Department of ENVIRONMENTAL HEALTH

MASTER OF PUBLIC HEALTH (45 CREDIT); MASTER OF PUBLIC HEALTH (65 CREDIT); MASTER OF SCIENCE (80 CREDIT); OCCUPATIONAL & ENVIRONMENTAL MEDICINE RESIDENCY; JOINT MPH/MUP PROGRAM; PHD & SD IN POPULATION HEALTH



















SCHOOL OF PUBLIC HEALTH

Environmental Health Field of Study PhD in Population Health Sciences

CURRICULUM GUIDE 2020-21

Every effort is made to ensure the information contained in this guide is accurate at the time of printing and posting. However, the curriculum, including degree requirements, courses, faculty, and program policies are subject to modification as deemed necessary by the Harvard T.H. Chan School of Public Health to provide students with the most meaningful educational experience and to remain current with professional standards and guidelines. This version of the Department of Environmental Health Curriculum Guide only pertains to students matriculating in summer or fall 2020.

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Courses – General Information

Waiving Department of Environmental Health Required Courses

These EH courses can include such required courses as those listed below amongst other:

EH 205 Human Physiology EH 504 Principles of Toxicology EH 510 Fundamentals of Human Environmental Exposure Assessment RDS 500 Risk Assessment

Complete the waiver form on page 22.

Sign the form and have your advisor sign as well.

Include with the form:

A copy of the syllabus of the course(s) you took that you believe fulfill this requirement and has covered the course content of the department course. An unofficial copy of your transcript indicating the grade you received in this course.

Email the completed waiver form and related documentation to Barbara Zuckerman (<u>bzuckerm@hsph.harvard.edu</u>). She will contact the instructor who will evaluate your request and let you know the decision.

Waiving School-wide Required Courses: BST 201 and EPI 201/202

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.

To waive:

BST 201 Introduction to Statistical Methods

EPI 201 Introduction to Epidemiology: Methods I

EPI 201 Introduction to Epidemiology: Methods I and EPI 202 Epidemiologic Methods 2: Elements of Epidemiologic Research

Process:

1) Download the core course waiver form and complete the appropriate form based on your degree program.

- SM/MPH/DrPH/BST PHD (EPI 201, BST 201 or ID 201)- course waiver form
- PHS PhD (EPI 201 and/or EPI 202) <u>course waiver form</u>

2) Collect syllabi and course descriptions of previously completed graduate- level courses (Please translate these documents if they are not written in English)

- 3) Collect transcripts documenting final grades in above courses
- 4) Complete survey and upload all supporting documents
 - Survey link: <u>https://harvard.az1.gualtrics.com/jfe/form/SV_6mv9iKaQXLq2mpv</u>
- 5) Survey will be open: July 24 August 4th @ 5pm
- 6) Decisions will be sent to your HSPH email address by August 12th @ 5pm
- *All times are Boston/EST

Questions can be directed to Eric DiGiovanni (edigiova@hsph.harvard.edu - EPI 201 and ID 201) and Jelena Follweiler (jtillots@hsph.harvard.edu - BST 201 and ID 201)



Department of Environmental Health

COURSE WAIVER FORM DEPARTMENT/DEGREE PROGRAM REQUIREMENTS

Harvard ID			
Area of Interest/Area of Spe	cialization/Track/	Area of Major Focus	
Course Semester: Fall	Spring	Year	
Course Number	Cours	e Instructor	
Course Name			
Required Course: Yes			
FAPIANATION FOR WAIVER	(Provide documen	tation including syllabus of previous co	purse(s) taken transcript of grade)
	(Provide documen	tation including syllabus of previous co	ourse(s) taken, transcript of grade)

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APPROVALS/SIGNATURES

Advisor	Date		
Course Instructor	Date		
Department			
Additional Comments			

About the Ph.D. in Population Health Sciences

Introduction

Welcome to the PhD in Population Health Sciences (PHS). This full-time degree is a joint collaboration between the Harvard Faculty of Arts and Sciences (FAS) and the Harvard T.H. Chan School of Public Health to offer a Doctorate 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 – Incoming Students, Fall 2020

- Environmental Health Bioengineering
- Environmental Health Epidemiology
- Environmental Health Exposures
- Environmental Health Molecular Epidemiology
- Environmental Health Molecular Physiology
- Environmental Health Occupational Health
- Environmental Health Risk Sciences

Areas of Specialization – Returning Students, Fall 2020

Environmental Epidemiology (EER) & (EOME): 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.

- Environmental Exposure Assessment: 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.
- Ergonomics and Safety (EER) & (EOME): this area focuses on public health and engineering approaches to the prevention of work-related injuries and musculoskeletal disorders, encompassing exposure assessment, occupational biomechanics, and epidemiology.
- Environmental 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, metabolomics, transcriptomic and other "omic" technologies into environmental epidemiology study designs.
- Environmental and Occupational Epidemiology: this area focuses on identifying and quantifying diseases and injuries due to workplace exposures and to provide the scientific basis for occupational health and safety policies.
- Environmental/Occupational Molecular Epidemiology: this area incorporates "omics" techniques with epidemiology, biostatistics and exposure assessment to study biomarkers of exposure, susceptibility, early adverse responses and diseases resulting from environmental and occupational exposures.
- Injury Epidemiology and Prevention: this area focuses on using epidemiologic methods to identify and describe risk factors for unintentional and intentional injuries, and to design an implementation of effective interventions for these injuries to target at-risk populations.
- Occupational Epidemiology: this area focuses on assessing hazardous exposures in the workplace (chemical, physical, biological) in human population studies.
- <u>Bioengineering</u>: 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.
- <u>Environmental Physiology</u>: this area emphasizes understanding the functional outcomes of environmental agents and exposures on cells, tissues and organs, especially as disease manifestations.
- Mechanisms of Disease: this area focuses on understanding the molecular and cellular basis for disease, especially those related to environmental exposures and agents.

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 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 in order to fulfill dissertation requirements. The dissertation must be successfully defended before three examiners.

Courses

Brief overview; more information provided on curriculum guides

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. The link to the course listing is here.

They may also take courses across any of the Harvard schools. The link to the University-wide course listing is here.

Course Enrollment Requirements

Please note that credit numbers are different between the Faculty of Arts and Sciences and the Harvard Chan School. FAS 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 16 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 requirements:

- Quantitative Research Methods in Population Health Sciences (PHS 2000), a year-long course to be taken in the first year. 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). (10 Chan credits/ 8 FAS credits)
- Introduction to Epidemiology (EPI201) and Elements of Epidemiological Research (EPI202): to be taken in the first year. This sequence equips all students with understanding of basic research concepts, causal theory, epidemiology, and study design. (5 Chan credits/ 4 FAS credits)
- Introduction to Public Health (number TBD): providing an introduction to the social and scientific context, content, and implications of theories of disease distribution, past and present. (2.5 Chan 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)

Quantitative Research Methods

PHS 2000: 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.

