PUBLIC HEALTH

Special Concentration in Public Health

Director of Undergraduate Programs: Dana March Palmer PhD, MPH | 405 Low Memorial Library | 212 854 3835 | dm2025@columbia.edu

Some of society's most pressing problems—gun violence, the opioid epidemic, climate change, obesity, mass incarceration, health and healthcare inequalities across the globe—concern public health. These complex problems and the emergence of novel challenges in the future demand a nimble application of public health knowledge and principles, leveraging the foundations of a liberal arts education in order to achieve solutions. Viable solutions will require cross-sector collaborations and systems-level, policy, and environmental action that will affect the social, political, and economic determinants of health. Necessary for leaders to solve these types of societal problems is a broad set of fundamental set of skills. Critical thinking, analytical, problem-solving, and communications skills are necessary to contextualize these problems historically, philosophically, socially, and culturally, and to conceptualize dynamic needs and evidence-based solutions to key parts of these problems.

Public health is integral to a civil society. The many determinants of population health—from the environmental, social, political, and economic factors that shape rates of disease in human populations to the biological factors that ultimately constitute the corporeal mechanisms for disease in individuals—are complex and intertwined. Moreover, how population health is understood, protected, and promoted, is replete with controversies and tensions that are ripe for intellectual interrogation. As such, population health and its connection to civil society is an inherently interdisciplinary area of inquiry. The health and well-being of human populations brings together numerous disciplines, including but not limited to anthropology, architecture, biology, chemistry, demography, ecology, economics, history, international development, mathematics, political science, psychology, sociology, and statistics.

The special concentration in public health is intended to be a secondary emphasis of study that complements the disciplinary specialization of a major or concentration. The goal for the undergraduate special concentration in public health is to foster critical understanding and analysis of the multiple ways in which population health both shapes and is shaped by civil society, complementing the foundation created by the Core curriculum. At the heart of the special concentration in public health are historical and contemporary issues in population health in the context of an increasingly connected, global, urban, aging, and inequitable world. The key themes of inequality, globalization, urbanization, development, the environment, and aging serve as the framework for the constituent courses in the special concentration in public health.

FACULTY

James Colgrove

Linda Fried

Dana March Palmer

Terry McGovern

Rachel Moresky

Ana Navas-Acien

Anne Paxton

Marni Sommer

Special Concentration in Public Health

The special concentration, comprising a **minimum of 25 points** of coursework, consists of **five required courses (16 points)** and **at least three electives (minimum of 9 points)** that provide additional depth and dimension to the underlying themes of the concentration.

Core Public Health Course Requirements

The required courses create a rich intellectual foundation in public health, providing students with a multifaceted view of the social production of health, as well as an integrated exposure to and understanding of the core disciplines of public health. Together, they serve to illuminate and allow students to analyze critically the social production of health and its connections with and implications for civil society. These courses have no prerequisites, and can be taken individually, as the student's schedule permits.

Required Courses for the Special Concentration in Public Health

PUBH UN3100	FUNDAMENTALS OF GLOBAL HEALTH
PUBH UN3200	INTRODUCTION TO PUBLIC HEALTH
PUBH GU4100	(Y)OUR LONGER LIFE
PUBH GU4200	Environment, Health, and Justice: Concepts and Practice
HSPB UN2950	Social History of U.S. Public Health

Elective Courses

Elective courses (minimum of 9 points) in the Special Concentration in Public Health will allow students to draw upon courses offered in a wide range of departments and centers across the University. Proposed electives must be approved by the Director of Undergraduate Studies.

Examples of departments with relevant elective courses include: African American Studies; Comparative Literature and Society; The Center for Ethnicity and Race; Earth and Environmental Sciences; Economics; Ecology, Evolution, and Environmental Biology; History; Human Rights; History of South East Asia; Political Science; Psychology; Sociology; Statistics; Sustainable Development; Women's Studies; Urban Studies. Elective courses are designed to allow students to add dimension and depth to their interests in public health, along the main themes of the Special Concentration. Electives may also allow students to amplify the connections to public health in their major area of study. Conversely, students may choose to take electives that allow them to gain more breadth in concepts to which they have been exposed in the set of required public health courses.

