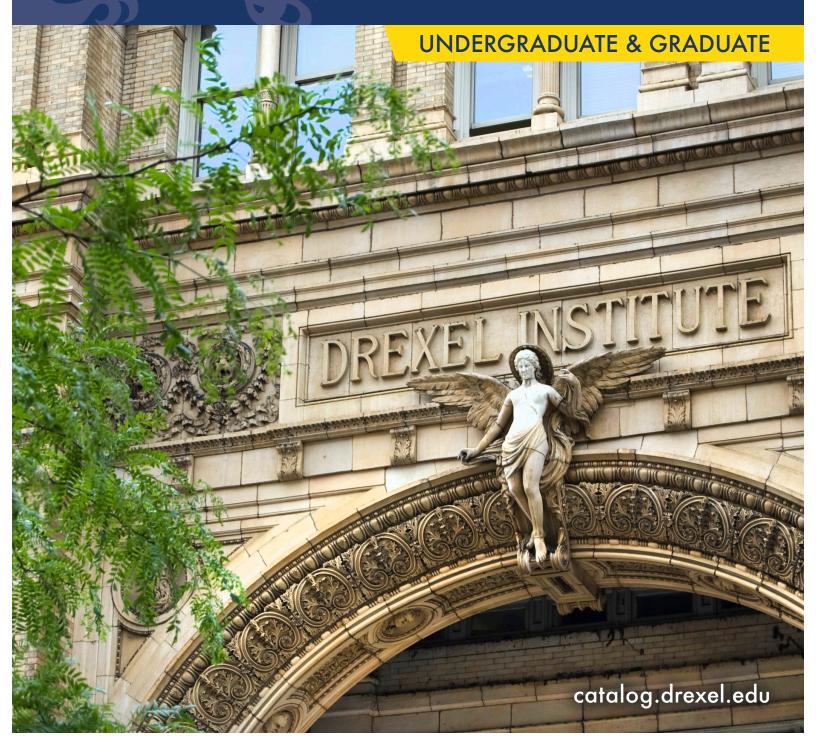


CATALOG 2014-2015



School of Public Health

About the School

Drexel University's School of Public Health promotes the health of communities through an integrated program of education, research, service and practice. The School is committed to identifying societal conditions required for people to be healthy, and to advancing practices that improve the health of vulnerable populations. The School enhances the health of communities by creating partnerships based on community values, strengths and assets. Its curriculum, stresses the importance of understanding and addressing the connection between human rights and health status.

The mission of the School of Public Health (http://publichealth.drexel.edu) is to promote health and quality of life through graduate education, applied research, and community service in the prevention and control of disease, injury, and disability. The curriculum combines knowledge of the disciplines of public health and practical applications of that knowledge. By working collaboratively with community groups, agencies, and populations, professionals are prepared to effectively address today's most pressing public health problems.

Preparation and Partnership

The School believes that professionals can best meet the needs of today and tomorrow with expertise in the integration and practical application of all disciplines of public health. The School of Public Health's educational and research programs are built upon partnerships with communities and the organizations that serve them.

The School prepares professionals to assess population health; to ensure appropriate services through programmatic, economic, and organizational interventions; and to develop and evaluate policy interventions.

Majors

• Public Health

Minor

Public Health

Public Health

Bachelor of Science Degree: 181.0 quarter credits

About the Program

Public health is the science of protecting and improving the health and well-being of communities. Where clinical professionals such as doctors and nurses focus on treating individuals after they become sick or are injured, public health professional are concerned with the health of entire populations, attempting to prevent problems from occurring or recurring through education, policy development, advocacy, service and research.

Reflecting the interdisciplinary approach of the School of Public Health (http://publichealth.drexel.edu), students in the major will take courses originating from the various public health core disciplines, which include epidemiology, community health and prevention, environmental and occupational health, and health management and policy. The diversity in course offerings provides the students with the general foundations of each discipline within public health. Student learning is enhanced

by faculty expertise from a wide array of backgrounds ranging from epidemiology, community health, global health, sociology, psychology, medicine, health policy, health economics, industrial hygiene and anthropology in addition to many more. As the students progress through the major, they will gain more breath and depth in the specific discipline of their choosing through the co-op experience as well as the capstone courses in their senior year.

The School of Public Health is dedicated to the integration of social justice and human rights in academic public health and being a model for interdisciplinary collaboration and civic engagement. Additionally, a commitment to global engagement is core to the School's mission. The Global Public Health Initiative was created to provide opportunities for all public health student to gain rich and meaningful experiences working on health issues that transcend national boundaries or that may be influenced by circumstances or experiences in other countries.

Upon completion of the degree, students will be better equipped to complete graduate education in public health or health sciences. Students will have acquired skills that could be translated into the workplace (city, state or local government, non for profit, etc.) or other post baccalaureate educational settings such as an MPH, JD or MD.

Goals and Objectives

By the conclusion of the major, all students will be able to:

- 1. Illustrate the interdisciplinary nature of public health in disease prevention and health promotion on both individuals and populations.
- 2. Recognize the interconnectedness between physical and natural sciences and how each address population-based health challenges.
- 3. Illustrate the fundamental relationship between health and human rights and the role of social justice and ethics.
- 4. Highlight the important role that epidemiology and surveillance play in shaping and protecting the health of populations.
- 5. Recognize the importance of historical context regarding public health milestones as they shape policies and programs.
- 6. Obtain a greater understanding of the role of culture and values and how they influence relationships between social determinants of health and the built environment.
- 7. Identify and address population health challenges through the various public health concentrations.
- 8. Illustrate the overarching role that the social determinants of health have in promoting or hindering health.
- Acquire a working knowledge of the US healthcare and healthcare delivery system.

Degree Requirements

General Education Requirements

COM 230	Techniques of Speaking	3.0
COM 320 [WI]	Science Writing	3.0
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0

ENGL 102	Composition and Rhetoric II: The Craft of Persuasion	3.0
ENGL 103	Composition and Rhetoric III: Thematic Analysis Across Genres	3.0
PBHL 101	Public Health 101	3.0
UNIV PH101	The Drexel Experience	3.0
Students select o	ne of the following math sequences:	12.0
MATH 101 & MATH 102	Introduction to Analysis I and Introduction to Analysis II	
& MATH 239 Or	and Mathematics for the Life Sciences	
MATH 121	Calculus I	
& MATH 122 & MATH 123	and Calculus II and Calculus III	
Physical and Life	e Sciences Requirements	
BIO 107	Cells, Genetics & Physiology	3.0
BIO 108	Cells, Genetics and Physiology Laboratory	1.0
BIO 109	Biological Diversity, Ecology & Evolution	3.0
BIO 110	Biological Diversity, Ecology and Evolution Laboratory	1.0
CHEM 111	General Chemistry I	4.0
CHEM 112	General Chemistry II	4.0
CHEM 113	General Chemistry I Laboratory	1.5
CHEM 114	General Chemistry II Laboratory	1.5
Social Science F	Requirements	
PSY 101	General Psychology I	3.0
SOC 101	Introduction to Sociology	3.0
Select 7 additiona	al social science electives from the following list:	21.0
ANTH 240	Urban Anthropology	
ANTH 250	Anthropology of Immigration	
ANTH 370	Ethnographic Methods	
ECON 201	Principles of Microeconomics	
ECON 202	Principles of Macroeconomics	
ECON 240	Economics of Health Care Systems	
ENVE 455	Geographic Information Systems	
ENVP 345	Sociology of the Environment	
ENVS 321	Environmental Health	
HIST 222	History of Work & Workers in America	
HIST 223	Women and Work in America	
HIST 224	Women in American History	
HRMT 323	Principles of Human Resource Administration	
IAS 320	Building Global Bridges	
IAS 359	Culture and Values	
MIS 200	Management Information Systems	
ORGB 300 [WI]	Organizational Behavior	
PHIL 321	Biomedical Ethics	
PSCI 353	International Human Rights	
PSCI 370	Topics in Public Policy	
PSY 120	Developmental Psychology	
PSY 240 [WI]	, , ,	
	Abnormal Psychology	
PSY 250 [WI]		

Total Credits	1	181.0
Free Electives		39.0
PBHL 499	Capstone Experience III	3.0
PBHL 498	Capstone Experience II	3.0
PBHL 497	Capstone Experience I	3.0
Public Health Ca	pstone Experience	
PBHL 318	Violence and Trauma in Public Health	
PBHL 316	Drugs, Society, and Public Health	
PBHL 310	Burden of Disease	
PBHL 307	Injury Prevention and Control	
PBHL 305	Women and Children: Health & Society	
ENVS 341	Equatorial Guinea: Society & Environment	
Select five of the f	following Public Health courses:	15.0
PBHL 317	The World's Water	3.0
PBHL 315	Public Health Leadership	3.0
PBHL 314	Environmental and Occupational Health	3.0
PBHL 313	The Social Determinants of Health and Well-Being	3.0
PBHL 312	Making Sense of Public Health Data	3.0
PBHL 311	Public Health Biology	3.0
PBHL 309	Public Health Ethics	3.0
PBHL 308	The U.S. Public Health System	3.0
PBHL 306	Introduction to Community Health	3.0
PBHL 304	Introduction to Health & Human Rights	3.0
PBHL 303	Overview of Issues in Global Health	3.0
PBHL 302	Introduction to the History of Public Health	3.0
PBHL 301	Epidemiology in Public Health	3.0
Public Heath Cor	re Course Requirements	
WMST 275	Women's Health & Human Rights	
SOC 275	Issues in Domestic Violence	
SOC 235	Sociology of Health	
SOC 210	Race and Ethnic Relations	
SOC 115	Social Problems	

Sample Plan of Study

Term 1		Credits
BIO 107	Cells, Genetics & Physiology	3.0
BIO 108	Cells, Genetics and Physiology Laboratory	1.0
ENGL 101	Composition and Rhetoric I: Inquiry and Exploratory Research	3.0
MATH 101	Introduction to Analysis I	4.0
or 121	Calculus I	
PBHL 101	Public Health 101	3.0
UNIV PH101	The Drexel Experience	2.0
	Term Credits	16.0
Term 2		
BIO 109	Biological Diversity, Ecology & Evolution	3.0
BIO 110	Biological Diversity, Ecology and Evolution Laboratory	1.0
ENGL 102	Composition and Rhetoric II: The Craft of Persuasion	3.0
MATH 102 or 121	Introduction to Analysis II Calculus I	4.0

UNIV PH101	The Drexel Experience	1.0
Social Science	e elective	3.0
	Term Credits	15.0
Term 3		
Social Science	e	3.0
ENGL 103	Composition and Rhetoric III: Thematic Analysis Across Genres	3.0
MATH 239	Mathematics for the Life Sciences	4.0
or 123	Calculus III	7.0
Free Elective		6.0
	Term Credits	16.0
Term 4		
CHEM 111	General Chemistry I	4.0
CHEM 113	General Chemistry I Laboratory	1.5
PBHL 303	Overview of Issues in Global Health	3.0
PBHL 305	Women and Children: Health & Society	3.0
Social Science	·	3.0
	Term Credits	14.5
Term 5	Tom ordato	17.0
CHEM 112	General Chemistry II	4.0
CHEM 114	General Chemistry II Laboratory	1.5
PBHL 301	Epidemiology in Public Health	3.0
PBHL 304	Introduction to Health & Human Rights	3.0
Free elective	introduction to riedith & riuman Rights	3.0
Tiee elective	Term Credits	14.5
Term 6	Term Credits	14.3
Free elective		2 (
PBHL 302	Introduction to the History of Dublic Health	3.0
	Introduction to the History of Public Health (PBHL) required course	3.0
Social Science		3.0
Social Science		6.0
T 7	Term Credits	15.0
Term 7	(DDIII) was wined assumed	0.0
	(PBHL) required courses	6.0
Social Science		3.0
Free electives	-	6.0
Term 8	Term Credits	15.0
COM 230	Techniques of Speaking	3.0
	(PBHL) required courses	6.0
	(PBHL) elective	3.0
Social Science		3.0
- Social Science	Term Credits	15.0
Term 9	Term Credits	13.0
COM 320	Science Writing	2 (
[WI]	Science Writing	3.0
Public Health	(PBHL) required courses	6.0
Public Health	(PBHL) elective	3.0
Social Science	e elective	3.0
	Term Credits	15.0
Term 10		
PBHL 497	Capstone Experience I	3.0
Public Health	(PBHL) elective	3.0

	Term Credits	15.0
Free elective		9.0
Public Healt	h (PBHL) elective	3.0
PBHL 499	Capstone Experience III	3.0
Term 12		
	Term Credits	15.0
Free electives		6.0
Social Scien	nce elective	3.0
Public Healt	h (PBHL) elective	3.0
PBHL 498	Capstone Experience II	3.0
Term 11		
	Term Credits	15.0
Free elective	es	6.0
Social Science elective		3.0

Total Credit: 181.0

Courses

PBHL 101 Public Health 101 3.0 Credits

Introduction to Public Health is a broad overview class designed to give an introduction to the core tenets of Public Health. Basic concepts covered in the class are the basic definitions and concepts related to public health. Specific areas that will be further explored in the class include, what it means to be healthy, what is public health, what are social determinants of health, what is disease prevention and health promotion and what are health inequalities among others.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 301 Epidemiology in Public Health 3.0 Credits

This is an introductory course designed to teach undergraduate students the basic principles and concepts of epidemiology. The course highlights the approaches used in the field of epidemiology to study disease in populations, incorporating concepts of disease causation and control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 302 Introduction to the History of Public Health 3.0 Credits

This course considers the origins of contemporary public health by examining major currents in the history of public health in the United States from Colonial times to the present, with an emphasis on the 20th century.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 303 Overview of Issues in Global Health 3.0 Credits

This introductory course will cover the major issues and considerations involved in global health. It is a survey course that is designed to familiarize students with the major topics in the global health. The goal of the course is to provide students with an overview of concepts such as the determinants of health, the measurements of health status and global burden of the disease.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 304 Introduction to Health & Human Rights 3.0 Credits

This introductory course highlights the intrinsic link between one's health and his/her fundamental human rights. When such rights (access to medical care, housing, food, standard of living) are violated, this can lead to adverse health outcomes.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 305 Women and Children: Health & Society 3.0 Credits

This course is designed to give students a broad overview of pertinent issues surrounding the health and well being of mothers and children. The course emphasizes the inter-relationship among women's health, reproductive health and child health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 306 Introduction to Community Health 3.0 Credits

This three credit course will provide the foundation for studying the root causes affecting community health in the United States, as well as broad efforts to improve world health. This course is designed to enhance oral and written communications on public health issues, advocacy, and public policy, while enhancing content, process skills, and other essential competencies.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: D]

PBHL 307 Injury Prevention and Control 3.0 Credits

This course examines the history of injury as one of the core public health problems in the United States. The subsequent costs and burdens to the healthcare system are explored using current information from the academic literature, local and national interest groups, and government agencies. Policy and behavioral interventions are addressed. Where possible, extensions to international settings are made.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 308 The U.S. Public Health System 3.0 Credits