Environmental Health Field of Study Required Courses

- 10 credits* from a list of required methods/BIO in addition to BIO 210/213
- 10 credits from a list of recommended courses in methods/EPI
- ID 215 Environmental and Occupational Epidemiology (2.5)
- 205 Human Physiology (5)
- EH 236 Epidemiology of Environmental & Occupational Health Regulations (5)
- EH 231 Occupational Health Policy and Administration (2.5)
- EH 504 Principles of Toxicology (2.5 or 5)
- HPM 548 Responsible Conduct of Research (1.25)

EH/EER

- RDS 500 Risk Assessment (2.5)
- EH 520 Research Design in Environmental Health (2.5)
- EH 510 Fund of Human Env Expos Assmnt (2.5)
- EH/MIPS
- EH 208 Pathophysiology
- EH 305 (2 lab rotations)
- EH 504 Principles of Toxicology
- EH 512 Introduction to Computational Biology and Bioinformatics
- EH 513 Interdisciplinary Training in Environmental Health

EH/EOME

There are requirements for areas within this area of study.

Please note that credits on this page have been listed as Harvard Chan credits. Please remember that as GSAS students, PHS students will calculate their credits on the FAS credit system which is in increments of 2, 4, 8. Please use the credit conversion chart if you have any questions or concerns.

Advising

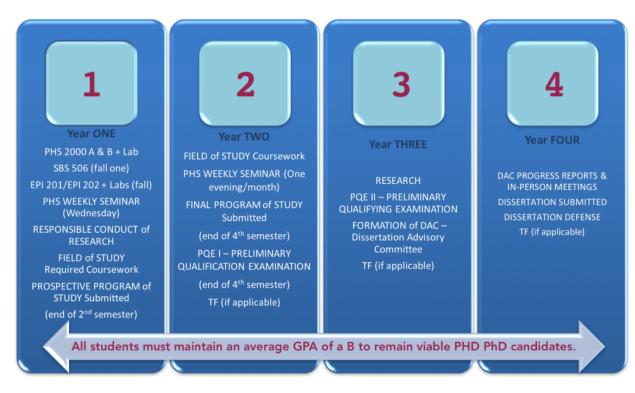
All first-year students will be assigned an adviser from within their field of study and will be notified of their adviser upon entering studies.

Students will work with their designated academic adviser to prepare a degree program plan. After successfully completing the qualifying examination, the doctoral candidate will finalize his or her general research topics and identify a prospective dissertation adviser and committee.

The dissertation adviser, who should be a faculty member of the department affiliated with the student's Field of Study, will assume the responsibilities of the academic adviser and direct the student's doctoral research. The program strongly encourages students to create a dissertation committee that consists of faculty from different departments affiliated with the five Fields of Study, in order to bring a range of expertise and interdisciplinary collaboration to the student's research.

Milestones

In order 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 is an example pathway and the milestones, some of which will be time-bound and others that will be ongoing.



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
- <u>Center for Health Communication</u>
- <u>Center for Health Decision Science</u>
- 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
- <u>Center for Biostatistics in AIDS Research</u>
- <u>Center for Communicable Disease Dynamics</u>
- <u>Center for Global Tobacco Control</u>
- 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 (Superfund Research Program)
- Harvard Preparedness and Emergency Response Learning Center
- <u>Center for Health and Global Environment</u>
- Harvard School of Public Health Prevention Research Center

Other Harvard University Centers

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

Click here for a more detailed list.

Career Outlook

Graduates assume a multitude of positions after they graduate including post-doctoral fellows, faculty members and research scientists in graduate schools, medical schools, research institutes or schools of public health. Career opportunities in the biological sciences as they apply to public health have also grown in academia and in the biotechnology and pharmaceutical industries.

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.

Careers in academia, such as schools of:

- Public Health
- Medicine
- Health Sciences
- Other academic institutions

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
- <u>Career Pathways Resources</u>
- GSAS Advising Resources

Harvard Chan School's Office of Career Services:

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

Useful Forms and Documents:

- Sample CV for Academe
- <u>Sample CV for Industry</u>
- New Biosketch Format (Sample)
- New Biosketch Format (For Use)
- <u>CV, Resume or Something in-between (Powerpoint)</u>

Tips:

- <u>The Perfect Elevator Pitch to Land a Job</u> (Source: Forbes)
- <u>10 Steps to Career Fair Success</u> (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)

Ph.D. in Population Health Sciences: Areas of Specialization for New Students

	Ph.D. in Environmental Health Epidemiology												
	Year 1 Fall - Environmental Health Epidemiology												
Semester	Semester Course Code Course Title Credits Day Time Completed/ Waived Grade Notes												
	Required Courses												
Summer / Fall 1	ID 100	Foundations for Public Health	1					Online – asynchronous					
Fall	PHS 2000A [#]	Quantitative Research Methods in Population Health Sciences	5 (4 GSAS)	TuTh	11:30-1:00			Required Lab Section, 11:30-1:00 see below					
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	TuTh	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	TuTh	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required					
Fall	EH 205**	Human Physiology	5	MW	9:45-11:15								
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	TuTh	2:00-3:30								
Fall 1	RDS 500**	Risk Assessment	2.5	TuTh	2:00-3:30								
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	10:00-1:00								
		Total Required Credits											
		Electives c	ourses chos	sen in consul	tation with your ad	lvisor.							
					1								

Total Elective Credits
Total Semester Credits

***NOTE:** Fall 2020 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 2020 and BST 210 Applied Regression Analysis in Spring 2011.

Fall 2020	BST 201	Introduction to Statistical Methods	5	Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2021	BST 210	Applied Regression Analysis	5	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 school requirements for EPI 201 and/or EPI 2020 see the section on waiving courses on pages 20-21.

