PUBLIC HEALTH - MINOR

As the world becomes more interconnected, our communities and populations face increasingly complex health challenges emerging through the interaction of individual vulnerability and behavior, cultural and social factors, environmental and geographic influences, as well as economic and political dynamics. Addressing these public health challenges requires innovative approaches arising from multiple disciplines.

According to the Association of Schools & Programs of Public Health (ASPPH), public health is the science and art of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention. Public health helps improve the health and well-being of people in local communities and around the globe. Public health works to prevent health problems before they occur.

Core Areas of Public Health

While public health is defined in many ways, the following is a list of core areas that are often associated with public health.

- Biostatistics: Statistical science applied to health and biomedical data.
- Environmental health: The impact of air, water, and the built environment on health.
- Epidemiology: The study of the frequency, distribution, and determinants of disease.
- Health administration and management: Managing human and fiscal resources to deliver public health services.
- · Global health: Addressing health challenges across the world.
- Maternal and child health: Improving the health of women, children, and their families.
- · Nutrition: How food and nutrients impact the health of populations.
- Public health laboratory practice: Diagnose, prevent, treat, and control infectious disease.
- Public health policy: The role of policy and policy decisions on public health.
- Public health practice: Incorporating public health principles into clinical practice.
- Social and behavioral science: The study of social and behavioral determinants of health.

Requirements

A minimum of 22 credit hours in public health coursework, including a minimum of 9 upper-division credit hours, are required for the minor. All coursework applied to the minor must be completed with a grade of C- or better; no pass/fail work may be applied. The grade point average for all public health coursework must equal 2.00 (C) or higher.

Students will be allowed to apply no more than 9 credit hours, including 6 upper-division credit hours of transfer work towards a minor in public health

Students must take courses in the following areas:

 Fundamentals of Public Health: Collectively, the core courses in public health will provide a foundational knowledge on the burden and distribution of disease and mortality around the world, the determinants of global health disparities, the development of global health policies, and the outcomes of global health interventions. Students will examine the history and uses of epidemiology, measures of disease frequency and occurrence, association and causality, analytic epidemiology, evidence-based screening, and infectious disease outbreak investigations.

- Introductory Statistics: Public health students must possess basic skills in quantitative reasoning to critically evaluate primary literature and understand how data are used to measure population health and disease burden, monitor intervention and screening programs, and inform policy decisions.
- **Introductory Biology**: Students majoring in public health must have a foundation of biological knowledge in order to understand and appreciate the concepts of health and disease.
- Elective Courses: To round out the public health major, students are required to take two courses (at least 6 credits) in the various domains of public health. Students must note when and if courses have prerequisites that are not part of the public health major.

Required Courses and Credits

Code	Title	Credit Hours
Fundamentals of Pub	lic Health	
PBHL/GEOG/IPHY 2692	Foundations in Public Health	3
GEOG 3692	Introduction to Global Public Health	4
IPHY 3490	Introduction to Epidemiology	3
Introductory Statistic	s	
Students must take a statistics:	t least one of the following courses in	3-4
ANTH 4000	Quantitative Methods in Anthropology	
ECON 3818	Introduction to Statistics with Computer Applications	
GEOG 3023	Statistics and Geographic Data	
IPHY 3280	Intro to Data Science and Biostatistics	
MATH 2510	Introduction to Statistics	
PSCI 2075	Quantitative Research Methods	
PSYC 2111	Psychological Science I: Statistics	
SOCY 2061	Introduction to Social Statistics	
STAT 2600	Introduction to Data Science	
Introductory Biology		
Students must take a	t least one of the following courses:	3
EBIO 1100	Biology and Society	
EBIO 1210	General Biology 1	
MCDB 1150	Introduction to Cellular and Molecular Biology	
Elective Courses		
Six credit hours of public health electives. At least one course (at least 3 credits) must be at the upper-division level, and at least one course (at least 3 credits) must be from outside of the student's major.		