This course will provide students with an understanding of the organizational components of the public health system in the United States. Among the topics covered are the roles of different levels of government in the financing, delivery, and regulation of public health services and the complementary private, non-profit components of the public health system. The course addresses several current, critical public health policy issues and how different political and economic interests and actors interact in shaping public policy on these issues.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 309 Public Health Ethics 3.0 Credits

This course will explore the emergence of the public health field, its philosophical, historical, and political development, its relationship to the field of human rights and its future. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics. This is a reading and writing intensive course, and students should be prepared to engage in serious dialogue each week in class.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 310 Burden of Disease 3.0 Credits

This course will cover selected topics of the burden of disease with critical review of the current public health literature. Students will have the opportunity to learn the basic concepts and methods of exploring risk factors and assessing the burden of disease at regional, national and global levels, through class lectures, group exercise and individual projects.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 311 Public Health Biology 3.0 Credits

This course is designed to introduce students to the biologic basics of the causes, natural history, and prevention of diseases of public health importance. An integrated perspective will be used to demonstrate the connection between exposures and cellular effects, disease processes in individuals, and population impacts. Coverage will include infectious disease transmission and prevention; cancer biology regarding etiology, prevention, and treatment; nutritional influences in obesity, diabetes and heart disease.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: BIO 107 [Min Grade: C] and BIO 108 [Min Grade: C] and

PBHL 101 [Min Grade: C]

PBHL 312 Making Sense of Public Health Data 3.0 Credits

This course will introduce students to the basic concepts and methods of biostatistics as they relate to applications in public health practice and research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 313 The Social Determinants of Health and Well-Being 3.0 Credits

The goal of this course is to introduce students to the patterning of health and well-being among social groups within and between societies, and how a social science approach can improve our understanding of health and illness at a population level, and identify possible public health strategies for reducing health disparities.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 314 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of EOH as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to EOH. Students will be expected to critically analyze EOH issues and explore appropriate responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 315 Public Health Leadership 3.0 Credits

This course provides students with an introduction to the environment and organizations in public health leadership. This course introduces leadership skills to lead changes in public health organizations. The cases and lectures throughout the course have been designed to develop leadership approaches for public health agencies.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 316 Drugs, Society, and Public Health 3.0 Credits

This course will examine problems associated with drug use through the prism of public health. The first half of the course will be devoted to understanding biological, psychological, social, and cultural aspects of key licit and illicit substances. The second half will focus on relevant public health aspects of drug use, including preventions, intervention, treatment, and policy. Intersecting issues include homelessness, HIV/ AIDS, mental health & violence. Students will be exposed to key books and peer-reviewed articles that address these issues from a range of theoretical & analytical approaches.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 317 The World's Water 3.0 Credits

This course will discuss the approaches that may be taken to improve access to water and sanitation and improve public health. The course will also cover water remediation and safeguard techniques for the improvement of water quality, as well as gender and development perspectives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 101 [Min Grade: C]

PBHL 318 Violence and Trauma in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems. The course will examine trauma informed models, which have been applied to individuals, communities and systems and will analyze the policy and practice implications of these models as well as the translation from research to practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 320 Exploring the HIV/AIDS Pandemic 3.0 Credits

This course examines the natural history, diagnosis and surveillance of HIV/AIDS. While this is an epidemiology based course, the students will also learn the basic virology of HIV, including the life cycle and genetic diversity of the virus in order to more fully describe the epidemiology of the pandemic. In addition to learning about the biology and epidemiology of the pandemic which can limit its control. Students will be responsible for reporting on a country of their choice, describing the history, epidemiology, and methods of control utilized by that country.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: BIO 107 [Min Grade: C-] and PBHL 302 [Min Grade: C-]

and PBHL 311 [Min Grade: C-]

PBHL 321 Disease Outbreak Investigations 3.0 Credits

The emergence of new pathogens and drug resistance, as well as increased transmission opportunities caused by globalization has led to a rising prevalence of new infectious diseases as well as reemergence of older diseases, this course will focus on the surveillance, identification, control, and prevention of selected infectious diseases of Public Health importance both globally and within the U.S. Specific areas that will be addressed include the causative agents, the routes of transmission, the host responses, environmental factors, unique risk factors, outbreak investigations, surveillance and strategies for control and prevention. We will incorporate the history of communicable disease control efforts where relevant and discuss the role of increased globalization in the spread of infectious diseases.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: BIO 107 [Min Grade: C-] and PBHL 301 [Min Grade: C-]

and PBHL 311 [Min Grade: C-]

PBHL 399 Independent Study 0.5-12.0 Credits

This course will provide a course of independent study in Public Health. Topics for study must be approved in advance of registration by the advisor and the instructor involved.

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 497 Capstone Experience I 3.0 Credits

The senior capstone is a progressive 3-quarter experience with cross cutting competencies for graduating public health major seniors to provide them with an individualized learning experience of breadth and depth. Students will work with faculty members to design a project that will fulfill both his/her public health interests as well as the broader capstone objectives. Students will participate in in-class learning with other public health majors to acquire foundational concepts, which they can apply to their individualized project.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if classification is Senior.

Prerequisites: PBHL 301 [Min Grade: C-] and PBHL 302 [Min Grade: C-] and PBHL 303 [Min Grade: C-] and PBHL 304 [Min Grade: C-] and PBHL 306 [Min Grade: C-] and PBHL 308 [Min Grade: C-] and PBHL 309 [Min Grade: C-] and PBHL 311 [Min Grade: C-] and PBHL 312 [Min Grade: C-] and PBHL 313 [Min Grade: C-] and PBHL 314 [Min Grade: C-] and PBHL

315 [Min Grade: C-] and PBHL 317 [Min Grade: C-]

PBHL 498 Capstone Experience II 3.0 Credits

The senior capstone is a progressive 3-quarter experience with cross cutting competencies for graduating public health major seniors to provide them with an individualized learning experience of breadth and depth. Students will work with faculty members to design a project that will fulfill both his/her public health interests as well as the broader capstone objectives. Students will participate in in-class learning with other public health majors to acquire foundational concepts, which they can apply to their individualized project.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if classification is Senior.

Prerequisites: PBHL 301 [Min Grade: C-] and PBHL 302 [Min Grade: C-] and PBHL 303 [Min Grade: C-] and PBHL 304 [Min Grade: C-] and PBHL 306 [Min Grade: C-] and PBHL 308 [Min Grade: C-] and PBHL 309 [Min Grade: C-] and PBHL 311 [Min Grade: C-] and PBHL 312 [Min Grade: C-] and PBHL 313 [Min Grade: C-] and PBHL 314 [Min Grade: C-] and PBHL 315 [Min Grade: C-] and PBHL 317 [Min Grade: C-]

PBHL 499 Capstone Experience III 3.0 Credits

The senior capstone is a progressive 3-quarter experience with cross cutting competencies for graduating public health major seniors to provide them with an individualized learning experience of breadth and depth. Students will work with faculty members to design a project that will fulfill both his/her public health interests as well as the broader capstone objectives. Students will participate in in-class learning with other public health majors to acquire foundational concepts, which they can apply to their individualized project.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if classification is Senior.

Prerequisites: PBHL 301 [Min Grade: C-] and PBHL 302 [Min Grade: C-] and PBHL 303 [Min Grade: C-] and PBHL 304 [Min Grade: C-] and PBHL 306 [Min Grade: C-] and PBHL 308 [Min Grade: C-] and PBHL 309 [Min Grade: C-] and PBHL 311 [Min Grade: C-] and PBHL 312 [Min Grade: C-] and PBHL 313 [Min Grade: C-] and PBHL 314 [Min Grade: C-] and PBHL

315 [Min Grade: C-] and PBHL 317 [Min Grade: C-]

Minor in Public Health

The Drexel University School of Public Health trains new leaders to tackle society's current and future health challenges. The Public Health minor is designed to provide students with a broad overview of the field's diversity. Reflecting the interdisciplinary approach of the School, students are required to take courses originating from various public health core disciplines, which include: epidemiology; community health and prevention; environmental and occupational health; and health management and policy.

This minor will be a relevant course of study for students pursuing pre-med, pre-law, biology and business curricula as well as students interested in population-based applications of psychology, sociology and communications theory. Completion of the minor will provide students with an exposure to the breadth and depth of topics within public health, population-level challenges and solutions, as well as possible career options.

Additional Information

For more information about this program, please contact the Program Director:

Jennifer Breaux, DrPH, MPH

Director, Undergraduate Public Health Education

Drexel University School of Public Health

irb43@drexel.edu

Required Courses

PBHL 301	Epidemiology in Public Health	3.0
PBHL 302	Introduction to the History of Public Health	3.0
PBHL 303	Overview of Issues in Global Health	3.0
PBHL 304	Introduction to Health & Human Rights	3.0
Elective Choice	es	
Select four of the	e following courses:	12.0
PBHL 305	Women and Children: Health & Society	
PBHL 307	Injury Prevention and Control	
PBHL 310	Burden of Disease	
PBHL 316	Drugs, Society, and Public Health	
PBHL 318	Violence and Trauma in Public Health	
ENVP 345	Sociology of the Environment	
PSCI 353	International Human Rights	
PSCI 370	Topics in Public Policy	
PSY 368	Critical Psychology	
SOC 210	Race and Ethnic Relations	
SOC 235	Sociology of Health	
WMST 275	Women's Health & Human Rights	
BIO 318	Biology of Cancer	
ECON 240	Economics of Health Care Systems	
ENVP 346	Environmental Justice	
ENVS 321	Environmental Health	
PHIL 321	Biomedical Ethics	
PSY 355	Health Psychology	
SOC 220	Wealth and Power	
SOC 275	Issues in Domestic Violence	

Total Credits 24.0

The School of Public Health

About the School

Drexel University's School of Public Health promotes the health of communities through an integrated program of education, research, service and practice. The School is committed to identifying societal conditions required for people to be healthy, and to advancing practices that improve the health of vulnerable populations. The School enhances the health of communities by creating partnerships based on community values, strengths and assets. Its curriculum, stresses the importance of understanding and addressing the connection between human rights and health status.

The mission of the School of Public Health (http://publichealth.drexel.edu) is to promote health and quality of life through graduate education, applied research, and community service in the prevention and control of disease, injury, and disability. The curriculum combines knowledge of the disciplines of public health and practical applications of that knowledge. By working collaboratively with community groups, agencies, and populations, professionals are prepared to effectively address today's most pressing public health problems.

Preparation and Partnership

The School believes that professionals can best meet the needs of today and tomorrow with expertise in the integration and practical application of all disciplines of public health. The School of Public Health's educational and research programs are built upon partnerships with communities and the organizations that serve them.

The School prepares professionals to assess population health; to ensure appropriate services through programmatic, economic, and organizational interventions; and to develop and evaluate policy interventions.

Majors

- Biostatistics (MS, MPH)
- Community Health and Prevention (MPH, DrPH)
- Epidemiology (MS, MPH, PhD, MD/MPH)
- Environmental and Occupational Health (MPH)
- Health Management and Policy (MPH)
- Health Policy and Social Justice (DrPH)
- Public Health (MPH)
- Public Health Executive Program (MPH)

Certificates

- Epidemiology and Biostatistics
- Global Health
- Lesbian, Gay, Bisexual and Transgender Health (LGBT)

Biostatistics

Master of Science (MS): 57.0 quarter credits Master of Public Health (MPH): 64.0 quarter credits

About the Programs Master of Science

Biostatistics applies statistical, mathematical and computational techniques to scientific research in health-related fields, including medicine, epidemiology, and public health. Biostatistics has been an integral and indispensable tool in improving health and reducing illness. Biostatisticians play essential roles in designing studies and analyzing research data. Graduates with degrees in biostatistics are employed in public health research and service organizations, university research groups, hospitals, pharmaceutical companies, health-related industries and government. The demand for biostatisticians in the job market has been consistently strong. New high throughput technologies such as gene microarray are generating an unprecedented amount of data and present exciting new opportunities for biostatisticians with strong computational skills.

The goal of Drexel University's MS Program in Biostatistics is to provide students with a thorough understanding of biostatistical methods, strong computational skills, and the ability to apply this knowledge to research focusing on health related problems. The program prepares students for handling the quantitative and computational aspects of a research project, ranging from study design, data collection and management, developing analysis plans, and conducting analyses and reporting findings. The MS in Biostatistics program includes course work in statistical theory and methods, computing and data management, epidemiology, and general public health topics. Incorporated into the second year is a guarterlong practicum experience working on a real academic, government, or industry project in a sponsoring organization setting. The practicum-based research project will involve the application of biostatistical analysis to a problem of significance to the sponsoring academic, government or industry organization with joint oversight provided by a Department faculty member and an on-site PhD level biostatistician.

Upon graduation MS students will attain competencies in the following three areas: general public health knowledge, biostatistics knowledge, data management and computing skills.

For additional information about the program, visit Drexel's School of Public Health (http://publichealth.drexel.edu/1) web site.

Master of Public Health

The Master of Public Health program is intended for individuals interested in careers as community educators; population health planners; policy analysts, evaluators, researchers; and managers of health service delivery organizations and systems, managed-care programs, and other population-based organizations.

The 64 quarter-credit program is interdisciplinary and requires students to complete a community-based master's project. It prepares students to enter an array of fields related to public health or a range of doctoral programs. Drexel University's Master of Public Health (MPH) program provides practical skills and experience, with a unique focus on relevant community issues, challenges, and priorities.

Program Highlights

The first year of the program covers the five core disciplines offered within the context of culture and community. These include environmental and occupational health; health care systems organization, management, and policy; social and behavioral sciences for population health; epidemiology; biostatistics. Throughout the program, group case discussion sessions,

case-related activities and didactic sessions are integrated into the experience.

These include:

- Skill development labs and workshops (year two)
- Public health grand rounds (for all faculty, students, and community partners) provide access to scholars and their cutting-edge research and initiatives in public health

Curriculum

The MPH full-time educational program is structured on a quarter-term basis, with a total of 64 credit hours required. This is generally taken as a two-year program; all coursework must be completed within five years of the date of matriculation for the full-time program.

The second-year curriculum is composed of four required courses, three elective courses, and the Community-Based Master's Project (CBMP), the culminating experience required of full-time Drexel MPH students. Students spend approximately 12 hours each week working on a community-oriented, health-related project, often working as an integral part of a community-based organization. This can be in the areas of government, healthcare and social services, among others.

In preparation for developing their final paper, students are required to identify an issue or problem of significance to the target community or agency, synthesize the literature, develop an approach or methodology to address the issue and either implement and test the validity of a proposed approach or set out a detailed prescription for addressing the problem. Students may also work with faculty in specific research areas.

Joint Doctor of Medicine and Master of Public Health Degree (MD/MPH)

Students wishing to complete a course of study earning the joint MD/MPH degree can complete such a program in 5 years. They must apply for the joint program and be accepted by both the Drexel University College of Medicine and the School of Public Health. Students in this program have enriched public health content in their first two years of medical school and spend their third year of study full time in the School of Public Health. Students are able to enter clinical rotations and residency selection having obtained the MPH degree.