**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 pages 20 and complete the EH Department Waiver Form on page 22.

Year 1 Spring - Environmental Health Epidemiology												
Semester	Course Code	se Code Course Title Credits Day Time Completed/ Grade Grade					Grade	Notes				
	Required Courses											
	PHS 2000B	Quantitative Research Methods in Population Health Science II										
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5 5	TuTh or WF	9:45-11:15 <u>or</u> 11:30-1:00							
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30							
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	TuTh	Tu 2:00-3:30 Th 1:00-3:30							
		An additional approved 2.5	credit <u>metl</u>	hods course	which could inclue	de one of the fo	llowing					
Spring 2 Spring 2	EPI 203 <u>Or</u> EPI 204	Study Design in Epidemiologic Research <u>Or</u> Analysis of Case-Control, Cohort and Other Epidemiologic Data	2.5 2.5	TuTh or MW	3:45-5:15 <u>or</u> 9:45-11:15			<i>These courses can be taken</i> 1 st or 2 nd year EPI 204 Lab section required, W 3:45-5:15; Th 3:45-5:15; F 9:45-11:15				
		An additional approved 2.5 c	redit <u>substa</u>	antive cours	e which could incl	ude one of the f	ollowing					
Spring 1	EPI 213	Epidemiology of Cancer <u>or</u>	2.5	TuTh <u>or</u>	2:00-3:30 <u>or</u>							
Spring 2	EPI 223	Cardiovascular Epidemiology I <u>or</u>	2.5	MW <u>or</u>	2:00-3:30 <u>or</u>							
Fall 2	EPI 269	Reproductive and Perinatal Epidemiology I	2.5	TuTh	2:00-3:30							
		Total Required Credits										

	Electives courses chosen in consultation with your advisor.									
		Total Elective Credits								
		Total Semester Credits								
		Year 2 Fa	all - Enviro	onmental I	Health Epidemio	logy				
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
			R	Required Cou	rses					
Fall	EH 504	Principles of Toxicology	5	ТВА	ТВА			Section 2		
		*Students must also take an approved <u>+</u> Courses may			r advanced biosta tation with your a		ve methods	s course.		
		Total Required Credits								
		Elective & T	A courses ch	hosen in con	sultation with your	advisor				
		Total Elective Credits						·		
	Total Semester Credits									

	Years 3-5 - Environmental Health Epidemiology												
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes					
	Elective & TA courses chosen in consultation with your advisor												
		Total Elective Credits			1			1					
		Total Course Credits		•									

	Ph.D. in Environmental Health Exposures												
	Year 1 Fall - Environmental Health Exposures												
Semester	Semester Course Code Course Title Credits Day Time Completed/ Waived Grade Notes												
	Required Courses												
Summer / Fall 1	ID 100	Foundations for Public Health	1					Online – asynchronous					
Fall	PHS 2000A [#]	Quantitative Research Methods in Population Health Sciences	5 (4 GSAS)	TuTh	11:30-1:00			Required Lab Section, 11:30-1:00 see below					
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	TuTh	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	TuTh	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required					
Fall	EH 205**	Human Physiology	5	MW	9:45-11:15								
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	TuTh	2:00-3:30								
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	10:00-1:00								
Fall 1	RDS 500**	Risk Assessment	2.5	TuTh	2:00-3:30								
	·	Total Required Credits				·							
		Electives c	ourses chos	en in consul	ltation with your ad	visor.							
		Total Elective Credits						·					
		Total Semester Credits											

***NOTE:** Fall 2020 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 2020 and BST 210 Applied Regression Analysis in Spring 2011.

Fall 2020	BST 201	Introduction to Statistical Methods	5	Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2021	BST 210	Applied Regression Analysis	5	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 school requirements for EPI 201 and/or EPI 2020 see the section on waiving courses on pages 20-21.

**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 pages 20 and complete the EH Department Waiver Form on page 22.

		Year 1 S	oring - Env	vironment	al Health Expos	ures				
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
	PHS 2000B	Quantitative Research Methods in Population Health Science II								
Spring	EH 257	Water Pollution	5	TuTh	9:45-11:15					
Spring	EH 297	Atmospheric Environment	5	WF	11:30-1:00					
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30					
Spring	ID 215	Environmental and Occupational Epidemiology	2.5	W	2:00-3:30					
		Total Required Credits								
	Electives courses chosen in consultation with your advisor.									
		Total Elective Credits								
		Total Semester Credits								
		Year 2	Fall - Envi	ronmenta	l Health Exposu	res				
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
Fall	EH 504	Principles of Toxicology	5	TBA	ТВА			Section 2		
	·	*Students must also take an approved <u>s</u> Courses may			r advanced biosta tation with your a	-	ve methods	course.		
	Total Required Credits									

		Elective & Ta	A courses ch	nosen in con	sultation with you	r advisor			
	Total Elective Credi								
		Total Semester Credits							
	Year 3-5 - Environmental Health Exposures								
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes	
		Elective & Ta	A courses ch	nosen in con:	sultation with you	r advisor			
		Total Elective Credits							

		<u>Ph.D. in Env</u>	ironment	al Health N	Molecular Epide	miology						
		Year 1 Fall - Er	nvironme	ntal Health	n Molecular Epic	lemiology						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes				
	Required Courses											
Summer / Fall 1	ID 100	Foundations for Public Health	1					Online – asynchronous				
Fall	PHS 2000A [#]	Quantitative Research Methods in Population Health Sciences	5 (4 GSAS)	TuTh	11:30-1:00			Required Lab Section, 11:30-1:00 see below				
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	TuTh	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	TuTh	9:45-11:15 <u>or</u> 11:30-1:00			Additional Lab Section Required				
Fall	EH 205**	Human Physiology	5	MW	9:45-11:15							
Fall 2	EH 510**	Fundamentals of Human Environmental Exposure Assessment	2.5	TuTh	2:00-3:30							
Fall 1	SBS 506	An Intro to History, Politics, & Public Health: Theories of Disease Distr. & Health Inequities	2.5	F	10:00-1:00							
Fall 1	RDS 500**	Risk Assessment	2.5	TuTh	2:00-3:30							
		Total Required Credits										
		Electives c	ourses chos	en in consul	tation with your ad	lvisor.						

Total Elective Credits
Total Semester Credits

***NOTE:** Fall 2020 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 2020 and BST 210 Applied Regression Analysis in Spring 2011.

Fall 2020	BST 201	Introduction to Statistical Methods	5	Th	3:45-5:15	BST 201 Additional Lab Required
Spring 2021	BST 210	Applied Regression Analysis	5	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 school requirements for EPI 201 and/or EPI 2020 see the section on waiving courses on pages 20-21.

