

# PUBLIC HEALTH

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*Department Chair:* Patricia Wren

*Undergraduate Academic Advisors:* A'Narris Monger (A-H; AGRADE), Margaret MacKeverican (I-Z; AGRADE)

Public health is the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, detecting patterns of risk and poor outcomes in populations, and engaging in research and interventions to eliminate health disparities and increase the duration and quality of life. Public health professionals are also involved in promoting health care equity, improving health care quality, and increasing access and accessibility.

The Department of Public Health offers evidence-based professional training across the traditional public health disciplines. Undergraduate students are well-prepared to apply to graduate programs in public health, medicine, pharmacy, social work, physician assistant studies, law, and a host of other professional fields. Our alumni are trained for meaningful public health careers in government agencies, hospitals and health care organizations, community-based organizations, foundations and philanthropies, policymaking and research councils, and corporations. Students will learn to ask questions, challenge assumptions, and utilize data to preserve, protect, and promote the health and well-being of vulnerable populations locally, nationally, and globally. In particular, students will learn how to be a catalyst for change in Detroit and beyond and facilitate health equity for years to come. Core courses in the public health major and minor allow students to gain knowledge, develop professional skills, and master core competencies in the following areas:

- Social determinants of health
- Health disparities and health equity
- Environmental health
- Epidemiology
- Biostatistics
- Research methods and applied methodological approaches
- Public health intervention and practice

Students wishing to pursue the major or minor in Public Health should meet with an Undergraduate Academic Advisor in Public Health (<https://clas.wayne.edu/public-health/advising>).

GREEN JONES, MONIQUE: M.P.H., University of Michigan; B.A., Hamilton College; Assistant Professor Teaching/Practicum Director

KESSELL, ERIC: Ph.D., M.P.H., University of California-Berkeley; B.A., University of Michigan; Assistant Professor (Teaching)

MALLARE, JAMES: Ph.D., M.S., Wayne State University; Assistant Professor of Teaching

MIRANDA-HARTSUFF, TRICIA: Ph.D., M.P.H., University of Michigan; B.A., Trinity University; Associate Professor

VAUGHAN, SARAH: Ph.D., University of New Mexico; M.P.H., Wayne State University; Assistant Professor

WREN, PATRICIA A.: Ph.D., M.P.H., University of Michigan; M.S., B.A., DePaul University; Professor and Chair

ZHOU, SASHA: Ph.D., M.P.H., M.H.S.A., B.A., University of Michigan; Assistant Professor

For more information and faculty profiles, please visit the directory (<https://clasprofiles.wayne.edu/department/public-health>).

- Health of Populations Minor (<https://bulletins.wayne.edu/undergraduate/college-liberal-arts-sciences/public-health/health-populations-minor/>)
- Public Health (B.S.) (<https://bulletins.wayne.edu/undergraduate/college-liberal-arts-sciences/public-health/public-health-bs/>)
- Public Health Minor (<https://bulletins.wayne.edu/undergraduate/college-liberal-arts-sciences/public-health/public-health-minor/>)

## PH 2100 Introduction to Public Health Cr. 3

**Satisfies General Education Requirement:** Natural Scientific Inquiry  
This course introduces the core principles of public health. Students begin to develop the knowledge and skills needed to analyze health challenges at both individual and population levels. Using real-world examples, you'll learn how biological, social, environmental, political, and cultural factors shape health outcomes in the United States, and around the world. You'll also explore strategies to create healthier communities, from disease surveillance to community-based interventions. No previous public health coursework is required. Offered Every Term.

## PH 2500 Race and Ethnic Disparities in Public Health Cr. 3

**Satisfies General Education Requirement:** Diversity Equity Incl Inquiry  
In this course, students examine how personal, social, and institutional structures contribute to poorer health outcomes and shorter life expectancy for racial and ethnic minority communities. Students explore the historical, political, and economic factors that shape health disparities, and learn professional skills, intervention techniques, and the role of policy to promote health equity. Students will learn the importance of community-based interventions and policy change, developing skills to become effective advocates and leaders in today's changing public health landscape. Offered Every Term.

## PH 2550 MENA Public Health Cr. 3

**Satisfies General Education Requirement:** Global Learning Inquiry  
In this global health course, you will investigate health problems impacting Middle East and North African (MENA) populations in the US and abroad. Students identify how history, culture, and geography shape health risks and outcomes in global, national, and local contexts. You will explore how social determinants of health, such as immigration history, geopolitical factors, and stigma, influence the health and well-being of MENA communities, including those in Metro Detroit. By learning how cultural, religious, and social influences intersect, you'll gain practical skills to develop effective, culturally responsive strategies to improve health here and abroad. Offered Winter.