Additional Information

For additional information about this program, contact: Stephanie Johnson snj22@drexel.edu 267.359.6065

Admission Requirements

Applicants to the MS in Biostatistics must meet the following requirements, having:

- a baccalaureate degree, ideally in a quantitative field such as mathematics, economics and computer science or a scientific area such as natural, biological, medical and environmental sciences.
- · at least two semesters of calculus in college.
- at least one semester of linear algebra in college.
- knowledge and experience in computing such as operating system, office software and Internet. Familiarity with a programming language or a statistical package is desirable.

The application package will include:

- · undergraduate and graduate transcripts
- three letters of recommendation from faculty or professionals who can evaluate the applicant's promise as a graduate student
- · Graduate Record Examination (GRE) scores
- · a written statement of career and educational goals

Degree Requirements

Completion of the MS in Biostatistics requires: (1) a minimum of 51.0 credit hours of course work; (2) a cumulative grade point average of 3.0 or higher; (3) a substantial data analysis project (6 credit hours) with a written report (30-50 pages) and oral presentation.

Required Public Health Courses

Total Credits		58.0
STAT 628	Applied Regression Analysis	
PBHL 830	Advanced Epidemiology	
PBHL 804	Research Methods for Community Health and Prevention	
PBHL 632	Applied Survey Research in Epidemiology	
MATH 511	Applied Probability and Statistics II	
MATH 510	Applied Probability and Statistics I	
BIO 640	Biometry	
BIO 631	Bioinformatics I	
Complete 2 of the	following:	6.0
PBHL 630	Intermediate Epidemiology	3.0
PBHL 530	Principles of Epidemiology	4.0
Required Epidem	niology Courses	
PBHL 698	Linear Statistical Models	3.0
PBHL 697	Generalized Linear Model	3.0
PBHL 696	Nonparametric and Semiparametric Models	3.0
PBHL 695	Statistical Consulting	2.0
PBHL 694	Biostatistical Literature Review	1.0
PBHL 685	Data Analysis Project	6.0
PBHL 686	Advanced Statistical Computing	3.0
PBHL 684	Statistical Inference II	4.0
PBHL 683	Advanced Clinical Trials & Experiment Design	3.0
PBHL 631	Applied Multivariate Analysis	3.0
PBHL 628	Survival Data Analysis	3.0
PBHL 625	Longitudinal Data Analysis	3.0
PBHL 623	Introduction to Statistical Computing	3.0
Required Biostat	Statistical Inference I	3.0
		2.0
PBHL 516	Introduction to Public Health	2.0

Degree Requirements

Foundation Courses

PBHL 516	Introduction to Public Health
PBHL 520	Principles of Biostatistics
PBHL 530	Principles of Epidemiology
PBHL 540	Prevention Principles and Practices

PBHL 550	Community Based Prevention Practices	
PBHL 600	Management, Leadership, Assurance and Health Services	
PBHL 640	Environmental Health	
PBHL 650	Public Policy and Advocacy	
Required Comm	unity-Based Master's Project Courses	12.0
PBHL 680	Community Based Master's Project I	
PBHL 681	Community Based Master's Project II	
PBHL 682	Community Based Master's Project III	
Required Cours	es	15.0
PBHL 620	Intermediate Biostatistics I	
PBHL 621	Intermediate Biostatistics II	
PBHL 623	Introduction to Statistical Computing	
PBHL 630	Intermediate Epidemiology	
and choose 1	of the follow:	
PBHL 622	Statistical Inference I	
PBHL 629	Design & Analysis of Clinical Trials	
PBHL 683	Advanced Clinical Trials & Experiment Design	
PBHL 691	Pathophysiology Basis of Epidemiologic Research	
PBHL 692	Public Health Obesity Prevention Research	
Electives		9.0

Students are required to successfully complete three electives (9.0 credits). These courses may be within the School of Public Health, or from other academic units within the University. Students must meet with their Academic Advisor in selecting their electives. It is the responsibility of the student to determine course restrictions and the registration process for campus electives taken at the Main Campus. The following is a sample of some of the School of Public Health electives offered by department:

Biostatistics Electives

PBHL 622	Statistical Inference I
PBHL 628	Survival Data Analysis
PBHL 629	Design & Analysis of Clinical Trials
PBHL 631	Applied Multivariate Analysis
PBHL 683	Advanced Clinical Trials & Experiment Design
PBHL 684	Statistical Inference II
PBHL 686	Advanced Statistical Computing
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
PBHL 693	Applied Bayesian Analysis
PBHL 696	Nonparametric and Semiparametric Models
PBHL 699	Biostatistical Computing with Stata

Community Health and Prevention Electives

	*800 level course	es may require professor's permission	
	PBHL 674	Studying Rare or Hidden Groups	
	PBHL 675	LGBT Health Disparities	
	PBHL 676	Intersectional Perspectives	
	PBHL 678	Drug Use in Public Health	
	PBHL 801	Theory & Practice of Community Health & Preventions I	
	PBHL 803	Theory & Practice of Community Health and Preventions II	
	PBHL 804	Research Methods for Community Health and Prevention	

PBHL 805	Qualitative Research in Community Health		
PBHL 808	Community Program Evaluation		
PBHL 810	Practicum in Community Health and Prevention		
PBHL 814	Community Based Participatory Research		
PBHL 823	Faith, Religion, Spirituality, and Health		
PBHL 824	Public Health Ethics		
PBHL 827	Advanced Topics in Qualitative Analysis		
Environmental a	and Occupational Health Electives		
PBHL 642	Healthy Housing & Built Environment		
PBHL 646	Environmental Health in Vulnerable Populations		
PBHL 648	Public Health and Disaster Preparedness		
PBHL 649	Occupational and Environmental Cancers		
PBHL 663	Injury Prevention and Control		
PBHL 664	Safety in Healthcare		
Epidemiology E	lectives		
PBHL 633	Epidemiology of Cancer		
PBHL 635	Social Epidemiology and Psychiatric Epidemiology		
PBHL 636	Infectious Disease Epidemiology		
PBHL 638	Perinatal Epidemiology		
PBHL 639	Cardiovascular Disease Epidemiology & Prevention		
PBHL 691	Pathophysiology Basis of Epidemiologic Research		
PBHL 692	Public Health Obesity Prevention Research		
Health Managen	Health Management and Policy Electives		
*800 level course	s may require professor's permission		
PBHL 604	Public Health Advocacy and Activism		
PBHL 606	Vaccines and Public Health Policy		
PBHL 610	Active Issues in Public Health		
PBHL 612	Public Health Funding & Program Development		
PBHL 613	Seminar in Fire Arms and Public Health		
PBHL 614	Coordinating a Population's Care		
PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class		
PBHL 616	Public Health Surveillance: Aligning Data and Policy Use		
PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic		
PBHL 618	Historical and Contemporary Developments in Social Justice		
PBHL 802	Health and Human Rights		
PBHL 851	Health Systems Policy Analysis		
PBHL 852	Economics of Health Policy & Social Justice		
PBHL 853	Applied Health Economics: Technology Assessment and Economic Evaluation		
PBHL 854	The Politics of Food & Gender		
PBHL 856	Violence, Trauma and Adversity in Public Health		

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity,

diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (Temple University School of Medicine) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (Utrecht University) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic

conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, gene-environmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (*University of Pennsylvania*) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (*Harvard University*) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (The University of Michigan School of Public Health) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of

race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Courses

PBHL 501S INTRODUCTION TO PUBLIC HEALTH 1.0-2.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 503 Public Health Independent Study 1.0-3.0 Credit

An independent study course designed to cover special topics relevant to public health and one or more of the core disciplines of biostatistics, epidemiology, environmental and occupational health, health behavior and promotion and health management. Students will work independently with the guidance of appropriate public health faculty.

College/Department: School of Public Health **Repeat Status:** Can be repeated 6 times for 9 credits

Restrictions: Can enroll if major is PH.

PBHL 503S INDEPENDENT STUDY 1.0-14.0 Credit

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 505 Community Health & Prevention 3.0 Credits

This course integrates knowledge about individual health behavior and decision-making with the rich ecological context found in communities. Coverage of basic knowledge and behavior science theories, models and research methods will be provided as well as modern human rights framework to analyze and create public health interventions and policies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 507 Health Policy and Management 3.0 Credits

Health management and policy is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This area of study has both an organizational management and a public policy focus and it especially addresses issues involving the accessibility, organization, costs, financing and outcomes of health services.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 509 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of environmental and occupational health as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to environmental and occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 510ES Block I-Introduction to Public Health 2.0 Credits

This course presents an overview of the principles of public health and the concepts and foci of each of its core disciplines. It is a required course for the Executive MPH students.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 516 Introduction to Public Health 2.0 Credits

This course introduces and investigates the history, issues, function and context of public health, community health and health systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 520 Principles of Biostatistics 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with

more advanced methods included as appropriate.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit

PBHL 520ES BIOSTATISTICS 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 530 Principles of Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment/evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics.

PBHL 530ES Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment and evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics taught in Block II.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 540 Prevention Principles and Practices 4.0 Credits

Focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. The goal of this course is to provide basic knowledge of social and behavioral science theories, models, and research methods.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 540ES Behavioral Assessment 4.0 Credits

Introduces principles of health behavior in context of the human life-cycle and covers their application to prevention and health promotion programs in a community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 550 Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building, community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540 [Min Grade: C]

PBHL 550ES Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540ES [Min Grade: C]

PBHL 560 Issues in Global Health 3.0 Credits

This course provides an overview of critical global health issues and the disproportionate effect on vulnerable populations, and will show how to apply the principles of human rights and environmental justice to those global health concerns.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 560ES MPH Comm Based MP Part A 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

PBHL 570ES Block XI- Integrated Public Health Case Analysis 4.0 Credits

This is the capstone course of the Executive MPH. Students will work in small groups to conduct a case analysis and a case development focusing on current public health issues which are multidisciplinary. All core disciplines will be examined as influences for the problem and possible solutions.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 599 Special Topics 0.5-9.0 Credits

See department for course description. **College/Department:** School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 600 Management, Leadership, Assurance and Health Services 3.0 Credits

This course explores critical elements of assurance in public health organizations by understanding overarching public health principles in leadership and through an integrated management model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 600ES Health Management and Leadership 4.0 Credits

Explores critical elements of the assurance role of public health, beginning from the premise that effectiveness of program delivery and of the assurance role itself requires an understanding of organizations, leadership, and change, in economic, strategic and systematic context. Applies management concepts and theories through an integrated model of the management process. In the latter portion of the block, extends, applies, and integrates previously developed concepts and theories with those of strategy, planning, accounting, financial management, and information systems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 601 Management Health Care Systems 3.0 Credits

This course addresses the management of healthcare outcomes from several perspectives: patient, patient care and health systems. It explores how absolute clincial outcomes are impacted by intermediate outcomes in healthcare delivery and how these are evaluated from an economic outcomes perspective. It also addresses disparities observed in achieving health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 602 Public Health Practice 3.0 Credits

This course addresses current and transforming issues in public health policy and management, examines the history of each issue and analyzes forces that have led to new policy or management approaches. A key goal of the course is to build critical thinking, effective management approaches and creativity skills.

PBHL 603 Advanced Healthcare Financial Management 3.0 Credits

The Business of Healthcare: Advanced Healthcare Financial Management is a course designed for non-financial health care managers. Using the case study approach, it offers and introduction to the most-used tools and techniques of health care financial management. There is a particular focus on fundamental.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 604 Public Health Advocacy and Activism 3.0 Credits

The elective course will provide distinct, specialized training in the leadership skills, tools and techniques needed to develop effective advocacy skills. Additionally, students will learn to integrate research-based data in order to strengthen advocacy initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 650 [Min Grade: C]

PBHL 604S INTRO TO HLTH FINANCE 0.0 Credits

This course is part of a block of courses. Credit hours are tracked for

PBHL 600 only.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 605 Change Management in Public Health 3.0 Credits

Strategy, Innovation and Change Management is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course prepares students for management responsibilities in delivering new health services. The course focuses on developing strategies to adopt innovative services and management technique.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 606 Vaccines and Public Health Policy 3.0 Credits

This course examines the history and development of S Vaccine policy and the implementation of policy in the public health setting. The course will examine the history and ethics of this broad public health intervention and examine policy challenges.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 607 Evolution of United States Health Policy 3.0 Credits

This is a reading intensive seminar in the evolution of the US health system and history of 20th century US health policy: how it adapted to internal and external forces with an emphasis on the cyclic interest - and disinterest - in universal health care coverage.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 608 Fundamentals of Disaster Management 3.0 Credits

Fundamentals of Disaster Management is an elective course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course provides an understanding of the broad range of disaster management issues, and study strategies used to help a community prepare.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 609 Issues in United States Health Policy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation in the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 610 Active Issues in Public Health 3.0 Credits

Through critical review and discussion of current articles from the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report, this course provides real-world illustration of principles learned in first-year MPH courses. Students will review articles on outbreak investigations, emergent situations, public health surveillance, and program updates for a mix of acute and chronic, infectious and non-infectious, and domestic and global health problems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 611 Race, Ethnicity and Health 3.0 Credits

Race, Ethnicity and Health is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course explores racial and ethnic disparities in health status and access to healthcare, and examines intervention approaches to eliminate them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 612 Public Health Funding & Program Development 3.0 Credits

This course introduces students to the principles and procedures for writing grant proposals to fund non-profit organizations. Students identify a need, gap, or problem that is addressed by a non-profit organization and work from the vantage point of that organization. The course is organized around the effort to identify a need, develop and intervention, and write a grant proposal for the organization.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 612ES MPH BLK VII-PRGM PLAN & EVAL 4.0 Credits

Beginning from the premise that the health-assurance role of public health begins with program planning, development, and evidence-based practice, this block examines concepts and theories underlying program planning, development, and evaluation. Emphasizes program application in context of specific problems and community context.