**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 pages 20 and complete the EH Department Waiver Form on page 22.

		Year 1 Spring -	Environm	ental Heal	th Molecular Ep	idemiology		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
			R	equired Cou	irses			
	PHS 2000B	Quantitative Research Methods in Population Health Science II						
Spring	EH 520	Research Design in Environmental Health	2.5	F	2:00-3:30			
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	TuTh	Tu 2:00-3:30 Th 1:00-3:30			
		An additional approved 2.5	credit <u>meth</u>	nods course	which could inclu	de one of the fol	llowing	
Spring 2 Spring 2	EPI 203 <u>or</u> EPI 204	Study Design in Epidemiologic Research <u>or</u> Analysis of Case-Control, Cohort and	2.5 <u>or</u> 2.5	TuTh <u>or</u> MW	3:45-5:15 <u>or</u> 9:45-11:15			These courses can be taken 1 st or 2 nd year EPI 204 Lab section required, W 3:45-5:15; Th 3:45-5:15;
		Other Epidemiologic Data An additional approved 2.5 c	redit substa	antive cours	e which could incl	ude one of the f	ollowina	F 9:45-11:15
Spring 1 Spring 2 Fall 2	EPI 213 <u>or</u> EPI 223 <u>or</u> EPI 269	Epidemiology of Cancer <u>Or</u> Cardiovascular Epidemiology I <u>Or</u> Reproductive and Perinatal Epidemiology I	2.5 <u>or</u> 2.5 <u>or</u> 2.5	TuTh <u>or</u> MW <u>or</u> TuTh	2:00-3:30 <u>or</u> 2:00-3:30 <u>or</u> 2:00-3:30			
		Total Required Credits						
		Electives c	courses chos	en in consul	ltation with your ad	lvisor.		

		Total Elective Credits									
		Total Semester Credits									
		Year 2 Fall - Ei	nvironme	ntal Health	Molecular Epic	lemiology					
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
Required Courses											
Fall	EH 504	Principles of Toxicology	5	ТВА	ТВА			Section 2			
	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										
	Total Required Credits										
		Electives of	ourses chos	sen in consult	tation with your ad	visor.					
		Total Elective Credits									
		Total Semester Credits									
		Year 2 Spring -	Environm	ental Heal	th Molecular Ep	idemiology					
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
			R	equired Cou	rses						
Spring	EH 257 <u>or</u> EH 297	Water Pollution <u>or</u> Atmospheric Environment	5	TuTh <u>or</u> WF	9:45-11:15 <u>or</u> 11:30-1:00			Can be taken 1 st or 2 nd year			

		Total Required Credits								
		Electives c	ourses chos	sen in consul	tation with your ac	lvisor.				
		Total Elective Credits								
	Total Semester Credits									
	Years 3-5									
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
	_	Electives c	ourses chos	sen in consul	tation with your ac	lvisor.		-		
		Total Elective Credits								
Total Course Credits										

Ph.D. in Population Health Sciences: Areas of Specialization for Returning Students

		Ph.D.	in Enviror	nmental Ep	idemiology (EEI	<u>२)</u>					
		Year 2	e - Enviror	nmental Ep	idemiology (EEI	२)					
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
			R	equired Cou	rses						
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30			Suggested			
Fall	EH 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA)- 5.0 credits - is for all other students			
Spring 1	ID 271	Advanced Regression for Environmental Epidemiology	2.5	TuTh	Tu 2:00-3:30 Th 1:00-3:30			Suggested			
	Total Required Credits										
	Elective	& TA Courses. 7.5 elective Cr required; 7.5	5 total TA Ci	r required fo	r graduation. Electi	ives chosen in col	nsultation w	vith your advisor.			
	11	Total Elective Credits						1			
		Total Semester Credits									
		Years 3	-5 - Enviro	onmental E	Epidemiology (E	ER)					
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Elective	e & TA Courses. 30 elective Cr required; 7.5	total TA Cr	required for	graduation. Electi	ves chosen in cor	nsultation w	vith your advisor.			
								<u> </u>			

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
	Total Elective Credits					1		L
	Total Course Credits							

		<u>Env</u>	vironment	tal Exposu	re Assessment			
		Year 2 Fa	ll - Enviro	nmental E	xposure Assess	ment		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
Spring 1	BST 211	Risk Factors and Population Health	2.5	MWF	2:00-3:30			Suggested; Lab
		Total Required Credits						
	Elective	e & TA Courses. 15 elective Cr required; 7.5	total TA Cr	r required for	r graduation. Electi	ives chosen in cor	nsultation w	ith your advisor.
	·	Total Elective Credits						
		Total Semester Credits						
		Years 3-5	5 - Enviror	nmental Ex	kposure Assessr	nent		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
	Elective	e & TA Courses. 30 elective Cr required; 7.5	total TA Cr	required for	r graduation. Electi	ives chosen in col	nsultation w	ith your advisor.

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits						
		Total Course Credits						

		<u>Ph.</u>	D. in Ergo	nomics ar	nd Safety (EER)						
		Year	2 Fall - Er	gonomics	and Safety (EER)					
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
			R	equired Cou	rses						
Spring 1	BST 211	Risk Factors and Population Health	2.5	MWF	2:00-3:30			Suggested; Lab			
		Total Required Credits									
	Elective	e & TA Courses. 15 elective Cr required; 7.5	total TA Cr	required for	r graduation. Electi	ves chosen in col	nsultation w	ith your advisor.			
		Total Elective Credits				1					
		Total Year Credits									
		Year	s 3-5 - Erg	gonomics a	and Safety (EER)						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Elective & TA Courses. 30 elective Cr required; 7.5 total TA Cr required for graduation. Electives chosen in consultation with your advisor.										

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits			•			·
		Total Course Credits]				

	EER Doctoral Electives												
Course Code	Course	Credits	Semester	Day	Time	Environmental Epidemiology	Environmental Exposure Assessment	Ergonomics and Safety	Occupational Hygiene	RDS			
BST 212	Survey Research Methods in Community Health	2.5	Spring	W	3:45-5:15	x							
BST 213	Applied Reg for Clinical Research	5	Fall	MW	8:00-9:30	*	*	*	*	*			
BST 222	Basics of Statistical Inference	5	Fall	TuTh	8:00-9:30	*	*	*	*	*			
BST 223	Applied Survival Analysis	5	Spring	TuTh	9:45-11:15	*	*	*	*	*			
BST 226	Applied Longitudinal Analysis	5	Spring	TuTh	2:00-3:30	*	*	*	*	*			
BST 233	Methods II	5	Spring	MW	8:00-9:30	х							
BST 245	Analysis of Multivariate and Longitudinal Data	5	Fall	TuTh	11:30-1:00	х							
EH 201	Intro to Environmental Health	2.5	Summer	MTuWThF	1:30-3:20	х							
EH 202	Principles of Environmental Health	2.5	Spring 1	TuTh	9:45-11:15	×							
EH 232	Introduction to Occupational and Environmental Medicine	2.5	Spring	F	8:00-9:30	x							
EH 241	Occupational Safety and Injury Prevention	2.5	Fall	Th	5:30-7:00			х					
EH 243	Ergonomics/Human Factors	2.5	Fall	₩	2:00-3:30	×		×	×				
EH 253	Ventilation	2.5	Spring	М	1:30-3:20			X					

