, 60, or 90 days—that will allow you access to the portions of the campus that are necessary for completing your work. The decision to sponsor a temporary ID is at the sole discretion of the department or program and may be rescinded at any time (revised July 10, 2013).

UPDATE AS OF 2021: Due to COVID-19 protocols, alumni are not currently able to obtain day passes.

Why is my HUID disabled so soon after graduation?

Harvard University policy mandates that all HUIDs be deactivated the day a student graduates, whether November, March or May. Deactivated HUIDs should be turned in at the ID Office.

I'm still doing some research. Can I use the Countway Library or other Harvard libraries after graduation?

Student access to Harvard libraries is removed immediately after graduation. However, all Harvard alumni now have access to a wide variety of electronic resources. While this catalog is not comprehensive, it does provide access to many of the most popular journals and other resources through the Harvard libraries. Additionally, alumni can apply for borrowing privileges at Countway and Widener Libraries for a fee, and we recently began providing alumni access to one of the largest publishers of online journals. Your alumni representatives serving on the Harvard Chan School Alumni Council are continuing to seek new ways for Harvard Chan School alumni to access Harvard's vast scholarly resources. Visit our Career Tools page to see the scholarly resources that are currently available to our alumni and how to access them.

What about Canvas? Can I still access my course materials after graduation?

Access to courses on Canvas is available for up to two years after graduation. Some collaborative features of courses will be in a "read only" state after the course has concluded (e.g., discussion boards, assignment submissions). Features that rely on student library access privileges will not be available. Please also note that faculty may opt to remove their courses and/or select content ahead of the two-year time period. We recommend copying materials locally to your computer to ensure continued access to content of interest from your courses.

If a course was recorded, videos will be available for up to two years after the course was offered. Faculty may opt to remove course videos ahead of the two-year time period. Videos are not available for download.

If you have questions or problems accessing materials, please contact the Harvard Chan IT Helpdesk at helpdesk@hsph.harvard.edu.

I'm still looking for a job. Can I use the Office of Career and Professional Development after graduation?

Yes. A variety of services are available throughout your career, and you are always welcome to contact us for assistance. As alumni, you will also have lifelong access to the CareerConnect job listings, and we are increasingly posting mid- to senior-level positions to help you as you progress through your career. Please visit the Career Advancement website for more details.

Does my Harvard email expire?

Student email accounts expire 365 days after a student's graduation.

Does my access to other Harvard Chan and Harvard systems expire?

Access to most systems ends upon graduation or shortly thereafter. Policies are determined by the technology unit that manages each service on a service-by-service basis.

Most notably, access to your Harvard Chan network drives (P:/, S:/, G:/ drives), as well as virtual student computing (VDI), expires on June 30 for all graduation dates (November, March, and May). The Department of Information Technology can provide guidance on copying personal files to your local computer or other devices.

The Department of Information Technology also maintains a detailed list at https://hsph.me/student-offboarding with additional information for recent graduates.

Does my HarvardKey credential expire?

Current Harvard University policy states that your HavardKey credential does not expire. The HarvardKey is used for some alumni activities, including accessing the University's alumni website (alumni.harvard.edu)

How can I connect with other Harvard Chan School alumni specifically?

A unique benefit of attending the Harvard T.H. Chan School of Public Health is that you are part of a great School within a great University! Our alumni are members of both the Harvard Chan School Alumni Association and the University-wide Harvard Alumni Association (HAA) described below. Please note that joining the Harvard Chan School Alumni Online Community requires a separate registration process from that for the HAA registration. The Harvard Chan School Alumni Online Community features a secure, password-protected, Harvard Chan School—specific alumni directory, an alumni mentoring network, information on how to submit class notes, listings of regional groups, current news about Harvard Chan School faculty and alumni, and career and volunteer opportunities around the globe. Whenever your home or business information changes, be sure to update your online community profile. You can also request to join the Harvard Chan Alumni LinkedIn Network and Facebook groups.

I heard I can join the Harvard Alumni Association (HAA). What's that about?

As an additional resource, all Harvard alumni are eligible to register with the Harvard Alumni Association at a password-protected site (alumni.harvard.edu) offering a variety of services, including a University-wide alumni directory, distance-learning programs, and career/networking opportunities.

To register:

- 1. Go to the HAA website.
- 2. Click the Community Login or Register button on the top right-hand side of the page, and follow the information requests.
- 3. Use your existing Harvard Key to log in.
- 4. If you have any problems registering, please email the HAA help desk or call 800-823-2478 or 617-496-0559 (M-F, 9 am 5 pm ET) or visit the HAA help page for more options.

What happens to insurance when you graduate?

November Degree

November degree candidates who complete their degree requirements on or before September 8 will have HUSHP coverage retroactively cancelled back to the last day of the prior term of coverage (July 31) and students will be charged for any services incurred through the health program during this period.