PBHL 613 Seminar in Fire Arms and Public Health 3.0 Credits

The seminar will focus on firearms and their impact on the public's health. Using recent events of mass firearm violence and urban violence, the seminar will seek to put into perspective the evolving policy discussion about the role of firearms in affecting the health of a range of populations through homicide, intentional injury, domestic violence, suicide, as well as general issues of population safety.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 614 Coordinating a Population's Care 3.0 Credits

This course examines the evolving concepts and population health in the current area of healthcare reform. Recent debate over healthcare expenditures has highlighted that chronic and preventable conditions account for the majority of healthcare costs. Our traditional healthcare system, however, is not positioned well to combat rising healthcare costs. Care coordination and population health are receiving attention as key strategies and concepts that are critical for the transition from a reactive dysfunctional system that provides expensive, fragmented sick care to a more organized, focus systems that can deliver proactive, coordinated, preventive and wellness care as well as acute and chronic care management.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 615 Perspectives on Gender, Race, Ethnicity, and Social Class 3.0 Credits

This course will explore the history of concepts of gender, race, ethnicity and social class and probe the biology, sociology and constructed meanings of these deeply situated ideas.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 616 Public Health Surveillance: Aligning Data and Policy Use 3.0 Credits

Public health surveillance - the monitoring of population health - is integral to public health practice. Surveillance not only informs public health programs and policies but also shapes broader public understanding of the importance of different health problems. This course provides an overview of the methods and uses of surveillance in public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 617 Health Disparities: Systemic, Structural, Environmental & Economic 3.0 Credits

This course explores racial and ethnic disparities in health status and access to health and examines interventions to eliminate them. Students learn to define and describe racial, ethnic and gender-related disparities, discuss underlying mechanisms, think critically about existing research on health disparities and develop proposals for reducing them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 618 Historical and Contemporary Developments in Social Justice 3.0 Credits

Courses will cover direct and indirect links between public health policies, political circumstances, social and economic conditions and effects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 619 Decision Analysis in Public Health and Medicine 3.0 Credits

A survey course of decision analysis and its relevance and use in public health and public policy decisions. Focus will be directed towards population health data, decision-making in conditions of uncertainty, and health policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 620 Intermediate Biostatistics I 3.0 Credits

This course focuses on an overview of the linear modeling methods most ocmmonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data. Focus is on implemeting models and interpreting results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 621 Intermediate Biostatistics II 3.0 Credits

The course reinforces and builds upon the concepts in PHBL 620. It adds theoretical background on various linear model assumptions and multivariable model-building strategies. Approaches to model diagnostics (e.g., goodness of fit, residual analysis) are also covered.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 622 Statistical Inference I 3.0 Credits

This course introduces probability and biostatistics theory. Topics include the basic concepts of probability including Bayes theorem; probability distributions of both discrete and continuous types of variables along with their properties; and the underlying theoretical foundation of the statistical inference including parameter estimation, hypothesis testing, hierarchical models and Bayesian inference.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 623 Introduction to Statistical Computing 3.0 Credits

Provides the students with sufficient data management and computing skills enabling them to manage small to intermediate size public health projects. Students will learn basic data management and analytic programming in the SAS statistical software.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit
Prerequisites: PBHL 520 [Min Grade: B]

PBHL 624 Regression Methods 3.0 Credits

Regression Methods is a required course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. It covers topics in linear regression, logistic regression and time until event analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 625 Longitudinal Data Analysis 3.0 Credits

Course covers modern statistical techniques for longitudinal data from an applied perspective. Suitable for doctoral and master students in biostatistics and doctoral students in epidemiology, clinical trials and social science analyzing longitudinal data.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: A] and PBHL 621 [Min Grade: A]

PBHL 626 Multivariate Linear Models 3.0 Credits

Multivariate Linear Models is an elective course for the Master of Public Health (MPH) program of study, especially for students concentrating in Epidemiology or Biostatistics, but open to students in other concentrations as well. It covers topics in analysis of variance and covariance, repeated measures analysis, factor analysis and path analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 627 Categorical Data Analysis Methods 3.0 Credits

Categorical Data Analysis Methods is an elective course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. This course discusses some of the specialized methods to model data from specific studies with categorical data as an outcome.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 624 [Min Grade: B]

PBHL 628 Survival Data Analysis 3.0 Credits

This course covers the basic techniques of survival analysis. These approaches are useful in analyzing cohort data, which are common in health studies, when the main interest outcome is the onset of even and time to event is known.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 629 Design & Analysis of Clinical Trials 3.0 Credits

The purpose of this course is to cover the design and conduct of clinical trials. The course will also cover how to evaluate the scientific rigor of studies of clinical trials published in the scientific literature. Topics which will include power and sample size, study design, randomization methods, recruitment, missing data, ethical issues and statistical analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 630 Intermediate Epidemiology 3.0 Credits

This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include: basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling. An emphasis is also placed on critically reading epidemiologic literature.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 630ES MPH BLOCK VIIIB-COMM BASED MP 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 631 Applied Multivariate Analysis 3.0 Credits

This course introduces students to statistical methods for describing and analyzing multivariate data. Topics to be covered include basic matrix algebra, multivariate normal distribution; linear models with multivariate response, multivariate analysis of variance; profile analysis, dimension reduction techniques, including principle component analysis, factor analysis, canonical correlation, multidimensional scaling; discriminate/ cluster analysis; and classification/regression trees.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 632 Applied Survey Research in Epidemiology 3.0 Credits

Applied Survey Research in Epidemiology is a required course for the Master of Public Health (MPH) program of study, concentration in Epidemiology and Biostatistics. This course addresses theoretical and practical aspects to the conduct of survey research in human populations. Practical requirements for research proposal development is covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 633 Epidemiology of Cancer 3.0 Credits

This course will provide students with training in the methods and topics specific to the epidemiology of cancer. Students will learn about cancer surveillance, etiologic studies, therapy trials, and prevention/screening studies of cancer.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 634 Epidemiology for Public Health Practice 3.0 Credits

This course is designed to enable the student to understand epidemiology as a health discipline and how epidemiology provides information for infectious/non-infectious disease prevention and control. Topics cover public health surveillance, outcomes research, health services research, principles of cancer registration, and a variety of practice-related exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 632 [Min Grade: B]

PBHL 635 Social Epidemiology and Psychiatric Epidemiology 3.0 Credits

This course focuses on the content and methods of social epidemiology and the clinical, methodologic, and epidemiologic aspects of psychiatric illness. In focusing on social and psychiatric/psychological issues, students are required to explore theoretical and empirical aspects of disease etiology and disease course that extends beyond a biomedical model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

and PBHL 632 [Min Grade: C]

PBHL 635ES MPH Comm Based MP Part C 2.0 Credits

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 636 Infectious Disease Epidemiology 3.0 Credits

Course will provide training in the methods specific to infectious disease epidemiology within the context of the study of several major classes of infectious diseases with global impact on public health. Students will learn about population-level data sources and surveillance methods and techniques in outbreak investigations.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PH. Prerequisites: PBHL 530 [Min Grade: C]

PBHL 636S MPH BLOCK VIII - CONCENTRATION 3.0 Credits

College/Department: School of Public Health

PBHL 637 Chronic Disease Epidemiology 3.0 Credits

Chronic Disease Epidemiology/Social Epidemiology is an elective course for the Master of Public Health (MPH) program of study, concentration in Epidemiology. This course addresses the general disciplines of chronic disease epidemiology and social epidemiology.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 637S PUBLIC HEALTH CONCENTRATION 0.0 Credits

College/Department: School of Public Health

PBHL 638 Perinatal Epidemiology 3.0 Credits

Introduces topical issues and methodological approaches to studying maternal and child health outcomes during the perinatal period. Focus is on study designs and data sources most relevant to perinatal epidemiology and examples of epidemiology research on common perinatal health issues. Current research in perinatal epidemiology and directions for research are also presented.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 639 Cardiovascular Disease Epidemiology & Prevention 3.0 Credits

This course provides a forum for in-depth discussions of one of the main public health issues. Topics include the pathophysiology of atherosclerosis and cardiovascular disease (CVD), trends in coronary heart disease, stroke, hypertension and heart failure mortality/morbidity, well-established and emerging CVD risk factors, and major strategies for CVD prevention/control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 640 Environmental Health 4.0 Credits

Introduces concepts, theories, and programmatic application within the field of environmental health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 640ES Environmental & Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the

fields of environmental and occupational health. **College/Department:** School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 641 Environmental Hazard Assessment 3.0 Credits

This course provides students with a general understanding of the recognition and evaluation of chemical, physical and biological hazards. Particular emphasis is placed on airborne hazard evaluation theory and methods. Students become familiar with commonly used industrial hygiene equipment through participation in laboratory and field exercise.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 642 Healthy Housing & Built Environment 3.0 Credits

Course provides students with understanding of connection between health and housing specifically the impact factors of both built environment and indoor environment has on the health status of residents, especially those at risk for allergic and respiratory diseases.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 643 Environmental and Occupational Toxicology 3.0 Credits

This course will provide students with a basic understanding of the recognition and evaluation of chemical, physical and biological hazards in the environment and workplace. The course addresses fundamentals of toxicology, legal implications of exposure and prevention strategies. Topics will include: general toxicology principles, metals, chemical and dust exposures and physical agents.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: B]

PBHL 644 Environmental Health for Public Health Practitioners 3.0 Credits

This course will provide students with an understanding of the fundamental knowledge and basic practices necessary for environmental health professionals who practice at the municipal and state levels.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 646 Environmental Health in Vulnerable Populations 3.0 Credits

Policy instruments and tools in place to protect the health of vulnerable populations will be critically examined as well as issues related to equity and justice. A number of case studies will be examined to exemplify why certain populations are vulnerable to various environmental hazards.

PBHL 647 Occupational and Environmental Epidemiology 3.0 Credits

Occupational and Environmental Epidemiology for Public Health is a required course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. Students are familiarized with commonly used industrial hygiene equipment through participation in laboratory and field exercises.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 530 [Min Grade: B] and PBHL 640 [Min Grade: B]

and PBHL 660 [Min Grade: B]

PBHL 648 Public Health and Disaster Preparedness 3.0 Credits

Public Health Readiness and Disaster Preparedness is an elective course. This course provides students with an understanding of the recognition and evaluation of chemical, physical and biological hazards related to terror attacks, and other man-made/natural disasters.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 649 Occupational and Environmental Cancers 3.0 Credits

Occupational and Environmental Cancers is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics in courses of cancer, the prevention of cancer, and public policy regarding cancer.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 650 Public Policy and Advocacy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation is the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 650ES Health Policy & Advocacy 4.0 Credits

Introduces the fundamentals of public-health law and the concepts and theories of health-policy development, adoption, and evaluation. Also introduces the advocacy process and its importance to development of sound public health policy. Students complete the M.P.H. program by exploring major public health topics in some depth. Emphasizes systemic integration and the integration of the assessment, assurance, and policy development roles of public health in problem, population, and political context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 651 Legal Aspects of Public Health 3.0 Credits

This course covers legal and policy issues in the implementation of public health programs. It emphasizes underlying themes that frame these efforts

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is LAW or major is PH or major is PHFT.

Prerequisites: PBHL 650 [Min Grade: C]

PBHL 660 Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the field of occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 661 Occupational and Environmental Diseases 3.0 Credits

Occupational and Environmental Diseases is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics related to lung diseases caused by occupational and or environmental exposures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 662 Environmental and Occupational Policy 3.0 Credits

This course provides an overview of the origines and development of environmental and occupational health policies in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 663 Injury Prevention and Control 3.0 Credits

A survey course examining the history, burden and cost of injury at the population level and its impact on health care systems. Lectures and readings will focus on critical analysis of incidence, risk, policy and prevention.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 664 Safety in Healthcare 3.0 Credits

This course examines the history of healthcare safety as an emerging public health problem in the US. Topics such as patient safety, nurse injury and other outcomes will be studied. Effects of safety climate, organizaitonal culture, and clinical knowledge on partients, healthcare workers and the healthcare system are discussed.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 665 Environmental Risk Analysis 3.0 Credits

This course will provide an overview of the fundamentals of risk for environmental health. Students will develop a critical understanding of the key components of risk assessment (hazard identification, dose modeling, exposure assessment, and risk characterization) through a series of environmental health problem case studies. Quantitative methods for conducting risk assessment will be taught, including use of software tools. We will discuss how risk assessment can inform risk management approaches (such as regulatory options) and risk communication, and vice versa. The course will emphasize the potentials, limitations, and uncertainties of the risk analysis framework for protecting human health from environmental hazards.

PBHL 670 Multicultural Competence in Community Health and Prevention 3.0 Credits

The goal of this course is to equip students already versed in the fundamentals of public health principles with additional practice skills and knowledge in cultural competency. Implicit in the terms cultural competence is a set of congruent behaviors, attitudes, beliefs and values enabling people to work effectively across cultures.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 671 Theory and Practice of Community Health and Prevention 3.0 Credits

This course introduces public health students to the theoretical foundation of community and population-based health promotion. The course emphasizes theories and models for individual and planned social and community change designed to improve health; and the application and impact of theoretical constructs in designing intervention strategies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 672 Theory and Practice in Health Communication 3.0 Credits

The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners in the steps required in developing, implementing and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 673 Outcomes Assessment of Community Health and Prevention 3.0 Credits

This course is designed to review the principles of identifying shortterm, mid-term and long-term outcomes and how these are linked to program goals, objectives, mission and vision. Topics include selecting outcomes in conjunction with the community, and strategies for design, data collection, analysis and interpretation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 674 Studying Rare or Hidden Groups 3.0 Credits

Target audience for this course is those intending to conduct research or evaluate programs designed for rare, stigmatized and/or hidden populations and for consumers of such programs. The course seeks to help students understand the ethics of research/evaluation in such programs, analyze health outcome measures and appropriately store data collected.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 675 LGBT Health Disparities 3.0 Credits

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College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 676 Intersectional Perspectives 3.0 Credits

This health focuses on health among gay, lesbian, bisexual and transgender (LGBT) populations from the perspective and theoretical framework of intersectionality. This course explores how the intersections of various identities such as race, ethnicity, socio-economic status result in different health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 678 Drug Use in Public Health 3.0 Credits

In the past several decades drug use has emergered as a major public health issue. The course will focus on biological, psychological, social, and cultural aspects of key licit and illicit substances. Additionally, students will learn relevant public health aspects of drug use, including prevention, intervention, and policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 680 Community Based Master's Project I 4.0 Credits

This course is the first of 3 CBMP courses and will encompass the first stages of the year long process of producing a final master?s project. Activities will include selection of CBMP site, CBMP workshops, student logs, IRB and HIPAA training. A learning agreement, community site profile and project proposal will be expected as end-products of student?s first 10 weeks at site and aforementioned activities.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 681 Community Based Master's Project II 4.0 Credits

This course is the second of 3 CBMP courses and will encompass the intermediate stages of the CBMP process. Activities will include CBMP workshops, IRB submission (if applicable) and regular attendance at community site. Student?s progress at site and on final project will be assessed through Community Site Preceptor Mid-Year Report and assessment by Faculty Advisor.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 682 Community Based Master's Project III 4.0 Credits

This is the third of 3 CBMP courses and represents the final stage of the CBMP process. Draft of final project will be previewed through short presentation to SPH community. Final oral defense, presentation of CBMP Poster and submission of final project paper for binding are the major activities of this course.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 683 Advanced Clinical Trials & Experiment Design 3.0 Credits

Course prepares students to design & conduct clinical trials and other health related experiments. It will cover the development of a study protocol for a clinical trial, selection of the study population, sample size, and treatment assignment methods. Advanced experimental designs will also be covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 621 [Min Grade: C]

PBHL 684 Statistical Inference II 3.0 Credits

This course is a continuation of Statistical Inference I: focusing on concepts and methods of statistical inference. Topics include point/interval estimation, methods of moments, maximum likelihood estimation, Bayes estimates, hypothesis testing, Meyman-Pearson lemma, likelihood ration tests and large sample approximation, Bayesian analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: C]

PBHL 685 Data Analysis Project 6.0 Credits

Provides the student with experience completeing a substantive data analysis in either an academic or applied setting. The project will be performed over a full term under the supervision of the advisor. Projects based in seetings outside the Department are jointly-supervised by the advisor and a doctorally-prepared host organization researcher.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is BIOS and program is MS.