EH 254	Control of Noise & Vibration	2.5	Spring	F	1:30-3:20			x		
EH 256	Intro to Aerobiology	2.5	Fall	F	1:30-3:20			x		
EH 257	Water Pollution	5	Spring	Th	9:45-11:15	х	х			
EH 262	Intro to the Work Env	2.5	Fall	₩	2:00-3:30			×	×	
EH 263	Analytic Methods and Exposure Assessment	5	Spring	MTu	5:30-7:00		х			
EH 278	Human Health and Global Environmental Change	2.5	Spring 2	TuTh	2:00-3:30	х				
EH 279	Radiation Environment: Its Identification, Evaluation & Control	2.5	Fall	M	2:00-3:20	×		×	×	
EH 292	Properties & Behavior of Airborne Particles	2.5	Spring	₩	2:00-3:30			х		
EH 297	Atmospheric Environment	5	Spring	WF	11:30-1:00		х			
EH 516	Environmental Genetics	2.5	Winter	TuWTh	9:00-12:00		x			
EH 521	Environmental Cardiology	1.25	Fall 2	Tu	2:00-3:30	×				
EH 522	Indoor Environmental Quality and Health	2.5	Fall	.Th	8:30-10:20		×			
EH 550	Special Topics in Environmental Health	2.5	Winter	ТВА	ТВА					
EPI 204	Analysis of Case-Control, Cohort and Other Epidemiologic Data	2.5	Spring 2	MW	9:45-11:15	х				
EPI 213	Epidemiology of Cancer	2.5	Spring 1	TuTh	2:00-3:30	х				
EPI 240	Biomarkers in Epi Research	1.25	Spring 2	М	1:30-3:20	x				
EPI 246	Applied Biomarkers in Cancer Epi	2.5	Fall 2	TuTh	2:00-3:30	х				
EPI 247	Epidemiologic Methods Development - Past and Present	2.5	Fall 2	MW	3:45-5:15	х				
EPI 249	Molecular Biology for Epidemiologists	2.5	Fall 1	WF	11:30-1:00	х				

EPI 254	The Epidemiology of Aging	1.25	Spring 2	ТВА	TBA	X			
EPI 271	Propensity Score Analysis: Theoretical & Practical Considerations	1.25	Winter	ТВА	ТВА	х			
EPI 284	Epidemiology Of Neurologic Diseases	2.5	Spring 1	TuTh	3:45-5:15	X			
HPM 206	Economic Analysis	5	Fall	TuTh	11:30-1:00				x
ID 263	Practice of Occupational Health	5	Spring	W	8:00-11:15	х			
ID 263	Practice of Occupational Health	5	Spring	W	8:00-11:15		x		
ID 269	Respiratory Epidemiology	1.25	Fall 2	Th	2:00-3:30	х			
ID 271	Advanced Regression for Environmental Epidemiology	2.5	Spring 1	TuTh	T 2:00-3:30 R 1:00-3:30	х			
RDS 280	Decision Analysis for Health and Medical Practices	2.5	Fall 2	TTuThR	2:00-3:30				x
RDS 282	Economic Evaluation of Health Policy & Program Management	2.5	Spring 2	MW	2:00-3:30				х
RDS 285	Decision Analysis Methods in Public Health and Medicine	2.5	Spring 1	MW	2:00-3:30				х
11.37	Brownfield's Policy & Practice		Fall		See MIT Catalog			х	
1.812J	Reg. of Chemicals, Radiation, and Biotechnology		Spring		See MIT catalog			х	

	Environmental Epidemiology (EOME)											
		Year 2 Fa	ll - Enviro	nmental E	pidemiology (EC	DME)						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes				
			R	equired Cou	rses							
Spring 1	BST 211	Risk Factors and Population Health	2.5	MWF	2:00-3:30			Lab				
Fall	EH 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA)- 5.0 credits - is for all other students				
Fall 2	EPI 247	Epidemiologic Methods Development – Past and Present	2.5	MW	3:45-5:15							
	Total Required Credits											
		Elective courses cho	sen in consu	Iltation with	your advisor (2.5 c	redits required)						
		Total Elective Credits										
		Total Semester Credits										
		Year 2 Spri	ng - Envir	onmental	Epidemiology (I	EOME)						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes				
			R	equired Cou	rses							
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00			Suggested				
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	2.5					Cancelled Permanently				

		Total Required Credits						
		Elective courses chose	n in consulta	ation with yo	our advisor (17.5 ele	ective Cr require	d)	
		Total Elective Credits						
		Total Semester Credits						
		Years 3-5	5 - Enviroi	nmental Ep	oidemiology (EO	ME)		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	en in consult	ation with y	our advisor (30 elec	ctive Cr required,).	

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
	Total Elective Credits							
		Total Course Credits						

	Ph.D. in Environmental Molecular Epidemiology											
		Year 2 Fall	- Environ	mental Mo	olecular Epidem	niology						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes				
			R	equired Cou	rses							
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30							
Fall	EH 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 –(TBA) 5.0 credits - is for all other students				
	Total Required Credits											
	Elective courses chosen in consultation with your advisor (5.0 credits required).											
	· · · ·	Total Elective Credits										
		Total Semester Credits										
		Year 2 Sprin	g - Enviro	nmental N	Iolecular Epide	miology						
Semester	Semester Course Code Course Title Credits Day Time Completed/ Waived Grade Notes											
			R	equired Cou	rses							
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	2.5					Cancelled Permanently				
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00							

Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			
Spring	HPM 292	Research Ethics	1.25					
		Total Required Credits			•	·		
		Elective courses chosen	in consulta	tion with yo	ur advisor (11.25 el	ective Cr require	d).	
		Total Elective Credits						
		Total Semester Credits						
		Years 3-5	- Environ	mental Mo	olecular Epidemi	ology		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	en in consult	tation with y	our advisor (30 elec	ctive Cr required,).	

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits						
		Total Course Credits						

		Environi	mental ar	nd Occupat	ional Epidemio	logy				
		Year 2 Fall - Er	nvironme	ntal and O	ccupational Epic	demiology				
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
			F	equired Cou	rses					
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30					
Fall	ЕН 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA) - 5.0 credits - is for all other students		
		Total Required Credits								
	Elective courses chosen in consultation with your advisor (5.0 credits required).									
	1 1	Total Elective Credits				4				
		Total Semester Credits								
		Year 2 Spring - I	Environm	ental and (Occupational Ep	oidemiology				
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	<u>2.5</u>					Cancelled Permanently		
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00					
Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15					

Spring	HPM 292	Research Ethics	1.25					
		Total Required Credits						
		Elective courses chosen	in consulta	tion with you	ur advisor (11.25 ei	lective Cr require	d).	
		Total Elective Credits						
		Total Semester Credits						
		Years 3-5 - En	ivironmer	ntal and Oc	cupational Epid	lemiology		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	en in consuli	tation with y	our advisor (30 elec	ctive Cr required,).	