Elective Examples (At least 3)

Population Health, Inequality, and Society

AFAS GU4035	Criminal Justice and the Carceral State in the 20th Century United States
CPLS GU4320	Marginalization in Medicine: A Practical Understanding of the Social Implications of Race
CPLS GU4220	Narrative, Health, and Social Justice
CSER UN3445	City, Environment, and Vulnerability
CSER UN3905	ASIAN AMERICAN # PSYCH OF RACE
CSER UN3924	Latin American and Latina/o Social Movements

CSER UN3942	RACE AND RACISMS
CSER GU4340	Visionary Medicine: Racial Justice, Health and Speculative Fictions
CSER GU4482	INDIGENOUS PEOPLES:MOVEMNT/RTS
CSER GU4483	SUBCITIZENSHIP
ECON GU4438	ECONOMICS OF RACE IN THE U.S.
EEEB GU4321	HUM NATURE:DNA,RACE # IDENTITY
HIST UN2523	HEALTH INEQUALITY: MODERN US
HIST UN3437	CORP BEHAVIOR # PUBLIC HEALTH
HIST UN3911	Medicine and Western Civilization
HIST W4985	Citizenship, Race, Gender and the Politics of Exclusion
HIST GU4584	Drug Policy and Race
HIST GU4588	RACE, DRUGS, AND INEQUALITY
HRTS BC3850	HUMAN RIGHTS # PUBLIC HEALTH
HRTS GU4215	NGOs # THE HUMAN RIGHTS MOVEMENT
HRTS GU4230	REFUGEES, FORCED MIGR # DISPLACEMENT
HRTS GU4500	SOCIO-ECONOMIC RIGHTS
HRTS GU4700	Ethical Dilemmas in Healthcare: A Human Rights Approach
HRTS GU4880	HUMAN RIGHTS IN THE UNITED STATES
POLS UN3220	LOGIC OF COLLECTIVE CHOICE
POLS UN3245	RACIAL AND ETHNIC POLITICS
POLS UN3595	Social Protection Around the World
SOCI V2230	Food and the Social Order
SOCI W2420	Race and Place in Urban America
SOCI UN3010	METHODS FOR SOCIAL RESEARCH
SOCI UN3213	Sociology of African American Life
SOCI W3214	Immigration and the Transformation of American Society
SOCI UN3261	Sexuality and Society
SOCI UN3265	SOCIOLOGY OF WORK # GENDER
SOCI UN3323	RACE, GNDR, SXLTY#PNSHMNT
SOCI W3643	Stratification and Inequality
SOCI W3913	Race and Ethnicity in a Global World
SOCI UN3914	INEQUALITY, POVERTY # MOBILITY
WMST GU4506	Gender Justice
SOCI UN3915	Stigma and Discrimination
SOCI UN3920	SOCIAL NETWORKS
SOCI UN3931	Sociology of the Body
SOCI W3923	Adolescent Society
SOCI UN3960	SEMINAR - PROBLEMS OF LAW # SOCIETY