PBHL 686 Advanced Statistical Computing 3.0 Credits

This course expands on computational methods used in biostatistics. It covers numerical techniques, programming, and simulations and will connect these to fundamental concepts in probability and statistics. The course will use the statistical software, R, to apply these concepts and enable the practical application of biostatistical models to real-world problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 687 Readings in Biostatistics 1.0 Credit

Guided readings course designed to introduce MS Biostatistics students (and other interested students) to classic papers in Biostatistics. Provides students with exposure to classic biostatistics papers and practice critically reading statistics literature. Also exposes students to some issues relevant to the practice of biostatistics that are not covered in coursework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 688 Statistical Inference I Lab 1.0 Credit

This course is a continuation of Statistical Inference I: In the sense that statistical concepts and methods will be developed in a mathematical framework and also additional topics will developed in a mathematical framework and also additional topics will be discussed as time permits. Topics tentatively selected include distributions, conditional distributions and expectation, probability inequalities/identities, limit theorems, and Bayesian methods.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

Corequisite: PBHL 622

PBHL 689 Master of Science Epidemiology Project 1.0-12.0 Credit

This course is designed to provide guidance of the MS Epidemiology project. Working with a faculty advisor, students will design and conduct an epidemiologic study that poses and tests a research question using a sufficiently robust data set. Components of the project will include data collection as necessary, data management and analysis and the preparation of a manuscript for publication or a research report that is consistent with accepted thesis and publication standards in epidemiology.

College/Department: School of Public Health

Repeat Status: Can be repeated 3 times for 48 credits

PBHL 690 Applied time Series Analysis 3.0 Credits

Introduces students to a variety of statistical methods for modeling and analysis of time series data, with emphasis on application. Topics include Theory of stationary random processes; Non-stationary time series models; Model identification, parameter estimation, diagnostics checking and model selection; spectral analysis; and Introduction to contemporary modeling topics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Credits

This course will examine the causes of many human diseases at a molecular level, paying particular attention to the role of inflammation in disease processes and examining the role of cell cycle dysregulation in the etiology of many human cancers. In order to understand the pathologic basis for disease, the course will also cover the normal structure and function of many body systems, that when compromised lead to diseases of public health importance.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: B]

PBHL 692 Public Health Obesity Prevention Research 3.0 Credits

This class will provide students with a foundation in obesity assessment, interpretation of obesity research and study designs used to examine population level obesity interventions. The substantive focus of this class is on environmental contexts (physical environment, economic and social environments) that influence obesity risk. The methodological focus of this class is on designing and evaluating population-level / macro level policies that may affect diet, physical activity, and obesity.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 693 Applied Bayesian Analysis 3.0 Credits

The course provides a practical introduction to Bayesian statistical inference, which is now at the core of many advanced methods. The course will compare traditional frequentist estimation, which relies on maximization methods, to Bayesian estimation of the posterior distribution. Students will learn numerical integration methods, such as Markov Chain Monte Carlo, to obtain these various distributions and ultimately make inference in a Bayesian framework. The course will also use the freely available statistical software, R (http://cran.r-project.org/).

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 625 [Min Grade: B] and PBHL 684 [Min Grade: B]

and PBHL 686 [Min Grade: B]

PBHL 694 Biostatistical Literature Review 1.0 Credit

This course is designed to train students on how to conduct a systematic literature review. The final literature review produced will then be included in the student's data analysis project written report. The course will draw on the skills and experience of biostatistics faculty in the Department of Epidemiology & Biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 695 Statistical Consulting 2.0 Credits

The objective of this course is to introduce biostatistics graduate students to the fundamental aspects of statistical consulting and to provide training for being an effective statistical consultant. Topics tentatively selected include: Roles and responsibilities of biostatisticians in collaboration with scientists and other clients, oral and written communication skills, sample size and power calculations, study design, how to help researchers formulate their scientific questions in quantifiable terms, how to deal with missing data, how to write statistical analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 696 Nonparametric and Semiparametric Models 3.0 Credits

The objective of this course is to introduce students to the fundamental concepts and applicable techniques of non-parametric and semi-parametric models, in particular, nonlinear functional relationships in regression analyses. Topics tentatively selected include: Density estimation, smoothing, non-parametric regression, additive models, semi-parametric mixed models, and generalized additive models.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 686 [Min Grade: B-]

PBHL 697 Generalized Linear Model 3.0 Credits

The objective of this course is to introduce students to generalized linear regression models (theoretical properties, model interpretation and application). Topics include: 1) Review of categorical data and related sampling distributions; 2) Two/Three-way contingency tables; 3) logistic regression and poission regression;4) loglinear models for contingency tables; 5) generalized linear mixed models for categorical responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 698 [Min Grade: B]

PBHL 698 Linear Statistical Models 3.0 Credits

The objective of this course is to introduce students to linear regression models (computation, theoretical properties, model interpretation and application). Topics include: 1) Review of basic concepts of matrix algebra that are particularly useful in linear regression, and basic R programing features; 2) (weighted) least square estimation, inference and testing; 3) regression diagnostics, outlier influence; 4) variable selection and robust regression.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 699 Biostatistical Computing with Stata 3.0 Credits

Public health research often involves the management, manipulation and analysis of complicated sets of data with standard statistical software packages. This course is designed to introduce the student to practical issues in the management and analysis of public health and biomedical data using the Stata programming language. This course is designed to give students a basic introduction to the Stata computing programming and is intended for students with limited or no previous experiences with Stata. The focuses on simple data analysis such as creating data sets, combining and modifying data, preparing data for analyses, working with Stata commands and do-files, and approaches data structure. The course will also present the conventions used for statistical analysis commends in Stata, and will illustrate these through review of limited set example commands. After taking this course, students will be comfortable using Stata to manage and manipulate data in classes and basic research

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 699ES Special Topics in PH 1.0 Credit

Public health is a multi-disciplinary field, drawing from the disciplines of Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy Management and Social and Behavioral Sciences. Through the use of archived online presentations, this self-directed course allows students to draw from a library of lectures which focus on the five core disciplines of public health. After viewing online lectures, students will then analyze and synthesize newly learned concepts with their own understanding of public health and public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 701 Introduction to Descriptive Epidemiology and Biostatistics 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

PBHL 701S Intro Descript Epidem/Biostats 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 702 Introduction to Analytic Epidemiology and Biostatistics 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 701 [Min Grade: B]

PBHL 702S Intro Analytic Epidem/Biostats 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701S [Min Grade: B] or PBHL 701S [Min Grade: S]

PBHL 703 Design and Analysis Epidemiological Studies 3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701 [Min Grade: B] and PBHL 702 [Min Grade: B]

PBHL 703S Design/Analysis Epidem Studies 2.0-3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: (PBHL 701S [Min Grade: B] and PBHL 702S [Min Grade: B]) or (PBHL 701S [Min Grade: S] and PBHL 702S [Min Grade: S])

PBHL 704 Proseminar in Global Health Ethics 1.0 Credit

The Proseminar in Global Health Ethics has been designed to afford maximum learning opportunities to: understand ethical concerns in global health; analyze social and cultural factors for better understanding of global health issues; tackle global health questions in relation to "hard to reach groups"; develop cross-cutting skills and competencies in global health. With this in mind, using global health case studies, the proseminar will also integrate student-directed problem based learning (PBL) in the review of health ethics. This focuses on providing structured learning activities to develop learner autonomy in a constructive and collaborative educational process.

College/Department: School of Public Health **Repeat Status:** Can be repeated 3 times for 3 credits

PBHL 705 Public Health in Developing Countries 3.0 Credits

This course is designed to provide students with an overview of public health issues specific to low and middle income countries and introduce students to the core concepts of public health. The course is divided into four parts: principles and goals of international health and health services in developing countries; cross-cutting global health issues; the burden of disease in developing countries; and cooperating to improve health and human rights in developing countries.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 706 Globalization, Development and Comparative Health Systems 3.0 Credits

This course presents a survey of comprehensive examinations of the structure of health systems in selected countries worldwide and provides an understanding of ways that health systems work in other countries (and thereby to better analyze policy issues affecting health and examine both global health issues and health systems from a comparative perspective). This course also explores country-level debates on issues such as access to care and funding and will note how a country's history has influenced the development of its health system. Specific attention is paid to the development of the national health system, financing, and delivery infrastructure, the impact of globalizations, development, and international relations is also examined.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 707 Monitoring and Evaluation in Global Health 3.0 Credits

This course is designed to provide students with a systematic approach to planning, implementing, monitoring, and evaluating global health programs. Students will learn the general principles of monitoring and evaluation (M&E) as well as criteria for selecting indicators and metrics, and various tools/models will be introduced to offer students an overview of the program planning and M&E process. Utilizing knowledge and skills from this course, students will be able to: apply scientific evidence throughout the program planning, implementation, and M&E process; design program work plans based on logic models; develop a proposal to secure donor and stakeholder support - and a plan implementing, monitoring, and evaluating a global health program or intervention; plan evidence based interventions to meet internationally established health targets; develop and M&E framework to assess organizations; utilize project management techniques throughout he program planning, implementation and M&E process; and develop context-specific implementation strategies foe scaling up best-practice interventions.

PBHL 708 Global Health Integration Module and Field Practicum Experience 6.0 Credits

This course will provide students with a distributed and evaluated global health training experience that requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and apply theory and principles in a situation that approximates some aspect of professional practice in global health and international development. Students will be mentored through the experience by faculty members, and will complete online modules as well as a 2-3 week field practicum (80-120 hours as part of a "summer institute") working closely with preceptors from partnering NGOs, international agencies, Ministries of Health and foreign institutions in the global health practice setting. Geographic focus will rotate between the Americas, Middle East, Asia Pacific, Australia, Africa, and Europe - based on site availability, participating faculty, and collaborative institutions in the US and abroad. Potential themes include health equity and social justice, MCH, HIV/AIDS, disparities and vulnerable sub-population, rural and agricultural health, food security, WASH, non-communicable disease, disasters and complex emergencies, EPI, IMCI, etc. Site and theme specific cross-cultural training and formal pre-departure orientation will be required in the integration module.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 801 Theory & Practice of Community Health & Preventions I 3.0 Credits

This course introduces the student to the principles, scientific methods, and major research issues in community health and prevention. The history, concepts and methods of prevention science are presented and major theoretical contributions to prevention are discussed. Course concludes with a discussion about using theoretical-empirical frameworks to guide intervention design.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 802 Health and Human Rights 3.0 Credits

Health and wellbeing are intricately associated with fundamental human rights. This course will cover direct links between public health policies, political circumstances, and social and economic conditions and their affects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 803 Theory & Practice of Community Health and Preventions II 3.0 Credits

Course focuses on public health interventions. Discusses individual and environmental theories of change, home, school, worksite, and community-based interventions, harm reduction, and multilevel intervention. Process and outcome of intervention research is investigated.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 804 Research Methods for Community Health and Prevention 3.0 Credits

Research Methods for Community Health and Prevention. Public health leaders must understand and use diverse research methods to make significant contributions to community health and prevention. This course integrates foundations of research methodology with use of appropriate statistical procedures to prepare students to apply rigorous scientific methods to understand and solve major public health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 805 Qualitative Research in Community Health 3.0 Credits

Qualitative Research in Community Health. Students will study and use a variety of qualitative methods suited for public health practice and research. Methods include case study analysis, individual interviews, focus groups, ethnography, and observation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 806 Community Health Research Methods 3.0 Credits

This course covers key principles and methods of community epidemiology. Topics include the epidemiologic perspective on health, epidemiologic study designs, surveillance databases, and survey design. Students will design and implement a community survey, analyze and interpret results, and discuss the contributions of epidemiology to prevention and policy formulation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 807 Analytic Methods for Community Health and Prevention 3.0 Credits

Analytical Methods for Community Health and Prevention. This will cover advanced design issues, methods for exploring data, traditional statistical techniques, and techniques for prevention research. This course integrates the foundations of research methodology with the use of computers and appropriate statistical procedures to prepare students to meet the increasing demands for conducting applied research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 808 Community Program Evaluation 3.0 Credits

Much of public health is about developing programs for individual and behavioral change. Therefore, public health practitioners must be able to understand the importance of developing, implementing, and evaluating public health programs. This course highlights the natural interweaving of three program elements.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 809 Community Health Policy Development and Analysis 3.0 Credits

Community Health Policy Development Analysis. Health policy is integral to the prevention of death, illness, disability, and the promotion of health. Course participants will learn about federal, state, and local roles in policymaking, roles of public opinion and interest groups, and methods for policy development and analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 901 [Min Grade: C]

PBHL 810 Practicum in Community Health and Prevention 3.0 Credits

Practicum in Community Health and Prevention. 480 hours of supervised experience applying concepts and methods to ongoing community health programs or policy development.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 813 Theory and Practice of Health Communication 3.0 Credits

Theory and Practice of Health Communication. The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners the steps required in developing, implementing, and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 814 Community Based Participatory Research 3.0 Credits

Community Based Participatory Research. Participatory Action Research acknowledges that every human being has the capacity to be a change agent. This is accomplished through an alternate view of the research world in which collaboration is emphasized. This course provides theory and skills necessary to plan, implement and evaluate community-based Participatory Action Research initiatives.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 815 Community Participation in Decision Making 3.0 Credits

Community Participation in Decision Making. This course examines how communities accomplish planned change. We will consider a number of models including community development, social planning, social action and public advocacy using historical and contemporary examples.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 817 Economic Evaluation Methods for Community Health and Prevention 3.0 Credits

Economic Evaluation Methods for Community Health and Prevention. Understanding and applying economic concepts and methods is critical for analyzing and solving health system problems. Topics include and overview of economic theory to healthcare, and major economic evaluation methods of cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 818 Community Nutrition and Food Politics 3.0 Credits

Community Nutrition and Food Politics. The purpose of this course is to allow students to learn about and discuss the social, economic, cultural and political influences of obesity and hunger involves understanding the multi-layered influences of food production, distribution and consumption.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 819 Understanding and Preventing Domestic Violence 3.0 Credits

Understanding and Preventing Domestic Violence. Domestic violence is endemic in the United States. This course is designed to define and describe the problem as well as critically evaluate programs designed to intervene and prevent. Major topics include systems, advocacy, policy, economic, socio-political, and psychological phenomena.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 820 Adolescent Risk Behavior in a Developmental Context 3.0 Credits

Adolescent Risk Behavior in a Developmental Context. This course uses a developmental perspective to focus on key problems and issues that affect the health of adolescents. The course highlights adolescents as protagonists in a life drama as puberty raises questions about relationships, questions about fairness, equality and justice, about connection and care and ultimately about their behaviors.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 821 Public Health Practice in and with Latino Communities 3.0 Credits

Public Health Practice in and with Latino Communities. The goal of this course is to prepare students for genuine engagement in a cultural diverse experience in Latino populations within the U.S. using an interdisciplinary approach in the context of public health practice. Attention will be given to various Latino subgroups, and ways to work within and across these.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 822 Independent Study in Community Health and Prevention 1.0-3.0 Credit

Independent Study in Community Health and Prevention. Independent study concerning concepts, methods, or specific health issues in community health and prevention. May be repeated six times for credit.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 18 credits

PBHL 823 Faith, Religion, Spirituality, and Health 3.0 Credits

This course focuses on the roles that "faith", "religion", and "spirituality" play in individual and community health. The course will focus on understanding the multiplicity of definitions of these terms (particularly spirituality and religion) and how these terms relate to health across time and cultures.