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
	Total Elective Credits							
	Total Course Credits							

		Ph.D. in Environm	iental and	l Occupati	onal Molecular	Epidemiology				
		Year 2 Fall - Environ	mental a	nd Occupa	tional Molecula	ar Epidemiolog	ζγ			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
			R	equired Cou	rses					
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30					
Fall	ЕН 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA) - 5.0 credits - is for all other students		
	Total Required Credits									
	Elective courses chosen in consultation with your advisor (5.0 credits required).									
	1	Total Elective Credits								
		Total Semester Credits								
		Year 2 Spring - Enviro	onmental	and Occup	ational Molecu	lar Epidemiolo	ogy			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes		
			R	equired Cou	rses					
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	2.5					Cancelled Permanently		
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00					

Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			
Spring	HPM 292	Research Ethics	1.25					
		Total Required Credits						
		Elective courses chosen	in consulta	tion with you	ur advisor (11.25 el	ective Cr require	od).	
		Total Elective Credits						
		Total Semester Credits						
		Years 3-5 - Environ	mental aı	nd Occupat	tional Molecula	r Epidemiolog	SY .	
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	n in consuli	tation with y	our advisor (30 elec	ctive Cr required,).	

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits				·		
		Total Course Credits						

		<u>Ph.C</u>). in Ergor	nomics and	l Safety (EOME)	1		
		Year 2	Fall - Erg	onomics a	nd Safety (EOM	E)		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30			
Fall	EH 241	Occupational Safety and Injury Prevention	2.5	Th	5:30-7:00			
Fall	EH 243	Ergonomics/Human Factors	2.5	₩	2:00-3:30			Cancelled Permanently
		Total Required Credits						
		Elective courses chos	sen in consu	ltation with	your advisor (7.5 c	redits required).		
		Total Elective Credits						
		Total Semester Credits						
		Year 2 S	Spring - Er	gonomics	and Safety (EOI	ME)		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
			R	equired Cou	rses			
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	2.5					Cancelled Permanently
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00			

Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			
		Total Required Credits						
		Elective courses chose	n in consult	ation with y	our advisor (10 elec	tive Cr required,	Ι.	
		Total Elective Credits						
		Total Semester Credits						
		Years	3-5 - Ergo	onomics ar	nd Safety (EOME	:)		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	n in consult	ation with y	our advisor (30 elec	tive Cr required,).	

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits			I			
	Total Course Credits							

			Ph.D. in	Injury Epi	demiology						
		٢	/ear 2 Fall	l - Injury El	pidemiology						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Required Courses										
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30						
Fall	EH 241	Occupational Safety and Injury Prevention	2.5	Th	5:30-7:00						
Fall	EH 243	Ergonomics/Human Factors	2.5	₩	2:00-3:30			Cancelled Permanently			
		Total Required Credits									
	Elective courses chosen in consultation with your advisor (7.5 credits required).										
		Total Elective Credits			I						
		Total Semester Credits									
		Ye	ear 2 Sprir	ng - Injury	Epidemiology						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
			R	equired Cou	rses						
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	2.5					Cancelled Permanently			

Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00			
Spring 1	ID 240	Principles of Injury Control	2.5	Th	4:00-6:50			
		Total Required Credits						
		Elective courses chose	n in consult	ation with ye	our advisor (7.5 elec	ctive Cr required,).	
	11	Total Elective Credits			I	<u> </u>		
		Total Semester Credits						
			Years 3-5	- Injury Ep	oidemiology			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	n in consult	ation with y	our advisor (30 elec	tive Cr required)		
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes

Total Elective Credits						
	Total Course Credits					

		<u>Ph</u>	.D. in Occ	upational	Epidemiology								
	Year 2 Fall - Occupational Epidemiology												
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes					
			R	equired Cou	rses								
Fall	BST 213	Applied Regression for Clinical Research	5	MW	8:00-9:30								
Fall	ЕН 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA) - 5.0 credits - is for all other students					
		Total Required Credits											
		Elective courses chose	sen in consu	Itation with	your advisor (7.5 c	redits required).							
		Total Elective Credits											
		Total Semester Credits											
		Year 2	2 Spring -	Occupatio	nal Epidemiolo	SV							
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes					
Spring	EH 269	Exposure Assessment for Environmental and Occupational Epi	<u>2.5</u>					Cancelled Permanently					
Spring	EH 236	Epidemiology of Environmental & Occupational Health Regulations	5	F	9:45-1:00								

Spring	ID 263	Practice of Occupational Health	5	W	8:00-11:15			
		Total Required Credits						
		Elective courses chosen	n in consulta	ntion with yo	our advisor (12.5 ele	ective Cr required	<i>I).</i>	
	· · · ·	Total Elective Credits						
		Total Semester Credits						
		Yea	rs 3-5 - O	ccupationa	al Epidemiology			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Elective courses chose	n in consult	ation with y	our advisor (30 elec	tive Cr required)		

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits						
		Total Course Credits						

EOME Doctoral Electives												
Course Code	Course	Credits	Semester	Day	Time	Environmental Epidemiology	Environmental & Occupational Epidemiology	Environmental Molecular Epidemiology	Environmental/ Occupational Molecular Epidemiology	Ergonomics & Safety	Injury Epidemiology	Occupational Epidemiology
BE 110	Physiological Systems Analysis	4 (FAS)	Fall	MW	11:30-1:00					x		
BST 211	Risk Factors and Population Health	2.5	Spring 1	MWF	2:00-3:30		X	x	x		x	
BST 212	Survey Research Methods in Community Health	2.5	Spring	W	3:45-5:15	х	х	х	х		x	
BST 213	Applied Regression for Clinical Research	5	Fall	MW	8:00-9:30	*	*	*	*	*	*	*
BST 222	Basics of Statistical Inference	5	Fall	TuTh	8:00-9:30	*	*	*	*	*	*	*
BST 223	Applied Survival Analysis	5	Spring	TuTh	9:45-11:15	*	*	*	*	*	*	*
BST 226	Applied Longitudinal Analysis	5	Spring	TuTh	2:00-3:30	*	*	*	*	*	*	*
BST 233	Methods II	5	Spring	MW	8:00-9:30	х	х	x	х			х
BST 245	Analysis of Multivariate and Longitudinal Data	5	Fall	TuTh	11:30-1:00	х	х	х			x	х
BST 247	Advanced Statistical Genetics	2.5	Spring 2	MW	3:45-5:15	x			x			
EH 2015	Intro to Environmental Health	2.5	Summer 2	MTuWT hF	1:30-3:20	×	×	×	×		×	×
EH 202	Principles of Environmental Health	2.5	Spring 1	TR	9:45-11:15	¥	×	×			×	¥
EH 208	Pathophysiology of Human Disease	5	Spring	MW	2:00-3:30	x	X	x	X			X