Globalization, Urbanization, Development, and the Environment

EEEB GU4127	DISEASE ECOLOGY
EEEB GU4111	Ecosystem Ecology and Global Change
EEEB GU4260	FOOD, ECOLOGY # GLOBALIZATION
EESC UN2330	SCIENCE FOR SUSTAINABLE DEVPT
EESC W4403	Managing and adapting to climate change
EESC GU4600	EARTH RESOURCES # SUSTAIN DEV
FSPH UN1100	FOOD, PUBLIC HEALTH # PUBLIC POLICY
HIST GU4811	Encounters with Nature: The History and Politics of Environment, Health and Development in South Asia and Beyond
HRTS GU4915	HUMAN RIGHTS # URBAN PUB SPACE
HSEA GU4844	GLOBAL HONG KONG
SDEV UN2300	CHALLENGES OF SUSTAINABLE DEV
SDEV UN3330	Ecological and Social Systems for Sustainable Development
SDEV UN3350	(Environmental Policy and Governance for Sustainability)
SDEV UN3355	CLIMATE CHANGE AND LAW
SDEV UN3360	DISASTERS AND DEVELOPMENT
SDEV UN3400	HUMAN POPULATIONS # SDEV
SDEV UN3410	Cities # Sustainability
SDEV GU4050	US WATER # ENERGY POLICY
SOCI UN3324	Global Urbanism
URBS UN3450	NEIGHBORHOOD # COMMUNITY DVLP
URBS UN3993	URBAN STUDIES SENIOR SEMINAR
URBS UN3565	Cities in Developing Countries: Problems and Prospects
URBS UN3315	METROPOLITICS OF RACE # PLACE
URBS UN3550	Community Building and Economic Development
URBS UN3565	Cities in Developing Countries: Problems and Prospects

Individuals, Bodies, and Population Health

FSEB UN1020	Food and the Body
PSYC UN2460	DRUGS AND BEHAVIOR
PSYC UN2480	The Developing Brain (The Developing Brain)
PSYC UN2650	INTRO TO CULTURAL PSYCHOLOGY

Quantitative Foundations

STAT UN1001	INTRO TO STATISTICAL REASONING
STAT UN1101	INTRODUCTION TO STATISTICS

Public Health Special Concentration Course List

PUBH UN3100 FUNDAMENTALS OF GLOBAL HEALTH. *3.00 points*.
Many of the greatest challenges in public health are global. This course uses a multidisciplinary approach to discuss the major underlying determinants of poor health and the relationship between health and political, social and economic development. Drawing upon the sciences, social sciences, and humanities, students will be introduced to the evolution of modern approaches to the setting of global health priorities, the functions and roles of health systems, an overview of current global health practices, and the major institutional players in global health. The first unit of the class will focus on establishing the foundations for a public health approach to understanding the challenges of global health. This will involve exploration of the factors shaping the global distribution of disease and their connection with issues of social, economic, and political development, as reflected in the Millennium Development Goals. The second unit will explore in further detail a number of major health priorities. A significant goal of the class will be to identify common sources of vulnerability and challenge across health risks, and the consequent need for a systemic approach to their being addressed. The third and final unit builds upon this analysis to demonstrate the multi-disciplinary, multi-level approach required to effectively address global health priorities, and the political and organizational cooperation required to achieve this. The class concludes with an analysis of the major challenges and threats to global coordination regarding such threats as pandemic influenza and emerging health threats related to climate change. Offered in the spring

Spring 2024: PUBH UN3100

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PUBH 3100	001/14148	M W 4:10pm - 5:25pm 142 Uris Hall	Rachel Moresky	3.00	110/120

PUBH UN3200 INTRODUCTION TO PUBLIC HEALTH. *3.00 points*.
An introduction to and overview of public health. Through a series of sessions with leading public health experts, this course views the multifaceted nature of public health through a prismic lens addressing key concepts, approaches, and issues of historical and contemporary import: What is public health and how has public health evolved over time? What are the core methods of public health? What are the approaches to understanding and addressing both infectious and chronic, non-communicable diseases? What role do micro- and macro-level determinants (i.e. biology and social context) play in public health? What are the global trends in population health? How does the individual life course bear on population health? How do systems, policy, and population health mutually shape each other? How are public health programs designed and evaluated? What are the limits of public health?