Social and Behavioral Health Electives

ANTH 4610	Medical Anthropology	
ANTH 4605	Anthropology of Neuroscience	
SOCY 1022	Ethics and Social Issues in U.S. Health	
	and Medicine	

SOCY 3032	Social Epidemiology
SOCY 3045	Sociology of Death and Dying
SOCY 3052	Medical Sociology
SOCY 4052	Social Inequalities in Health
SOCY 4062	Suffering and Care in Society
ECON 4646	Topics in Health Economics (depends on topic)
PSYC 4606	Advanced Topics in Social Psychology (Social Psychology of Health Promotion; Discrimination and Health)
PSYC 4021	Psychology and Neuroscience of Exercise
PSYC 4541	Special Topics in Psychology - Social Science (Prevention Science: Promoting Positive Youth and Adult Development; Science of Happiness; Sports Psychology)
Environment and Heal	th Electives
ENVS 3034	Foundations of Environmental Justice
or HONR 4075	Environmental Justice
or PHIL 2140	Environmental Justice
or GEOG 3782	Environmentalism, Race, and Justice
GEOG 4852	Health and Medical Geography (taught every other year)
EBIO 3400	Microbiology
SOCY 4007	Global Human Ecology
GEOG 4772	Food and Power (taught every year)
GEOG 4692	Climate Change and Health
HIST 2830	Disease and Public Health in Global History (online course)
ECON 4646	Topics in Health Economics (depends on topic)
Nutrition and Health E	lectives
IPHY 2420	Introduction to Nutrition
or IPHY 3440	Clinical Nutrition
ANTH 4060	Nutrition and Anthropology
IPHY 4420	Nutrition and Human Performance (offered every other year)
GEOG 4772	Food and Power
EBIO 3590	Plants and Society
PHIL 2260	Philosophy and Food
ENVS 3525	Intermediate Environmental Problem Analysis: Topical Cornerstones (Food and Environment; Water-Energy-Food Nexus)
HIST 2830	Disease and Public Health in Global History (online course)
SOCY 4117	Food and Society (online course)
Other Electives Relate	d to Public Health
EBIO 3630	Parasitology
IPHY 4780	Sleep, Circadian Rhythms, and Health
SLHS 3014	Hearing Loss Epidemiology
SLHS 1010	Disabilities in Contemporary American Society
SPAN 3080	Spanish Health Professions

otal Credit Hou	Irs 22-2	23
	United States	
WGST/JWST	4200 Religion and Reproductive Politics in the	
PSYC 2012	Biological Psychology	
NRSC 4420	Genetics of Brain and Behavior	
HUMN 3200	Fictions of Illness: Modern Medicine and the Literary Imagination	
APRD 4010	Strategic Health Communication	

Total Credit Hours

1 IPHY 2420 is offered every year; IPHY 3440 is offered every other year.

Plan(s) of Study

Year One		
Fall Semester		Credit
		Hours
EBIO 1210	General Biology 1	3
	Credit Hours	3
Spring Semester		
PBHL 2692	Foundations in Public Health	3
or GEOG 2692	or Foundations in Public Health	
or IPHY 2692	or Foundations in Public Health	
	Credit Hours	3
Year Two		
Fall Semester		
SOCY 2061	Introduction to Social Statistics	3
	Credit Hours	3
Spring Semester		
IPHY 3490	Introduction to Epidemiology	3
	Credit Hours	3
Year Three		
Fall Semester		
GEOG 3692	Introduction to Global Public Health	4
	Credit Hours	4
Spring Semester		
SOCY 4052	Social Inequalities in Health	3
	Credit Hours	3
Year Four		
Fall Semester		
PSYC 4606	Advanced Topics in Social Psychology	3
	(Social Psychology of Health Promotion)	
	Credit Hours	3
	Total Credit Hours	22

Learning Outcomes

By the completion of the program, students will be able to:

- Describe and apply the modern public health approach to understanding the natural history of communicable and noncommunicable diseases
- · Examine the biological, behavioral, social, cultural and environmental origins of communicable and noncommunicable diseases

- Identify and examine the biological, behavioral, social, cultural and environmental factors that contribute to the distribution of disease and health indicators over the life course
- Define the role of data, data literacy and statistics in guiding evidence-based risk assessment and health policy
- Apply analytic methodologies, research strategies and study designs used in public health to study the distribution, underlying causes and impact of communicable and noncommunicable disease
- Articulate multi-disciplinary public health strategies for the prevention, treatment and control of communicable and noncommunicable diseases