PBHL 824 Public Health Ethics 3.0 Credits

Course explores emergence, philosophical, historical, political development, relationship to human rights, and future of Public Health. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 825 Measuring Health 3.0 Credits

Course for students using health measurement scales, and constructing measures of health for evaluation, research, population monitoring, or policy purposes. Methods will be xplored for measuring health in individuals and populations. Reviews fundamental theories of measurement including classical test theory, item response theory, and qualitative and quantitative approaches.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 826 Causal Inference in Epidemiology 3.0 Credits

Provides an in-depth theoretical foundation on epistemology and models of disease causation in epidemiology. Students will be expected to answer the question how can we know that A causes B from diverse perspectives ranging from theoretical models, statistical conventions around identifying causation, and mitigating bias.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 630 [Min Grade: B]

PBHL 827 Advanced Topics in Qualitative Analysis 3.0 Credits

This course teaches students how to analyze an existing qualitative dataset. The course is structured in a seminar/workshop format. A key feature of the course involves students reviewing and critiquing each other's manuscripts. Students may be first author on their manuscript and will be expected to submit their manuscript to a peer-review journal.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 805 [Min Grade: C]

PBHL 830 Advanced Epidemiology 4.0 Credits

This course covers more advanced methodologic issues in analytic epidemiology including: in-depth discussions of cohort, case-control, and case-cohort studies, missing data and methods of single/multiple imputation, theoretical basis of and analytic methods for using intermediate endpoints/surrogate markers, repeated measures analysis, the use of DAGS, and propensity socres to mitigate confounding.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 620 [Min Grade: B]

PBHL 831 Epidemiology PhD Seminar I 1.0 Credit

This seminar provides the opportunity for entering epidemiology PhD students to review intermediate-to-advanced level concepts in Epidemiology. The weekly one-hour seminar will quickly review basic concepts of epidemiology and discuss conceptual underpinnings of core concepts in epidemiologic research in more detail.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 833 Epidemiology PhD Seminar II 3.0 Credits

This course is a doctoral level seminar designed to introduce students to epidemiologic methods and substantive courses not covered and offers practical skills for funding and conducting their own research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 834 Methodological Challenges 3.0 Credits

This course is designed to provide a theoretical foundation and the practical tools necessary for addressing challenges to causal inference in epidemiological research.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 835 Proposal Writing Seminar 3.0 Credits

Designed to provide students with an understanding of the methodologic and logistic problems involved in designed and conducting epidemiologic studies. The course also offers students opportunities to critically evaluate the adequacy and scientific merit of research protocols.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

PBHL 850 Practicum in Health Policy & Social Justice 10.0 Credits

The practicum is required, invovled supervised practical experience applying concepts and methods to new health policy development and/ or modification of exisiting policy. The student will identify a health policy and social justice problem and analyze the problem through using the appropriate complement of methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Restrictions: Can enroll if major is HPSJ and classification is PhD.

PBHL 851 Health Systems Policy Analysis 3.0 Credits

This course examines alternative approaches to structuring a nation's health system and reforming existing systems. Development of an analytic framework to explore health systems of different nations and performance evaluation of those systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 852 Economics of Social Justice 3.0 Credits

The course provides an overview of the evolution of economic thought from Aristotle to the present with special emphasis on health and public health. 18th and 19th century moral philosophers a dn more recent work by economists is read and discussed. Unethical or unjust behaviors in contemporary markets are examined.

PBHL 853 Applied Health Economics: Technology Assessment and Economic Evaluation 3.0 Credits

This course reviews issues and methods of assessing health care technologies and programs, with an emphasis on economic evaluation and applications to clinical and public policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 854 The Politics of Food & Gender 3.0 Credits

This course will examine the global food crisis & community nutrition in context of maternal & child health. Using current events & news stories, students will be introduced to the complex & diverse nature of the politics of food and agriculture, & how these dynamics manifest in the health and wellbeing of young children & their families.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 855 Health Services Research 3.0 Credits

Course provides an introduction to basic and "state of the art" methods for undertaking research and program evaluation within health services organizations and systems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 856 Violence, Trauma and Adversity in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 899S REGISTERED FOR THESIS ONLY 1.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 900S Registered for Degree Only 1.0 Credit College/Department: School of Public Health

PBHL 901 Dissertation Seminar I 5.0 Credits

This is a required doctoral course to develop the dissertation proposal. Students will select and develop a research question, establish evidence of the significance, define assumptions and limitations, complete a critical analysis of literature, select and justify research methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit **Restrictions:** Can enroll if program is DRPH.

PBHL 902 Dissertation Seminar II 5.0 Credits

This is a required doctoral course to finalize the dissertation proposal. Students will complete the Drexel University Internal Review Board (IRB) protocol for their research. Students will prepare for the oral defense of the proposal including proposal presentation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH. Prerequisites: PBHL 901 [Min Grade: C]

PBHL 990S THESIS DEFENSE 0.0 Credits College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 995 Ph.D. Dissertation Companion 1.0-9.0 Credit

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 998 Disseration Guidance 1.0-12.0 Credit

Directed guidance of dissertation research including base-building and consent, data collection and intervention, analysis and interpretation of data and implications for future research, policy and practice. Guidance will include preparation for presenting dissertation research and preparation for the final defense.

College/Department: School of Public Health **Repeat Status:** Can be repeated 8 times for 12 credits

Restrictions: Can enroll if program is DRPH.

Prerequisites: PBHL 901 [Min Grade: C] and PBHL 902 [Min Grade: C]

PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology 1.0-12.0 Credit

Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and preparation for the final defense.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

Certificate in Epidemiology and Biostatistics

Certificate Level: Graduate

Admission Requirements: Bachelor's degree

Certificate Type: Certificate

Number of Credits to Completion: 9.0 Instructional Delivery: Online

Calendar Type: Quarter

Expected Time to Completion: 1 year Financial Aid Eligibility: Not aid eligible

The Certificate in Epidemiology and Biostatistics offered by Drexel University's School of Public Health, is an interdisciplinary program designed for working professionals of diverse backgrounds, including public health administrators, physicians, nurses, clinical research professionals, health educators, and policy experts.

Never before has disease prevention and health promotion been more important. As world events develop, with the added threat of bioterrorism and other emerging public health issues, those who can apply knowledge gained through research to real-world problems are in great demand across all sectors: health care, pharmaceuticals, governmental and non-governmental agencies, business, and academia.

The certificate program is supervised by the School of Public Health's director of eLearning and the department chair. The program is administered through Drexel Online. Applications to the certificate program are managed by Drexel Online. For the most current admission information, please visit www.drexel.com (https://nextcatalog.drexel.edu/graduate/schoolofpublichealth/epidemiologyandbiostatisticscert/www.drexel.com) .

About the Curriculum

The certificate program provides research-oriented training in the theory and tools of core public health disciplines. Students build the statistical background needed to conduct research, develop hypotheses, analyze data, and interpret and communicate results.

The certificate program consists of three sequential 3.0 credit courses. Each course is taught over a 10-week period, allowing completion of the certificate within a 30-week period. The curriculum reflects core epidemiological and biostatistical concepts and practices in a similar manner to the full-time and Executive MPH programs. Contact between faculty and students creates an intense experience over this exclusively online format. The online format allows asynchronous learning while providing flexibility for adult learners constrained by physical and time limitations.

Requirements

PBHL 701	Introduction to Descriptive Epidemiology and Biostatistics	3.0
PBHL 702	Introduction to Analytic Epidemiology and Biostatistics	3.0
PBHL 703	Design and Analysis Epidemiological Studies	3.0

Additional information

For more information about the program, visit the Certificate in Epidemiology & Biostatistics (http://www.drexel.com/online-degrees/public-health-degrees/cert-epi-bio) on the Drexel Online web site.

Certificate in Global Health

Certificate Level: Graduate

Admission Requirements: Bachelor's degree

Certificate Type: Certificate

Number of Credits to Completion: 18.0

Instructional Delivery: Online Calendar Type: Quarter

Expected Time to Completion: 2 years Financial Aid Eligibility: Aid eligible

This online certificate in global health is designed to train post-baccalaureate students and public health professionals for a career in global health and development, including in international settings. The program stresses the development of analytic and technical skills required for pursing further work in the growing areas of global health and international development. The curriculum focuses on designing, implementing, and evaluating programs in under-served communities in the US and international/developing countries. Students will learn to translate theory into practical applications to current global health and developmental challenges. Course materials are designed for the adult-learner in an online, distributed format.

Admissions

Admission requirements to the program include:

- a bachelor's degree
- completion of Certificate Program Application Form
- working knowledge of and access to a PC or Mac with DVD/CD-ROM drive, high speed connection to the Internet as well as MS Office.

 the ability to download free versions of Adobe Acrobat Reader, Skype, and/or VSee video teleconferencing applications.

Required Courses

PBHL 704	Proseminar in Global Health Ethics (Offered as a series of three 1-credit seminar courses.)	3.0
PBHL 705	Public Health in Developing Countries	3.0
PBHL 706	Globalization, Development and Comparative Health Systems	3.0
PBHL 707	Monitoring and Evaluation in Global Health	3.0
PBHL 708	Global Health Integration Module and Field Practicum Experience	6.0

Total Credits 18.0

Certificate in Lesbian, Gay, Bisexual and Transgender Health (LGBT)

Certificate Level: Graduate

Admissions Requirements: Bachelor's degree

Certificate Type: Certificate

Number of Credits to Completion: 9.0 Instructional Delivery: Online

Calendar Type: Quarter

Expected Time to Completion: 1 year Financial Aid Eligibility: Not aid eligible

The Certificate in Lesbian, Gay, Bisexual and Transgender (LGBT) Health program is designed to address the complex issues confronting the health disparities and health-seeking behaviors of LGBT people. The sequence of courses examines health disparities, research, sampling and measurement methodologies involved in the study of LGBT populations, and the intersections of social identities/inequalities (such as those based on ethnicity, sexual orientation and sex/gender among others).

The program is offered entirely online, and in a flexible format to provide qualified students and health professionals with an opportunity to acquire these credentials regardless of restrictions in time and physical location. Those who successfully complete the certificate program and wish to broaden their scope of public health education could purse an MPH degree program.

Required Courses

Total Credits		9.0
PBHL 676	Intersectional Perspectives	3.0
PBHL 675	LGBT Health Disparities	3.0
PBHL 674	Studying Rare or Hidden Groups	3.0

Additional Information

For additional information about this program, contact:

Randall L. Sell, ScD
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Community Health and Prevention

Master of Public Health (MPH): 64.0 quarter credits

About the Program (MPH) Master of Public Health (MPH)

The Master of Public Health program is intended for individuals interested in careers as community educators; population health planners; policy analysts, evaluators, researchers; and managers of health service delivery organizations and systems, managed-care programs, and other population-based organizations.

The 64 quarter-credit program is interdisciplinary and requires students to complete a comprehensive, community-based master's project. The program prepares students to enter an array of fields related to public health or a range of doctoral programs. Drexel University's Master of Public Health (MPH) program provides practical skills and experience, with a unique focus on relevant community issues, challenges, and priorities.

Program Highlights

The first year of the program covers the five core disciplines offered within the context of culture and community. These include environmental and occupational health; health care systems organization, management, and policy; social and behavioral sciences for population health; epidemiology; biostatistics. Throughout the program, group case discussion sessions, case-related activities and didactic sessions are integrated into the experience.

These include:

- Skill development labs and workshops (year two)
- Public health grand rounds (for all faculty, students, and community partners) provide access to scholars and their cutting-edge research and initiatives in public health

Curriculum

The MPH full-time educational program is structured on a quarter-term basis, with a total of 64 credit hours required. This is generally taken as a two-year program; all coursework must be completed within five years of the date of matriculation for the full-time program.

The second-year curriculum is composed of four required courses, three elective courses, and the Community-Based Master's Project (CBMP), the culminating experience required of full-time Drexel MPH students. Students spend approximately 12 hours each week working on a community-oriented, health-related project, often working as an integral part of a community-based organization. This can be in the areas of government, healthcare and social services, among others.

In preparation for developing their final paper, students are required to identify an issue or problem of significance to the target community or agency, synthesize the literature, develop an approach or methodology to address the issue and either implement and test the validity of a proposed approach or set out a detailed prescription for addressing the problem. Students may also work with faculty in specific research areas.

Joint Doctor of Medicine and Master of Public Health Degree (MD/MPH)

Students wishing to complete a course of study earning the joint MD/MPH degree can complete such a program in 5 years. They must apply for the joint program and be accepted by both the Drexel University College of Medicine and the School of Public Health. Students in this program have enriched public health content in their first two years of medical school

and spend their third year of study full time in the School of Public Health. Students are able to enter clinical rotations and residency selection having obtained the MPH degree.

Additional Information

For additional information about this program, contact: Stephanie Johnson snj22@drexel.edu 267.359.6065

Doctor of Public Health (DrPH): 60.0 quarter credits

About the Program (DrPH) Doctor of Public Health (DrPH)

Drexel University's School of Public Health (http://publichealth.drexel.edu) offers a doctoral program in Community Health and Prevention, leading to the doctor of public health (DrPH) degree. The mission of the School of Public Health is to promote health and quality of life through graduate education, applied research, and community service in the prevention and control of disease, injury, and disability. The DrPH program in Community Health and Prevention builds upon the unique strengths of the School of Public Health, including the master's program in public health, a multidisciplinary faculty, and institutional resources.

The goal of the DrPH program in Community Health and Prevention is to produce doctoral-level public health graduates who exhibit a broad-based, systemic understanding of public health and are committed to effecting meaningful change in public and/or community health systems. Integrating applied research, education, service and advocacy, the program emphasizes the application of interdisciplinary, theoretical, and applied research paradigms to the understanding and prevention of public health problems.

The DrPH program in Community Health and Prevention is structured as follows: required courses, which build core competencies in community health and prevention; elective courses, which develop specific areas of expertise; the comprehensive exam, which reassures student understanding and application of core public health competencies; the practicum, which structures the application of concepts and methods to solving public health problems; and the dissertation, which showcases the student's competency in applied research. This general framework is infused with community public health practice, rigorous qualitative and quantitative applied research methods, and skilled advocacy.

Developing Core Competencies for Understanding and Solving Public Health Problems

Students in the DrPH program in Community Health and Prevention are expected to attain five core competencies for understanding and solving specific public health problems. The core competencies for the DrPH program integrate public health competencies developed by the Council on Linkages between Academia and Public Health Practice* with the unique characteristics of the faculty of the Department of Community Health and Prevention and the practice community.

The five core competencies are as follows:

- Understand the mission, goals, and strategies of community health and prevention
- Understand and assess community health status and needs

12.0

- Understand and assess individual and environmental determinants of health
- Design, implement, and evaluate public health programs and policies
- Translate findings into policy recommendations and advocate for change

*The Council on Linkages between Academia and Public Health Practice represents national public health academic and practice organizations including the American Public Health Association, the Association of Schools of Public Health, and the Centers for Disease Control and Prevention. Over the past decade, the council has developed a list of public health competencies to guide curriculum development in public health education.