## PH 3000 Public Health Administration Cr. 3

In this course you will be introduced to the US healthcare delivery and financing system, as well as health care reform and current policy issues. Through case-based learning, group work and a semester-long project, students will gain experience critically evaluating health care problems and explore policy and quality improvement options to address healthcare delivery issues. Students will be prepared to enter the health care workforce, navigate intricate systems, develop innovative solutions, and manage creative responses to new challenges. Sophomore standing or higher recommended. Offered Every Term.

## PH 3050 Mental Health and Crime Cr. 3

Provides a comprehensive overview of the issues and challenges located at the intersection of mental health/illness and the criminal justice system. Attention will be focused on a range of topics, including, but not limited to, the definition of mental illness, deinstitutionalization and criminalization of the mentally ill, the impact of mental illness on criminal proceedings, treatment/intervention effectiveness, and the reentry/reintegration of mentally ill individuals. Offered Intermittently.

**Equivalent:** CRJ 3050

**PH 3100 Social and Behavioral Aspects of Public Health Cr. 3****Satisfies General Education Requirement:** Social Inquiry

In this course, you'll discover the importance of social and behavioral factors in shaping health outcomes. Health outcomes and health disparities have more to do with interconnected social, behavioral, and environmental factors than just biology or genetics. You will learn theories of health behavior and decision-making needed to design public health interventions and inform health policies. By engaging in a service-learning project, you'll master skills in the use of theories, tailoring interventions, and culturally responsive public health practice. Offered Every Term.

**PH 3200 Introduction to Biostatistics Cr. 3**

Students learn biostatistical methods used to analyze quantitative health and medical data. Students will learn key concepts and techniques including probability and sampling, statistical inference, hypothesis testing, correlation methods and linear regression. By working with real datasets and practical health applications, students develop the skills needed to confidently collect, analyze, and interpret data in medicine, epidemiology, public health and the life sciences. Offered Every Term.

**Prerequisites:** PH 2100 with a minimum grade of C- and (MAT Permit to Reg ACT/SAT with a test score minimum of 4, Math Permit to Reg - (L1-L4) with a test score minimum of 4, STA 1020 with a minimum grade of C-, MAT 1800 with a minimum grade of C-, MAT 2010 with a minimum grade of C-, MAT 2020 with a minimum grade of C-, or STA 2210 with a minimum grade of C-)

**PH 3300 Epidemiology Cr. 3**

In this course, you will be introduced to strategies used by public health professionals to track, assess, and prevent diseases. This course offers hands-on experiences that allow students to analyze real-world public health challenges, from emerging infectious diseases to chronic conditions. Students will learn the essentials of study design, how to use statistics to measure and interpret health data, and shape public health policy, ethical standards, and professional practice. Offered Every Term.

**Prerequisites:** PH 2100 with a minimum grade of C- and (MAT Permit to Reg ACT/SAT with a test score minimum of 4, Math Permit to Reg - (L1-L4) with a test score minimum of 4, STA 1020 with a minimum grade of C-, MAT 1800 with a minimum grade of C-, MAT 2010 with a minimum grade of C-, MAT 2020 with a minimum grade of C-, or STA 2210 with a minimum grade of C-)

**PH 3400 Health in All Policies Cr. 3**

In this course, students will be introduced to the Health in All Policies (HiAP) framework, a global strategy that integrates health considerations into policy decisions across diverse sectors. Students will examine case studies at the federal, state, and local levels to understand how policies related to housing, education, transportation, and the economy can improve health outcomes, reduce disparities, and foster health equity. Students will gain knowledge and skills to effectively collaborate with multiple sectors to design, advocate for, and implement policies that promote health and well-being for all. Offered Fall.

**PH 3410 Global Health Cr. 3****Satisfies General Education Requirement:** Global Learning Inquiry, Social Inquiry

Introduces students to problems of disease and disorder worldwide and looks at various efforts to define and address these problems through a social science perspective. Offered Every Term.

**Equivalent:** ANT 3410, GLS 3410

**PH 3450 Advocating for Change in Public Health Cr. 3**

In this course, students will learn how public health professionals influence meaningful change through advocacy and civic engagement. Students will explore effective strategies for informing populations and policies across a variety of settings to advocate for health improvements. You will learn the importance of coalition building, effective messaging, and leveraging public platforms to advance equitable health policies. Students gain the knowledge and skills needed to advocate for public health-related policies and change at the local, state, and federal levels. Offered Winter.