EH 232	Introduction to Occupational & Environmental Medicine	2.5	Spring	F	8:00-9:30	х	х	х	х			х
EH 241	Occupational Safety and Injury Prevention	2.5	Fall	Th	5:30-7:00		х	х	х			х
EH 243	Ergonomics/Human Factors	2.5	Fall	₩	2:00-3:30		×	×	×			×
EH 250	Protecting Workers & Communities from Hazardous Substances	2.5	Spring				x	x	x			x
EH 257	Water Pollution	5	Spring	TuTh	9:45-11:15	х						
EH 263	Analytical Methods and Exposure Assessment	5	Spring	MTu	5:30-7:00	х	x		х		x	х
EH 277	Genetic Epidemiology & Gene Mapping	2.5	Spring 1			X						
EH 278	Human Health and Global Environmental Change	2.5	Spring 2	TuTh	2:00-3:30	х	х	х	х			х
EH 279	Radiation Environment: Its Identification, Evaluation & Control	2.5	Fall	₩	2:00-3:20	×						
EH 281	Occupational Health Care Delivery	2.5	Winter								x	
EH 282	Injury Epidemiology and Prevention	<u>2.5</u>	Spring 2	F	1:30-3:20		X	x	x	x		x
EH 292	Properties and Behaviors of Airborne Particles	2.5	Spring	₩	2:00-3:30		х	х	х		х	х
EH 295	Air Pollution & Energy Processes	5	Spring								x	
EH 296	Occupational Biomechanics	5	Spring							x		
EH 298	Environmental Epigenetics	2.5	Spring 2	TuTh	2:00-3:30	Х		х	х		х	х
EH 504	Principles of Toxicology	2.5 or 5.0	Fall	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA					x	x	
EH 510	Fundamentals of Human Environmental Exposure Assessment	2.5	Fall 2	TuTh	2:00-3:30	х						
EH 515	Critical Readings: Mechanisms of Health Effects by Air Pollution	1.25	Winter								x	

EH 521	Environmental Cardiology	1.25	Fall 2	Tu	2:00-3:30	×	×	×	×			×
EH 523	Work, Health, and Productivity	2.5	Winter	MTuWT hF	1:00-4:00		×	×	×			×
EH 550	Special Topics in Environmental Health	2.5	Winter	TBA	ТВА							
EH 570	Research Design in Environmental Health	2.5	Spring				x	x	x			x
EPI 201	Introduction to Epidemiology: Methods I	2.5	Fall 1	TuTh	9:45-11:15 <u>or</u> 11:30-1:00					x		
EPI 202	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5	Fall 2	TuTh	9:45-11:15 <u>or</u> 11:30-1:00					x		
EPI 203	Study Design in Epidemiology Research	2.5	Spring 2	TuTh	3:45-5:15	х				х		
EPI 204	Analysis of Case-Control, Cohort and Other Epidemiologic Data	2.5	Spring 2	MW	9:45-11:15					x		
EPI 205	Practice of Epidemiology	2.5	Fall	F	2:00-3:30						х	
EPI 207	Advanced Epidemiologic Methods	2.5	Fall 1	MW	3:45-5:15		х	х	х		x	х
EPI 213	Epidemiology of Cancer	2.5	Spring 1	TuTh	2:00-3:30	х	х	х	х		x	х
EPI 221	Pharmacoepidemiology	2.5	Fall 1	MW	2:00-3:30						х	
EPI 240	Biomarkers in Epidemiology Research	1.25	Spring 2	М	1:30-3:20	x	X	x	x		x	x
EPI 246	Applied Biomarkers in Cancer Epidemiology	2.5	Fall 2	TuTh	2:00-3:30	х			х		x	
EPI 247	Epidemiologic Methods Development – Past and Present	2.5	Fall 2	MW	3:45-5:15	х	х	х	х		x	х
EPI 249	Molecular Biology for Epidemiologists	2.5	Fall 1	WF	11:30-1:00	х	х	х	х		x	х
EPI 250	Molecular Epidemiology of Chronic Diseases	2.5	Fall 2			x		x			x	
EPI 251	Studies in Molecular Epidemiology	1.25	Spring 1								x	

EPI 254	The Epidemiology of Aging	1.25	Spring 2	TBA	TBA	X						
EPI 269	Reproductive and Perinatal Epidemiology I	2.5	Fall 2	TuTh	2:00-3:30		х	х	х		х	х
EPI 271	Propensity Score Analysis: Theoretical & Practical Considerations	1.25	Winter	TBA	ТВА	х						
EPI 284	Epidemiology of Neurologic Diseases	2.5	Spring 1	TuThTR	3:45-5:15	X						
EPI 285	Industrial Ecology & Life Cycle Analysis	5				X						
EPI 287	Epidemiology of Reproductive Morbidity	1.25	Fall 2								x	
EPI 294	Screening		Spring			X	X	X	X			X
HPM 292	Research Ethics	1.25	Spring							х		
ID 214	Nutritional Epidemiology	2.5	Spring	F	9:45-11:15						х	
ID 263	Practice of Occupational Health	5	Spring	W	8:00-11:15	Х						
ID 269	Respiratory Epidemiology	1.25	Fall 2	Th	2:00-3:30	Х	х	х	х		х	х
ID 271	Advanced Regression for Environmental Epidemiology	2.5	Spring 1	TuTh	T 2:00-3:20 R 1:00-3:30	х	х	х	х		х	х
RDS 500	Risk Assessment	2.5	Fall 1	TuTh	2:00-3:30	Х	х	х	х		х	х

			<u>Ph.D.</u>	in Bioengi	neering			
			Year 2 F	all - Bioen	gineering			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
			R	equired Cou	rses			
Spring 1	BST 211	Risk Factors and Population Health	2.5	MWF	2:00-3:30			Lab
Fall	EH 512	Interdisciplinary Training in Pulmonary Sciences Part I	2.5	TuF	Tu 9:45-10:45 F 1:00-2:00			
Fall	EH 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA) - 5.0 credits - is for all other students
Fall	EH 305	Laboratory Rotation						Cancelled in 2019-2020
		Total Required Credits						
		Elective courses ch	osen in cons	sultation wit	h your advisor (12.	5 Cr required).		
	· · · · · ·	Total Elective Credits						
		Total Semester Credits						