Fall 2024: PUBH UN3200

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PUBH 3200	001/14521	M W 4:10pm - 5:25pm Room TBA	Dana March	3.00	0/180

PUBH UN3400 Data Science and Health Equity in New York City. *3.00 points*.
This course, which has no pre-requisites, teaches students about data science and public health. Students will create and answer public health research questions related to health equity in NYC. The course will use publicly available NYC health data to learn the seven steps of data science: 1) writing a research question; 2) obtaining data to address the question; 3) data cleaning; 4) data exploration; (5) analysis; 6) replication and validity evaluation; and (7) presentation and summary. The course will introduce students to R

Fall 2024: PUBH UN3400

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PUBH 3400	001/14522	T Th 5:40pm - 6:55pm Room TBA	Abigail Greenleaf	3.00	0/100

PUBH GU4100 (Y)OUR LONGER LIFE. *3.00 points*.
People are living 30 years longer than we did 100 years ago. We have created a whole new stage of life. How do we prepare to benefit from our longer lives? What can you do in your own life? This course explores the personal, population, community, and societal dimensions of our now-longer lives, of aging itself, and the role of health and societal design in the experience of aging. The course examines the meaning of aging and the attendant expectations, myths, fears, and realities. The course examines an aging society as a public health success, the potential for building health futures, the health plan you want to be healthy in old age, and the potential for longer lives and how we unlock it. It addresses the roles public health currently plays and can play in shaping a society for an aging population. The course explores how a public health system—indeed, a society—optimized for an aging population stands to benefit all. The course also examines the physical, cognitive, and psychological aspects of aging, the exposures across our lives that affect these, the attributes and challenges of aging, keys to successful aging, and aging around the globe. The culminating project will design elements of our society that are needed to support the opportunity of having longer lives. This course comprises lectures, class discussions, individual assignments, in-class case activities, and a group project in which students shall take an active role. You will be responsible for regular preparatory assignments, writing assignments, one group project, and attending course sessions. Please note: GSAS students must receive permission from their department before registering for this course

Spring 2024: PUBH GU4100

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PUBH 4100	000/17287	T Th 4:10pm - 5:25pm Cin Alfred Lerner Hall	Dana March, Elizabeth Schroeder	3.00	16/100
PUBH 4100	001/14149	T Th 4:10pm - 5:25pm Cin Alfred Lerner Hall	Dana March	3.00	108/150

PUBH GU4200 Environment, Health, and Justice: Concepts and Practice. *3.00 points*.
Please note: this class was designed as part of the Special Concentration in Public Health. It is open to undergraduates, as well as students in Public Health, and will be taught on the Morningside campus. This course introduces key concepts on environmental health sciences and environmental justice and their application to address environmental health disparities affecting communities in New York City, across the United States and globally. The course will present theory and methods needed to characterize, understand and intervene on environmental health problems with a focus on methods that are particularly appropriate for environmental justice research and interventions. We will describe environmental health disciplines such as exposure sciences, environmental epidemiology, environmental biosciences and toxicology, as well as methods to assess expected environmental health impacts

Fall 2024: PUBH GU4200

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PUBH 4200	001/14523	M W 10:10am - 11:25am Room TBA	Ana Navas Acien	3.00	0/100

HSPB UN2950 Social History of U.S. Public Health. *4.00 points*.
The purpose of this course is to provide students with an historical understanding of the role public health has played in American history. The underlying assumptions are that disease, and the ways we define disease, are simultaneously reflections of social and cultural values, as well as important factors in shaping those values. Also, it is maintained that the environments that we build determine the ways we live and die. The dread infectious and acute diseases in the nineteenth century, the chronic, degenerative conditions of the twentieth and the new, vaguely understood conditions rooted in a changing chemical and human-made environment are emblematic of the societies we created. Among the questions that will be addressed are: How does the health status of Americans reflect and shape our history? How do ideas about health reflect broader attitudes and values in American history and culture? How does the American experience with pain, disability, and disease affect our actions and lives? What are the responsibilities of the state and of the individual in preserving health? How have American institutions--from hospitals to unions to insurance companies--been shaped by changing longevity, experience with disability and death?