**Prerequisites:** PH 2100 with a minimum grade of C- and PH 3100 with a minimum grade of C-

**PH 3500 Environmental Health Cr. 3**

Using a public health perspective, this course explores the complex relationship between people and their environments. Students will discover how chemical, physical, social, and biological factors in the environment impact human health. Examining a range of environmental challenges, students will gain insights into how various systems intersect to influence health outcomes. In this course, students will develop essential skills to assess environmental risks, navigate regulatory frameworks, and facilitate community engagement as public health professionals. Offered Every Term.

**PH 3550 Public Health and the City Cr. 3**

Introduces the field of medical geography, or the study of geographic aspects of health and disease. Students will also be introduced to the impact that city life has on health and healthcare in the US and internationally. They will gain an understanding of how geography as a discipline contributes to an understanding of health and health care in urban environments, and how social and economic contexts impact urban health. Mapping techniques will be utilized to examine the spatial patterns of disease and risk factors that may contribute to disease. Offered Yearly.

**Equivalent:** US 3550

**PH 3600 Special Topics in Public Health Cr. 3**

Topics may include but are not limited to an examination of health in families, health in the workplace, health across the life course, health of urban communities, community health interventions, access to health care, and health services administration. Offered Intermittently.

**Repeatable for 6 Credits**

**PH 3700 Funding Public Health Cr. 3**

This course introduces core concepts in funding public health programs, focusing on government agencies, private foundations, and the development activities of non-profit organizations. Students learn how to acquire the resources needed to tackle important health issues and serve diverse communities. This course will explain how organizations identify, apply for, and manage grants. Students will also explore creative fundraising strategies that can be used to fill critical funding gaps, expand existing services, and address emerging health challenges. Students gain practical knowledge and tools to secure resources necessary to effectively address the needs of the populations they serve. Offered Fall.

**Prerequisites:** PH 2100 with a minimum grade of C- and PH 3100 with a minimum grade of C-

**PH 3750 Reproductive Health Cr. 3**

This course explores how gender, race, class, and sexuality intersect to create disparities in reproductive healthcare access and outcomes. Applying an interdisciplinary approach, students explore issues of reproductive justice and examine the impacts of reproductive healthcare policies and practices. Students will examine public health interventions focused on reproductive health in local communities, gaining the practical skills to inform equitable reproductive health policies and practices. Offered Winter.

**PH 3800 Law and Public Health Cr. 3**

This course examines how the law shapes health outcomes and influences our everyday lives. Using a competency-based approach developed by the CDC's Public Health Law Program, students explore the legal foundations of public health. Students learn how constitutional principles, statutes, and regulations can be powerful tools to promote and maintain community health. From medical malpractice and hospital governance to abortion laws and gun control, students gain a deeper understanding of the broad spectrum of legal and ethical issues affecting the health of populations. Focusing on contemporary applications, students will understand the role of public health laws and regulation in promoting improved health outcomes and equity. Offered Fall.

**Prerequisite:** PH 2100 with a minimum grade of C- and PH 3100 with a minimum grade of C-

**PH 3900 LGBTQ Health Cr. 3**

This course centers LGBTQ+ voices and uses an intersectional socioecological lens to reveal the diverse factors that influence health. Students will explore key frameworks for understanding LGBTQ health disparities across the lifespan while examining implications for public health research, policy, and practice. Students will learn how tailored public health efforts can more effectively promote equity and address the unique challenges faced by LGBTQ+ individuals. Offered Fall.

**Equivalent:** SOC 3900

**PH 4100 Public Health Principles and Practice Cr. 2**

This required course examines practice-based approaches to improve public health. The focus will be on learning methods for community health improvement, from assessment to finding and implementing evidence-based public health interventions. Offered Every Term.

**Prerequisites:** PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, PH 3300 with a minimum grade of C-, and PH 3500 with a minimum grade of C-

**Corequisite:** PH 4150

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students with a major in Public Health or Public Health Honors.

**PH 4250 Interprofessional Education and Public Health Cr. 3**

This course introduces the foundations of Interprofessional Education and Collaborative Practice, guided by four core competencies established by the Interprofessional Education Collaborative (IPEC). Students will examine how groups of professionals in public health, medicine, nursing, pharmacy, dentistry, etc. can come together to address complex health challenges and improve patient outcomes. By exploring the unique roles and responsibilities of diverse healthcare providers, students will develop effective interprofessional communication strategies and develop the skills necessary to build and lead high-functioning multidisciplinary teams. Offered Every Term.

**Prerequisites:** PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, PH 3300 with a minimum grade of C-, and PH 3500 with a minimum grade of C-

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students with a major in Public Health or Public Health Honors.