- Students who register for the fall term and complete their degree requirements between September 9 and October 9 will be charged for HUSHP for the fall term and will have coverage from August 1-January 31.
- Students who register for the fall term and complete their degree requirements on or after October 10 will not be considered November degree candidates. HUSHP charges will remain on the student account for fall term and the student will have coverage from August 1-January 31.

Sample scenario one

5/30 Student misses May degree deadline and is presumed to be a November degree candidate 7/01 Student is billed for HUSHP

8/25 Student registers for fall

9/08 Student completes degree requirements"

9/13 HUSHP is cancelled retroactively back to July 31

Sample scenario two

5/30 Student misses May degree deadline and is presumed to be a November degree candidate

7/01 Student is billed for HUSHP

8/25 Student registers for fall

9/09 Student completes degree requirements

9/13 HUSHP remains on student's bill and the student is covered from August 1 through January 31

March Degree

HUSHP coverage will terminate on January 31 for all March degree candidates.

MAY DEGREE

HUSHP coverage will terminate on July 31 for all May degree candidates.

When is my final stipend payment?

For graduating PhD PHS students, stipends will go through the month of their degree conferral.

Example: If they defend in February and are set to graduate in May their last stipend is in May.

UNLESS

They you secured employment then their last stipend check is the month of the start date of employment – the stipend can be pro-rated if you start their new position in the middle of the month.

If you start as a postdoc, the doctoral stipend ends in the month prior to the start of your new job.

Electives

	Potential Electives – Consult With Your Advisor				
Course Code	Course	Credits	Semester	Day	Time
API 135	Economics of Climate Change and Environmental Policy	4	Spring	W/F	1:30-2:45
API 165	Energy and Environmental Economics and Policy	4	Spring	M/W	3:00-4:15
BE 110	Physiological Systems Analysis	4 (FAS)	Fall	M/W	9:45 – 11:00
BIOPHYS 170	Evolutionary and Quantitative Genomics	4	Fall	ТВА	ТВА
BIOSTAT 249	Bayesian Methodology in Biostatistics	4	Spring	Tu/Th	3:45-5:15
BIOSTAT 281	Genomic Data Manipulation	4	Spring	M/W	3:45-5:15
BST 212	Survey Research Methods in Community Health	2.5	Spring	W	3:45-5:15
BST 213	Applied Regression for Clinical Research	5	Fall	M/W	8:00-9:30
BST 222	Basics of Statistical Inference	5	Fall	Tu/Th	8:00-9:30
BST 223	Applied Survival Analysis	5	Spring	Tu/Th	9:45-11:15
BST 226	Applied Longitudinal Analysis	5	Spring	Tu/Th	2:00-3:30
BST 227	Introduction to Statistical Genetics	2.5	Fall 2	M/W	3:45-5:15
BST 245	Analysis of Multivariate and Longitudinal Data	5	Fall	Tu/Th	11:30-1:00
BST 280	Introductory Genomics and Bioinformatics for Health Research	2.5	Fall 2	Tu/Th	2:00-3:30
BST 281	Genomic Data Manipulation	5	Spring	M/W	3:45-5:15

CELLBIO 201	Principles of Cell Biology	4 (GSAS)	Spring	M/W/F	10:30-12:00
EH 208	Pathophysiology of Human Disease	5	Spring	M/W	2:00-2:30
EH 212	Food and the Global Environment	2.5	Spring	M	3:45-5:15
EH 231	Occupational Health Policy and Administration	5	Spring	M	3:45-5:15
EH 232	Introduction to Occupational and Environmental Medicine	2.5	Spring	F	8:00-9:30
EH 236	Epidemiology of Environmental and Occupational Health Regulations	5	Spring	F	9:45-1:00
EH 241	Occupational Safety and Injury Prevention	2.5	Fall	Th	5:30-7:00
EH 249	Built Environment, Nature, and Health	2.5	Fall	W/F	3:45-5:15
EH 252	High Performance Buildings for Health, Comfort and Sustainability	5	Spring	M	2:00-5:15
EH 257	Water Pollution	5	Spring	Tu/Th	9:45-11:15
EH 268	Principles and Practices of Leadership for Environmental and Occupational health Professionals	2.5	Fall	M	3:45-5:15
EH 278	Human Health and Global Environmental Change	2.5	Spring 2	Tu/Th	2:00-3:30
EH 297	Atmospheric Environment	5	Spring	W/F	11:30-1:00
EH 298	Environmental Epigenetics	2.5	Spring 2	Tu/Th	2:00-3:30
EH 504	Principles of Toxicology	2.5 or 5	Fall	M/W	9:45-11:15
EH 510	Fundamentals of Human Environmental Exposure Assessment	2.5	Fall 2	Tu/Th	2:00-3:30
EH 512	Interdisciplinary Training in Pulmonary Science I	2.5	Fall	Tu/F	Tu 9:45-10:45 F 1:00-2:00
EH 513	Interdisciplinary Training in Pulmonary Science II	2.5	Spring	Tu/F	Tu 9:45-10:45 F 1:00-2:00
EH 550	Special Topics in Environmental Health: Statistical Methods for Environmental Mixtures	2.5	January	M/Tu/W /Th/F	1:00-4:00