			Year 2 Sp	oring - Bioe	engineering			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
			R	Required Cou	rses			
Spring	EH 513	Interdisciplinary Training in Pulmonary Sciences Part II	2.5	TF	Tu 9:45-10:45 F 1:00-2:00			
Spring	EH 305	Laboratory Rotation						Cancelled in 2019-2020
		Total Required Credits						
	Elective	& TA Courses. 12.5 elective Cr required; 7.	5 total TA C	Cr required fo	or graduation. Elect	tives chosen in co	nsultation v	vith your advisor.
	11	Total Elective & TA Credits				1		
		Total Semester Credits						
			Years 3	-5 - Bioen	gineering			
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
	Elective	& TA Courses. 12.5 elective Cr required; 7.	5 total TA C	Cr required fo	or graduation. Elect	tives chosen in co	nsultation v	vith your advisor.
	L l		1	1	1	L		1

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
		Total Elective Credits						
		Total Course Credits						

	Ph.D. in Environmental Physiology											
		Yı	ear 2 - Env	vironment	al Physiology							
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes				
			R	equired Cou	rses							
Fall	EH 504	Principles of Toxicology	2.5 or 5 (see note)	MW <i>or</i> TBA	9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA) - 5.0 credits - is for all other students				
			One of	the following	g courses:							
Fall Spring	EH 512 EH 513	Interdisciplinary Training in Pulmonary Sciences Part I Interdisciplinary Training in Pulmonary Sciences Part II	2.5 2.5	TuF	Tu 9:45-10:45 F 1:00-2:00							
		Total Required Credits										
		Elective course	s chosen in	consultation	with your advisor	(Optional)						
		Total Elective Credits			I							
		Total Year Credits										
		Ye	ar 3-5 - Er	nvironmen	tal Physiology							
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes				
			E	lective Cou	ses							

	Total Elective Credits			
	Total Course Credits			

		<u> </u>	Ph.D. in M	lechanism	s of Disease							
	Year 2 Fall - Mechanisms of Disease											
Semester	Course Code	Course Title	Credits	Day	Day Time Comple Waiv		Grade	Notes				
	Required Courses											
Spring 1	BST 211	Risk Factors and Population Health	2.5	MWF	2:00-3:30			Lab				
Fall	EH 512	Interdisciplinary Training in Pulmonary Sciences Part I										
Fall					9:45-11:15 <i>or</i> TBA			Section 1 (MW 9:45-11:15) - 2.5 credits - is only for those students with a prior medical degree. Section 2 (TBA) - 5.0 credits - is for all other students				
Fall	EH 305	Laboratory Rotation						Cancelled in 2019-2020				
		Total Required Credits										
		Elective courses ch	osen in con	sultation wit	th your advisor (12.	5 Cr required)						
		Total Elective Credits			•							
		Total Semester Credits										

	Year 2 Spring - Mechanisms of Disease										
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
			R	equired Cou	rses						
Spring	EH 513	Interdisciplinary Training in Pulmonary Sciences Part II	2.5	TuF	Tu 9:45-10:45 F 1:00-2:00						
Spring	EH 305	Laboratory Rotation						Cancelled in 2019-2020			
	Total Required Credits										
	Elective	& TA Courses. 12.5 elective Cr required; 7.	5 total TA C	Cr required fo	or graduation. Elect	tives chosen in co	nsultation v	with your advisor.			
	1 1	Total Elective & TA Credits			1	1					
		Total Semester Credits									
		Ye	ears 3-5 -	Mechanisı	ms of Disease						
Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes			
	Elective & TA Courses. 12.5 elective Cr required; 7.5 total TA Cr required for graduation. Electives chosen in consultation with your advisor.										

Semester	Course Code	Course Title	Credits	Day	Time	Completed/ Waived	Grade	Notes
Total Elective Credits								
Total Course Credits								

MIPS Electives												
Course Code	Course	Credits	Semester	Day	Time	Bioengineering	Cell & Molecular Bio	Mechanisms of Disease	Physiology			
BCMP 200	Principles of Molecular Biology	4 (FAS)	Fall	MWF	10:45-12:14	x	x	х	х			
BCMP 201	Proteins: Structure, Function, and Catalysis (BCMP 250?)								x			
BPH 206	Advanced Respiratory Physiology	4 (FAS)	Fall						х			
CELLBIO 201	Principles of Cell Biology	4 (FAS)	Spring	MWF	10:30-11:59	x	х	х	х			
EH 2015	Intro to Environmental Health	2.5	Summer 2	MTuWThF	1:30-3:20							
EH 202	Principles of Environmental Health	2.5	Spring 1	ŦR	9:45-11:15			×				
EH 225	Advanced Topics in Physiology		Spring						x			
EH 232	Introduction to Occupational and Environmental Medicine	2.5	Spring	F	8:00-9:30							
EH 243	Ergonomics/Human Factors	2.5	Fall	₩	2:00-3:30	×			×			
EH 256	Introduction to Aerobiology	2.5	Fall	F	1:30-3:20			x				
EH 278	Human Health and Global Environmental Change	2.5	Spring 2	TuTh	2:00-3:30							
EH 290	Research in Physiology	2.5				x	x	x	x			
EH 292	Properties and Behaviors of Airborne Particles	2.5	Spring	₩	2:00-3:30			х				
EH 297	Atmospheric Environment	5	Spring	WF	11:30-1:00			х				

EH 504	Principles of Toxicology	2.5 or 5	Fall	MW <i>or</i> TBA	9:45-11:15 or TBA	x	х	х	x
EH 550	Special Topics in Environmental Health	2.5	Winter	ТВА	ТВА				
GEN 201	Principles of Genetics	5	Fall	MWF	9:00-10:20	x	X	X	x
ID 215	Environmental and Occupational Epidemiology	2.5	Spring	W	2:00-3:30				
IMMUN 201	Principles of Immunology	5	Fall	TuTh	1:30-3:59	x	X	X	x
MICRO 200	Microbiology & Pathogenesis	4	Spring	MWF	10:45-12:15	х	Х	Х	х
2.37	Molecular Mechanics				See MIT Catalog	x	X	X	x
20.410J	Molecular, Cellular, & Tissue Biomechanics		Spring		See MIT Catalog	x	X	X	x

MIPS Doctoral Electives

Academic Year 2020-2021

 Bioengineering • Mechanisms of Disease • Environmental Physiology • Environmental and Occupational Epidemiology • Ergonomics and Safety • Environmental Epidemiology • Injury Epidemiology and Prevention
 • Environmental Molecular Epidemiology • Occupational and Environmental Medicine • Environmental and Occupational Molecular Epidemiology • Environmental Exposure Assessment • Occupational Epidemiology • Risk and Decision Sciences • Environmental Health • Occupational Health • Occupational and Environmental Health and Safety • Sustainability, Health, and the Global Environment • Occupational Hygiene • Cell and Molecular Biology • Physiology



2020 CURRICULUM GUIDE 2021

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