**PH 4400 Quantitative Methods in Public Health Cr. 3**

In this quantitative methods course, students further develop the skills needed to design research projects as well as analyze, interpret and communicate statistical research findings. Students will explore the strengths and limitations of different quantitative approaches. They also learn how to evaluate scientific literature critically, preparing them to confront real-world public health challenges. Through readings, interactive discussions, and hands-on exercises, students develop core competencies in study design, data collection, analysis, and results dissemination, preparing them for success in the Capstone (PH 5100) and Practicum (PH 5150) courses. Offered Every Term.

**Prerequisites:** PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, PH 3300 with a minimum grade of C-, and PH 3500 with a minimum grade of C-

**Restriction(s):** Enrollment is limited to students with a major in Public Health or Public Health Honors.

**PH 4500 Qualitative Methods in Community Public Health Cr. 3**

This course introduces students to qualitative methods in public health, centering the experiences of community members, patients, populations, and/or partner organizations. Students explore how researchers build equitable, reciprocal partnerships that foster meaningful engagement in public health projects. Students will be introduced to essential qualitative approaches, including one-on-one interviews, focus groups, ethnographic observations, motivational interviewing, and Photovoice, and learn how these methods can provide valuable insights into health challenges. Offered Every Term.

**Prerequisites:** PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, PH 3300 with a minimum grade of C-, and PH 3500 with a minimum grade of C-

**Restriction(s):** Enrollment is limited to students with a major in Public Health or Public Health Honors.

**PH 4600 Special Topics in Health Disparities Cr. 3**

Topics may include but are not limited to an examination of health disparities by race or ethnicity, gender, income, age, nationality, or residential location. Offered Intermittently.

**Repeatable for 6 Credits**

**PH 4650 Health Data Visualization Cr. 3**

This course introduces students to the art and science of data visualization, equipping them with the tools to transform data into interesting and meaningful visuals to effectively communicate important information to diverse audiences. Students will learn how to combine epidemiological insights, biostatistical methods, and aesthetic principles to create clear, impactful visuals that can influence attitudes, behaviors, and policies. From highlighting disparities to demonstrating intervention or policy impacts, students will gain hands-on experience to effectively illustrate and evaluate data visualizations to communicate complex findings in public health, non-profit, health care, governmental, and other settings. Offered Winter.

**Prerequisites:** PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, and PH 3300 with a minimum grade of C-

**Restriction(s):** Enrollment limited to students with a class of Junior or Senior.

**PH 4900 Directed Study in Public Health Cr. 1-3**

This directed study course allows students to earn academic credit while engaging in hands-on, directed research under the guidance of a faculty supervisor. Students collaborate with experienced faculty researchers, complete directed readings, and participate in data collection, analysis, and dissemination of research findings. Once students have secured a mentored research position with a faculty member, this course enables them to gain real-world experience tackling important public health problems and research under expert guidance. Offered Every Term.

**Repeatable for 3 Credits**

### **PH 5100 Capstone Course in Public Health Cr. 3**

In this culminating Capstone course, students formulate a research question tied to pressing public health issues, conduct comprehensive literature reviews, and critically evaluate scientific evidence. Students will apply their existing public health knowledge and skills to complete a variety of research and practice-oriented tasks. This work has students critically evaluate and synthesize data relevant to their chosen research question. Students evidence essential communication skills, presenting work through writing, visuals, and oral presentations, preparing them for graduate school and professional settings. Offered Every Term.

**Prerequisites:** PH 2100 with a minimum grade of C-, PH 3000 with a minimum grade of C-, PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, PH 3300 with a minimum grade of C-, PH 3500 with a minimum grade of C-, and (PH 4400 with a minimum grade of C- or PH 4500 with a minimum grade of C-)

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students with a major in Public Health or Public Health Honors.

### **PH 5150 Public Health Practicum Cr. 3**

This practicum course offers students a structured, mentored opportunity to see public health in action. Students immerse themselves in real-world public health settings where they can practically apply their knowledge and skills. Emphasis is placed on working collaboratively with healthcare providers, public health professionals, and community members. By completing individual and group assignments, students showcase their ability to navigate real-world challenges, communicate effectively, and adapt evidence-based practices to local contexts. Through ongoing reflection, students identify their strengths and areas for growth, deepening their understanding of best practices in public health. Offered Every Term.

**Prerequisites:** PH 2100 with a minimum grade of C-, PH 3000 with a minimum grade of C-, PH 3100 with a minimum grade of C-, PH 3200 with a minimum grade of C-, PH 3300 with a minimum grade of C-, PH 3500 with a minimum grade of C-, and (PH 4400 with a minimum grade of C- or PH 4500 with a minimum grade of C-)

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students with a major in Public Health or Public Health Honors.