EPI 203	Study Design in Epidemiologic Research	2.5	Spring 2	Tu/Th	3:45-5:15
EPI 204	Analysis of Case-Control, Cohort and Other Epidemiologic Data	2.5	Spring 2	M/W	9:45-11:15
EPI 205	Practice of Epidemiology	2.5	Fall	F	2:00-3:30
EPI 207	Advanced Epidemiologic Methods	2.5	Fall 1	M/W	3:45-5:15
EPI 213	Epidemiology of Cancer	2.5	Spring 1	Tu/Th	2:00-3:30
EPI 215	Advanced Topics in Case-Control and Cohort Studies	2.5	Fall 1	M/W/Th	MW 2:00-3:30 Th 3:45-5:15
EPI 221	Pharmacoepidemiology	2.5	Fall 1	M/W	2:00-3:30
EPI 247	Epidemiologic Methods Development - Past and Present	2.5	Fall 2	M/W	3:45-5:15
EPI 249	Molecular Biology for Epidemiologists	2.5	Fall 1	W/F	11:30-1:00
EPI 254	Topics in Epidemiology of Aging	1.25	Spring 2	Th	9:45-11:15
EPI 269	Reproductive and perinatal Epidemiology I	2.5	Fall 2	Tu/Th	2:00-3:30
EPI 271	Propensity Score Analysis: Theoretical & Practical Considerations	1.25	January	M/Tu/W /Th/F	8:00-1:00
EPI 284	Epidemiology Of Neurologic Diseases	2.5	Spring 1	Tu/Th	3:45-5:15
EPI 507	Principles of Genetic Epidemiology	2.5	Fall 2	M/W	9:45-11:15
EPS 200	Atmospheric Chemistry and Physics	4	Fall	W/F	1:30-2:45
EPS 208	Physics of Climate	4	Fall	Tu/Th	10:30-11:45
EPS 231	Climate Dynamics	4	Spring	Tu/Th	10:30-11:45
ESE 168	Human Environmental Data Science: Agriculture, Conflict, and Health	4	Fall	Tu/Th	10:30-11:45
GHP 207	Risk Factors and Population Health	2.5	Spring 1	M/W/F	2:00-3:30

HPM 206	Economic Analysis	5	Fall	Tu/Th	11:30-1:00
HPM 549	Ethical and Regulatory Issues in Human Research	2.5	June	M/Tu/W /Th/F	1:30-4:30
ID 214	Nutritional Epidemiology	2.5	Spring	F	9:45-11:15
ID 220	An Introduction to Planetary Health	2.5	Spring	W	3:45-5:15
ID 263	Practice of Occupational Health	5	Spring	W	8:00-11:15
ID 269	Respiratory Epidemiology	1.25	Fall 2	Th	2:00-3:30
ID 271	Advanced Regression for Environmental Epidemiology	2.5	Spring 1	Tu/Th	T 2:00-3:30 Th 1:00-3:30
ID 539	Built Environment, Human Transportation, Public Health, and Climate Change	2.5	Spring 1	Th	2:00-3:30
IGA 455	Environmental Politics: Building Power Through Leadership, Persuasion and Negotiation	4	Spring	M/W	12:00 – 1:15
IGA 565	Analytical Methods for Complex Adaptive Systems	4	Fall 1	M/W	9:00-10:15
IMMUN 307QC	Cancer Immunology	2 (GSAS)	Fall 2	М	4:00-6:00
MCB 169	Molecular and Cellular Immunology	4 (GSAS)	Fall	Tu/Th	10:30-11:45
MIT 11.630J/1.81 1J/ESD.133J	Environmental Law, Policy and Economics: Pollution Prevention and Control		Check MIT Catalog	TR	3:30-5:00
MLD 377	Organizing: People, Power, Change	4	Spring	ТВА	ТВА
NUT 200	Introduction to Nutrition Science	2.5	Fall 1	M/W	9:45-11:15
RDS 280	Decision Analysis for Health and Medical Practices Decision Science for Public Health	2.5	Fall 2 Spring	Tu/Th	2:00-3:30 TBA
RDS 282	Economic Evaluation of Health Policy & Program Management	2.5	Spring 2	M/W	2:00-3:30
RDS 285	Decision Analysis Methods in Public Health and Medicine	2.5	Spring 1	M/W	2:00-3:30

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Bioengineering/Mechanisms of Disease
 Exposures/Exposure Assessment
 Molecular Epidemiology
 Molecular Physiology
 Occupational Health/Occupational Epidemiology
 Risk Sciences















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