For more information, visit the Drexel University School of Public Health (http://publichealth.drexel.edu) website or contact:

Patience Ajoff-Foster, M.S. Senior Academic Coordinator pna24@drexel.edu 267-359-6036

Admission Requirements (DrPH)

Admission to the doctor of public health program in Community Health and Prevention is competitive. Students who demonstrate an ability to integrate public health competencies and skills into public health practice are preferred.

Applicants to the DrPH program must meet the following requirements:

- A master's of public health degree (MPH) or a master's degree in a related field
- · Documented evidence of applied research
- Potential for a high level of performance in the DrPH program and for significant contributions to the field of public health.

To qualify for admission, the applicant must present a portfolio that includes:

- · Undergraduate and graduate transcripts;
- GRE General Test (verbal, quantitative, analytical writing);
- Evidence of applied research skills (master's thesis, master's research paper, or publication);
- Three letters of recommendation, including one from a public health practitioner; and
- A written statement of career and educational goals, professional experience, and area of interest for the dissertation.
- An in-person or telephone interview is required of all finalists.

For more information about the admissions process, please contact:

Patience Ajoff-Foster, M.S. Senior Academic Coordinator pna24@drexel.edu 267-359-6036

Forms, details about requirements, and information about application deadlines are all available on the DrPH Community Health and Prevention (http://publichealth.drexel.edu/admissions/admissions-application-requirements/#full-time%20MPH) page of Drexel's Graduate Admissions website.

Degree Requirements

Foundation Cou	irses	28.0
PBHL 516	Introduction to Public Health	
PBHL 520	Principles of Biostatistics	
PBHL 530	Principles of Epidemiology	
PBHL 540	Prevention Principles and Practices	
PBHL 550	Community Based Prevention Practices	
PBHL 600	Management, Leadership, Assurance and Health Services	
PBHL 640	Environmental Health	
PBHL 650	Public Policy and Advocacy	
Required Comm	unity-Based Master's Project Courses	12.0
PBHL 680	Community Based Master's Project I	
PBHL 681	Community Based Master's Project II	
PBHL 682	Community Based Master's Project III	
Required Course	s	12.0
PBHL 670	Multicultural Competence in Community Health and Prevention	
PBHL 671	Theory and Practice of Community Health and Prevention	
PBHL 672	Theory and Practice in Health Communication	
PBHL 673	Outcomes Assessment of Community Health and Prevention	

Students are required to successfully complete four electives (12.0 credits). These courses may be within the School of Public Health, or from other academic units within the University. Students must meet with their Academic Advisor in selecting their electives. It is the responsibility of the student to determine course restrictions and the registration process for campus electives taken at the Main Campus. The following is a sample of some of the School of Public Health electives offered by department:

Biostatistics Electives

Electives

Biostatistics E	ectives
PBHL 621	Intermediate Biostatistics II
PBHL 622	Statistical Inference I
PBHL 628	Survival Data Analysis
PBHL 629	Design & Analysis of Clinical Trials
PBHL 631	Applied Multivariate Analysis
PBHL 683	Advanced Clinical Trials & Experiment Design
PBHL 684	Statistical Inference II
PBHL 686	Advanced Statistical Computing
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
PBHL 693	Applied Bayesian Analysis
PBHL 696	Nonparametric and Semiparametric Models
PBHL 699	Biostatistical Computing with Stata
Community He	alth and Prevention Electives
PBHL 674	Studying Rare or Hidden Groups
PBHL 675	LGBT Health Disparities
PBHL 676	Intersectional Perspectives
PBHL 678	Drug Use in Public Health
PBHL 801	Theory & Practice of Community Health &

Preventions I

PBHL 803	Theory & Practice of Community Health and Preventions II
PBHL 804	Research Methods for Community Health and Prevention
PBHL 805	Qualitative Research in Community Health
PBHL 808	Community Program Evaluation
PBHL 810	Practicum in Community Health and Prevention
PBHL 814	Community Based Participatory Research
PBHL 823	Faith, Religion, Spirituality, and Health
PBHL 824	Public Health Ethics
PBHL 827	Advanced Topics in Qualitative Analysis
Environmental	and Occupational Health Electives
PBHL 642	Healthy Housing & Built Environment
PBHL 646	Environmental Health in Vulnerable Populations
PBHL 648	Public Health and Disaster Preparedness
PBHL 649	Occupational and Environmental Cancers
PBHL 663	Injury Prevention and Control
PBHL 664	Safety in Healthcare
Epidemiology E	•
PBHL 633	Epidemiology of Cancer
PBHL 635	Social Epidemiology and Psychiatric Epidemiology
PBHL 636	Infectious Disease Epidemiology
PBHL 638	Perinatal Epidemiology
PBHL 639	Cardiovascular Disease Epidemiology &
FBHL 039	Prevention
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
Health Manager	ment and Policy Electives
*800 level course	es may require professor's permission
PBHL 604	Public Health Advocacy and Activism
PBHL 606	Vaccines and Public Health Policy
PBHL 610	Active Issues in Public Health
PBHL 612	Public Health Funding & Program Development
PBHL 613	Seminar in Fire Arms and Public Health
PBHL 614	Coordinating a Population's Care
PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class
PBHL 616	Public Health Surveillance: Aligning Data and Policy Use
PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic
PBHL 618	Historical and Contemporary Developments in Social Justice
PBHL 802	Health and Human Rights
PBHL 851	Health Systems Policy Analysis
PBHL 852	Economics of Health Policy & Social Justice
PBHL 853	Applied Health Economics: Technology
	Assessment and Economic Evaluation
PBHL 854	The Politics of Food & Gender
PBHL 856	Violence, Trauma and Adversity in Public Health

Degree Requirements

Completion of the DrPH program requires the following:

- 60 quarter credit hours of coursework beyond the master's degree
 (30 credits of required coursework; 9 credits of elective courses; a
 3 credit practicum; and 12 credits for the dissertation). Coursework
 covers the theory and practice of community health and prevention,
 health and human rights, community health interventions, qualitative
 research methods, community epidemiology, statistical methods for
 prevention research, program evaluation, health policy development
 and analysis, and leadership and advocacy;
- a minimum cumulative grade point average of 3.3;
- · completion of the a practicum experience;
- passage of the doctoral comprehensive/candidacy examination; and
- completion of a dissertation that is highly relevant to community health practice and involves applied research, policy analysis, or management analysis.

All coursework is designed to develop the five core competencies (http://publichealth.drexel.edu/academics/degrees/drph-degree-in-community-health) of community health and prevention.

Electives

The 9 credits of elective coursework enable doctoral students to expand and enhance skills within specific areas of competency. New courses are developed and added regularly, based on interests of faculty and students.

School Required Courses			15.0
	PBHL 620	Intermediate Biostatistics I	
	PBHL 630	Intermediate Epidemiology	
	PBHL 802	Health and Human Rights	
	PBHL 824	Public Health Ethics	
D	epartment Requ	uired Courses	21.0
	PBHL 632	Applied Survey Research in Epidemiology	
	PBHL 801	Theory & Practice of Community Health & Preventions I	
	PBHL 803	Theory & Practice of Community Health and Preventions II	
	PBHL 804	Research Methods for Community Health and Prevention	
	PBHL 805	Qualitative Research in Community Health	
	PBHL 808	Community Program Evaluation	
	PBHL 814	Community Based Participatory Research	
	PBHL 825	Measuring Health	
Р	racticum		3.0
	PBHL 810	Practicum in Community Health and Prevention	
Dissertation Sequence (12 credits minimum)		quence (12 credits minimum)	12.0
	PBHL 901	Dissertation Seminar I	
	PBHL 902	Dissertation Seminar II	
	PBHL 998	Disseration Guidance	
Ε	lectives *		9.0
	PBHL 670	Multicultural Competence in Community Health and Prevention	
	PBHL 671	Theory and Practice of Community Health and Prevention	
	PBHL 672	Theory and Practice in Health Communication	
	PBHL 673	Outcomes Assessment of Community Health and	

Prevention

PBHL 678	Drug Use in Public Health
PBHL 822	Independent Study in Community Health and Prevention
PBHL 823	Faith, Religion, Spirituality, and Health
PBHL 827	Advanced Topics in Qualitative Analysis

Total Credits 60.0

Students are not limited to the electives offered by the DrPH program. Each student is encouraged to choose electives that maximize the fit between the student's educational objectives and opportunities throughout the University.

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity, diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (Temple University School of Medicine) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (Utrecht University) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning

and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, gene-environmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (*University of Pennsylvania*) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (The University of Michigan School of Public Health) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Courses

PBHL 501S INTRODUCTION TO PUBLIC HEALTH 1.0-2.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 503 Public Health Independent Study 1.0-3.0 Credit

An independent study course designed to cover special topics relevant to public health and one or more of the core disciplines of biostatistics, epidemiology, environmental and occupational health, health behavior and promotion and health management. Students will work independently with the guidance of appropriate public health faculty.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 9 credits

Restrictions: Can enroll if major is PH.

PBHL 503S INDEPENDENT STUDY 1.0-14.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 505 Community Health & Prevention 3.0 Credits

This course integrates knowledge about individual health behavior and decision-making with the rich ecological context found in communities. Coverage of basic knowledge and behavior science theories, models and research methods will be provided as well as modern human rights framework to analyze and create public health interventions and policies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 507 Health Policy and Management 3.0 Credits

Health management and policy is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This area of study has both an organizational management and a public policy focus and it especially addresses issues involving the accessibility, organization, costs, financing and outcomes of health services.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 509 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of environmental and occupational health as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to environmental and occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 510ES Block I-Introduction to Public Health 2.0 Credits

This course presents an overview of the principles of public health and the concepts and foci of each of its core disciplines. It is a required course for the Executive MPH students.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 516 Introduction to Public Health 2.0 Credits

This course introduces and investigates the history, issues, function and context of public health, community health and health systems.

PBHL 520 Principles of Biostatistics 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 520ES BIOSTATISTICS 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 530 Principles of Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment/evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 530ES Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment and evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics taught in Block II.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 540 Prevention Principles and Practices 4.0 Credits

Focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. The goal of this course is to provide basic knowledge of social and behavioral science theories, models, and research methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 540ES Behavioral Assessment 4.0 Credits

Introduces principles of health behavior in context of the human life-cycle and covers their application to prevention and health promotion programs in a community context.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 550 Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building, community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540 [Min Grade: C]

PBHL 550ES Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540ES [Min Grade: C]

PBHL 560 Issues in Global Health 3.0 Credits

This course provides an overview of critical global health issues and the disproportionate effect on vulnerable populations, and will show how to apply the principles of human rights and environmental justice to those global health concerns.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 560ES MPH Comm Based MP Part A 1.0 Credit

Independent Study.

College/Department: School of Public Health Repeat Status: Can be repeated 1 times for 2 credits

PBHL 570ES Block XI- Integrated Public Health Case Analysis 4.0 Credits

This is the capstone course of the Executive MPH. Students will work in small groups to conduct a case analysis and a case development focusing on current public health issues which are multidisciplinary. All core disciplines will be examined as influences for the problem and possible solutions.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 599 Special Topics 0.5-9.0 Credits

See department for course description. **College/Department:** School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 600 Management, Leadership, Assurance and Health Services 3.0 Credits

This course explores critical elements of assurance in public health organizations by understanding overarching public health principles in leadership and through an integrated management model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 600ES Health Management and Leadership 4.0 Credits

Explores critical elements of the assurance role of public health, beginning from the premise that effectiveness of program delivery and of the assurance role itself requires an understanding of organizations, leadership, and change, in economic, strategic and systematic context. Applies management concepts and theories through an integrated model of the management process. In the latter portion of the block, extends, applies, and integrates previously developed concepts and theories with those of strategy, planning, accounting, financial management, and information systems.

PBHL 601 Management Health Care Systems 3.0 Credits

This course addresses the management of healthcare outcomes from several perspectives: patient, patient care and health systems. It explores how absolute clincial outcomes are impacted by intermediate outcomes in healthcare delivery and how these are evaluated from an economic outcomes perspective. It also addresses disparities observed in achieving health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 602 Public Health Practice 3.0 Credits

This course addresses current and transforming issues in public health policy and management, examines the history of each issue and analyzes forces that have led to new policy or management approaches. A key goal of the course is to build critical thinking, effective management approaches and creativity skills.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 603 Advanced Healthcare Financial Management 3.0 Credits

The Business of Healthcare: Advanced Healthcare Financial Management is a course designed for non-financial health care managers. Using the case study approach, it offers and introduction to the most-used tools and techniques of health care financial management. There is a particular focus on fundamental.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 604 Public Health Advocacy and Activism 3.0 Credits

The elective course will provide distinct, specialized training in the leadership skills, tools and techniques needed to develop effective advocacy skills. Additionally, students will learn to integrate research-based data in order to strengthen advocacy initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 650 [Min Grade: C]

PBHL 604S INTRO TO HLTH FINANCE 0.0 Credits

This course is part of a block of courses. Credit hours are tracked for PBHL 600 only.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 605 Change Management in Public Health 3.0 Credits

Strategy, Innovation and Change Management is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course prepares students for management responsibilities in delivering new health services. The course focuses on developing strategies to adopt innovative services and management technique.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 606 Vaccines and Public Health Policy 3.0 Credits

This course examines the history and development of S Vaccine policy and the implementation of policy in the public health setting. The course will examine the history and ethics of this broad public health intervention and examine policy challenges.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 607 Evolution of United States Health Policy 3.0 Credits

This is a reading intensive seminar in the evolution of the US health system and history of 20th century US health policy: how it adapted to internal and external forces with an emphasis on the cyclic interest - and

disinterest - in universal health care coverage.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 608 Fundamentals of Disaster Management 3.0 Credits

Fundamentals of Disaster Management is an elective course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course provides an understanding of the broad range of disaster management issues, and study strategies used to help a community prepare.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 609 Issues in United States Health Policy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation in the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 610 Active Issues in Public Health 3.0 Credits

Through critical review and discussion of current articles from the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report, this course provides real-world illustration of principles learned in first-year MPH courses. Students will review articles on outbreak investigations, emergent situations, public health surveillance, and program updates for a mix of acute and chronic, infectious and non-infectious, and domestic and global health problems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 611 Race, Ethnicity and Health 3.0 Credits

Race, Ethnicity and Health is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course explores racial and ethnic disparities in health status and access to healthcare, and examines intervention approaches to eliminate them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 612 Public Health Funding & Program Development 3.0 Credits

This course introduces students to the principles and procedures for writing grant proposals to fund non-profit organizations. Students identify a need, gap, or problem that is addressed by a non-profit organization and work from the vantage point of that organization. The course is organized around the effort to identify a need, develop and intervention, and write a grant proposal for the organization.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 612ES MPH BLK VII-PRGM PLAN & EVAL 4.0 Credits

Beginning from the premise that the health-assurance role of public health begins with program planning, development, and evidence-based practice, this block examines concepts and theories underlying program planning, development, and evaluation. Emphasizes program application in context of specific problems and community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 613 Seminar in Fire Arms and Public Health 3.0 Credits

The seminar will focus on firearms and their impact on the public's health. Using recent events of mass firearm violence and urban violence, the seminar will seek to put into perspective the evolving policy discussion about the role of firearms in affecting the health of a range of populations through homicide, intentional injury, domestic violence, suicide, as well as general issues of population safety.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 614 Coordinating a Population's Care 3.0 Credits

This course examines the evolving concepts and population health in the current area of healthcare reform. Recent debate over healthcare expenditures has highlighted that chronic and preventable conditions account for the majority of healthcare costs. Our traditional healthcare system, however, is not positioned well to combat rising healthcare costs. Care coordination and population health are receiving attention as key strategies and concepts that are critical for the transition from a reactive dysfunctional system that provides expensive, fragmented sick care to a more organized, focus systems that can deliver proactive, coordinated, preventive and wellness care as well as acute and chronic care management.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 615 Perspectives on Gender, Race, Ethnicity, and Social Class 3.0 Credits

This course will explore the history of concepts of gender, race, ethnicity and social class and probe the biology, sociology and constructed meanings of these deeply situated ideas.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 616 Public Health Surveillance: Aligning Data and Policy Use 3.0 Credits

Public health surveillance - the monitoring of population health - is integral to public health practice. Surveillance not only informs public health programs and policies but also shapes broader public understanding of the importance of different health problems. This course provides an overview of the methods and uses of surveillance in public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 617 Health Disparities: Systemic, Structural, Environmental & Economic 3.0 Credits

This course explores racial and ethnic disparities in health status and access to health and examines interventions to eliminate them. Students learn to define and describe racial, ethnic and gender-related disparities, discuss underlying mechanisms, think critically about existing research on health disparities and develop proposals for reducing them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 618 Historical and Contemporary Developments in Social Justice 3.0 Credits

Courses will cover direct and indirect links between public health policies, political circumstances, social and economic conditions and effects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 619 Decision Analysis in Public Health and Medicine 3.0 Credits

A survey course of decision analysis and its relevance and use in public health and public policy decisions. Focus will be directed towards population health data, decision-making in conditions of uncertainty, and health policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 620 Intermediate Biostatistics I 3.0 Credits

This course focuses on an overview of the linear modeling methods most ocmmonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data. Focus is on implemeting models and interpreting results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 621 Intermediate Biostatistics II 3.0 Credits

The course reinforces and builds upon the concepts in PHBL 620. It adds theoretical background on various linear model assumptions and multivariable model-building strategies. Approaches to model diagnostics (e.g., goodness of fit, residual analysis) are also covered.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 622 Statistical Inference I 3.0 Credits

This course introduces probability and biostatistics theory. Topics include the basic concepts of probability including Bayes theorem; probability distributions of both discrete and continuous types of variables along with their properties; and the underlying theoretical foundation of the statistical inference including parameter estimation, hypothesis testing, hierarchical models and Bayesian inference.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 623 Introduction to Statistical Computing 3.0 Credits

Provides the students with sufficient data management and computing skills enabling them to manage small to intermediate size public health projects. Students will learn basic data management and analytic programming in the SAS statistical software.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 624 Regression Methods 3.0 Credits

Regression Methods is a required course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. It covers topics in linear regression, logistic regression and time until event analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 625 Longitudinal Data Analysis 3.0 Credits

Course covers modern statistical techniques for longitudinal data from an applied perspective. Suitable for doctoral and master students in biostatistics and doctoral students in epidemiology, clinical trials and

social science analyzing longitudinal data.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: A] and PBHL 621 [Min Grade: A]

PBHL 626 Multivariate Linear Models 3.0 Credits

Multivariate Linear Models is an elective course for the Master of Public Health (MPH) program of study, especially for students concentrating in Epidemiology or Biostatistics, but open to students in other concentrations as well. It covers topics in analysis of variance and covariance, repeated measures analysis, factor analysis and path analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 627 Categorical Data Analysis Methods 3.0 Credits

Categorical Data Analysis Methods is an elective course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. This course discusses some of the specialized methods to model data from specific studies with categorical data as an outcome.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 624 [Min Grade: B]

PBHL 628 Survival Data Analysis 3.0 Credits

This course covers the basic techniques of survival analysis. These approaches are useful in analyzing cohort data, which are common in health studies, when the main interest outcome is the onset of even and time to event is known.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 629 Design & Analysis of Clinical Trials 3.0 Credits

The purpose of this course is to cover the design and conduct of clinical trials. The course will also cover how to evaluate the scientific rigor of studies of clinical trials published in the scientific literature. Topics which will include power and sample size, study design, randomization methods, recruitment, missing data, ethical issues and statistical analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 630 Intermediate Epidemiology 3.0 Credits

This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include: basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling. An emphasis is also placed on critically reading epidemiologic literature.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 630ES MPH BLOCK VIIIB-COMM BASED MP 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 631 Applied Multivariate Analysis 3.0 Credits

This course introduces students to statistical methods for describing and analyzing multivariate data. Topics to be covered include basic matrix algebra, multivariate normal distribution; linear models with multivariate response, multivariate analysis of variance; profile analysis, dimension reduction techniques, including principle component analysis, factor analysis, canonical correlation, multidimensional scaling; discriminate/ cluster analysis; and classification/regression trees.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 632 Applied Survey Research in Epidemiology 3.0 Credits

Applied Survey Research in Epidemiology is a required course for the Master of Public Health (MPH) program of study, concentration in Epidemiology and Biostatistics. This course addresses theoretical and practical aspects to the conduct of survey research in human populations. Practical requirements for research proposal development is covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 633 Epidemiology of Cancer 3.0 Credits

This course will provide students with training in the methods and topics specific to the epidemiology of cancer. Students will learn about cancer surveillance, etiologic studies, therapy trials, and prevention/screening studies of cancer.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 634 Epidemiology for Public Health Practice 3.0 Credits

This course is designed to enable the student to understand epidemiology as a health discipline and how epidemiology provides information for infectious/non-infectious disease prevention and control. Topics cover public health surveillance, outcomes research, health services research, principles of cancer registration, and a variety of practice-related exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 632 [Min Grade: B]

PBHL 635 Social Epidemiology and Psychiatric Epidemiology 3.0 Credits

This course focuses on the content and methods of social epidemiology and the clinical, methodologic, and epidemiologic aspects of psychiatric illness. In focusing on social and psychiatric/psychological issues, students are required to explore theoretical and empirical aspects of disease etiology and disease course that extends beyond a biomedical model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

and PBHL 632 [Min Grade: C]

PBHL 635ES MPH Comm Based MP Part C 2.0 Credits

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 636 Infectious Disease Epidemiology 3.0 Credits

Course will provide training in the methods specific to infectious disease epidemiology within the context of the study of several major classes of infectious diseases with global impact on public health. Students will learn about population-level data sources and surveillance methods and techniques in outbreak investigations.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PH. Prerequisites: PBHL 530 [Min Grade: C]

PBHL 636S MPH BLOCK VIII - CONCENTRATION 3.0 Credits

College/Department: School of Public Health

PBHL 637 Chronic Disease Epidemiology 3.0 Credits

Chronic Disease Epidemiology/Social Epidemiology is an elective course for the Master of Public Health (MPH) program of study, concentration in Epidemiology. This course addresses the general disciplines of chronic disease epidemiology and social epidemiology.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 637S PUBLIC HEALTH CONCENTRATION 0.0 Credits

College/Department: School of Public Health

PBHL 638 Perinatal Epidemiology 3.0 Credits

Introduces topical issues and methodological approaches to studying maternal and child health outcomes during the perinatal period. Focus is on study designs and data sources most relevant to perinatal epidemiology and examples of epidemiology research on common perinatal health issues. Current research in perinatal epidemiology and directions for research are also presented.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 639 Cardiovascular Disease Epidemiology & Prevention 3.0 Credits

This course provides a forum for in-depth discussions of one of the main public health issues. Topics include the pathophysiology of atherosclerosis and cardiovascular disease (CVD), trends in coronary heart disease, stroke, hypertension and heart failure mortality/morbidity, well-established and emerging CVD risk factors, and major strategies for CVD prevention/control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 640 Environmental Health 4.0 Credits

Introduces concepts, theories, and programmatic application within the

field of environmental health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 640ES Environmental & Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the

fields of environmental and occupational health.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit

PBHL 641 Environmental Hazard Assessment 3.0 Credits

This course provides students with a general understanding of the recognition and evaluation of chemical, physical and biological hazards. Particular emphasis is placed on airborne hazard evaluation theory and methods. Students become familiar with commonly used industrial hygiene equipment through participation in laboratory and field exercise.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 642 Healthy Housing & Built Environment 3.0 Credits

Course provides students with understanding of connection between health and housing specifically the impact factors of both built environment and indoor environment has on the health status of residents, especially those at risk for allergic and respiratory diseases.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 643 Environmental and Occupational Toxicology 3.0 Credits

This course will provide students with a basic understanding of the recognition and evaluation of chemical, physical and biological hazards in the environment and workplace. The course addresses fundamentals of toxicology, legal implications of exposure and prevention strategies. Topics will include: general toxicology principles, metals, chemical and dust exposures and physical agents.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: B]

PBHL 644 Environmental Health for Public Health Practitioners 3.0 Credits

This course will provide students with an understanding of the fundamental knowledge and basic practices necessary for environmental health professionals who practice at the municipal and state levels.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 646 Environmental Health in Vulnerable Populations 3.0 Credits

Policy instruments and tools in place to protect the health of vulnerable populations will be critically examined as well as issues related to equity and justice. A number of case studies will be examined to exemplify why certain populations are vulnerable to various environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 647 Occupational and Environmental Epidemiology 3.0 Credits

Occupational and Environmental Epidemiology for Public Health is a required course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. Students are familiarized with commonly used industrial hygiene equipment through participation in laboratory and field exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 530 [Min Grade: B] and PBHL 640 [Min Grade: B]

and PBHL 660 [Min Grade: B]

PBHL 648 Public Health and Disaster Preparedness 3.0 Credits

Public Health Readiness and Disaster Preparedness is an elective course. This course provides students with an understanding of the recognition and evaluation of chemical, physical and biological hazards related to terror attacks, and other man-made/natural disasters.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 649 Occupational and Environmental Cancers 3.0 Credits

Occupational and Environmental Cancers is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics in courses of cancer, the prevention of cancer, and public policy regarding cancer.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 650 Public Policy and Advocacy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation is the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 650ES Health Policy & Advocacy 4.0 Credits

Introduces the fundamentals of public-health law and the concepts and theories of health-policy development, adoption, and evaluation. Also introduces the advocacy process and its importance to development of sound public health policy. Students complete the M.P.H. program by exploring major public health topics in some depth. Emphasizes systemic integration and the integration of the assessment, assurance, and policy development roles of public health in problem, population, and political context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 651 Legal Aspects of Public Health 3.0 Credits

This course covers legal and policy issues in the implementation of public health programs. It emphasizes underlying themes that frame these efforts.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is LAW or major is PH or major is PHFT.

Prerequisites: PBHL 650 [Min Grade: C]

PBHL 660 Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the field of occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 661 Occupational and Environmental Diseases 3.0 Credits

Occupational and Environmental Diseases is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics related to lung diseases caused by occupational and or environmental exposures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 662 Environmental and Occupational Policy 3.0 Credits

This course provides an overview of the origines and development of environmental and occupational health policies in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 663 Injury Prevention and Control 3.0 Credits

A survey course examining the history, burden and cost of injury at the population level and its impact on health care systems. Lectures and readings will focus on critical analysis of incidence, risk, policy and prevention.

PBHL 664 Safety in Healthcare 3.0 Credits

This course examines the history of healthcare safety as an emerging public health problem in the US. Topics such as patient safety, nurse injury and other outcomes will be studied. Effects of safety climate, organizaitonal culture, and clinical knowledge on partients, healthcare workers and the healthcare system are discussed.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 665 Environmental Risk Analysis 3.0 Credits

This course will provide an overview of the fundamentals of risk for environmental health. Students will develop a critical understanding of the key components of risk assessment (hazard identification, dose modeling, exposure assessment, and risk characterization) through a series of environmental health problem case studies. Quantitative methods for conducting risk assessment will be taught, including use of software tools. We will discuss how risk assessment can inform risk management approaches (such as regulatory options) and risk communication, and vice versa. The course will emphasize the potentials, limitations, and uncertainties of the risk analysis framework for protecting human health from environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 670 Multicultural Competence in Community Health and Prevention 3.0 Credits

The goal of this course is to equip students already versed in the fundamentals of public health principles with additional practice skills and knowledge in cultural competency. Implicit in the terms cultural competence is a set of congruent behaviors, attitudes, beliefs and values enabling people to work effectively across cultures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 671 Theory and Practice of Community Health and Prevention 3.0 Credits

This course introduces public health students to the theoretical foundation of community and population-based health promotion. The course emphasizes theories and models for individual and planned social and community change designed to improve health; and the application and impact of theoretical constructs in designing intervention strategies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 672 Theory and Practice in Health Communication 3.0 Credits

The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners in the steps required in developing, implementing and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 673 Outcomes Assessment of Community Health and Prevention 3.0 Credits

This course is designed to review the principles of identifying shortterm, mid-term and long-term outcomes and how these are linked to program goals, objectives, mission and vision. Topics include selecting outcomes in conjunction with the community, and strategies for design, data collection, analysis and interpretation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 674 Studying Rare or Hidden Groups 3.0 Credits

Target audience for this course is those intending to conduct research or evaluate programs designed for rare, stigmatized and/or hidden populations and for consumers of such programs. The course seeks to help students understand the ethics of research/evaluation in such programs, analyze health outcome measures and appropriately store data collected.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 675 LGBT Health Disparities 3.0 Credits

LGBT community ranging from HIV/AIDS to intimate partner violence.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 676 Intersectional Perspectives 3.0 Credits

This health focuses on health among gay, lesbian, bisexual and transgender (LGBT) populations from the perspective and theoretical framework of intersectionality. This course explores how the intersections of various identities such as race, ethnicity, socio-economic status result in different health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 678 Drug Use in Public Health 3.0 Credits

In the past several decades drug use has emergered as a major public health issue. The course will focus on biological, psychological, social, and cultural aspects of key licit and illicit substances. Additionally, students will learn relevant public health aspects of drug use, including prevention, intervention, and policy.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 680 Community Based Master's Project I 4.0 Credits

This course is the first of 3 CBMP courses and will encompass the first stages of the year long process of producing a final master?s project. Activities will include selection of CBMP site, CBMP workshops, student logs, IRB and HIPAA training. A learning agreement, community site profile and project proposal will be expected as end-products of student?s first 10 weeks at site and aforementioned activities.

PBHL 681 Community Based Master's Project II 4.0 Credits

This course is the second of 3 CBMP courses and will encompass the intermediate stages of the CBMP process. Activities will include CBMP workshops, IRB submission (if applicable) and regular attendance at community site. Student?s progress at site and on final project will be assessed through Community Site Preceptor Mid-Year Report and assessment by Faculty Advisor.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 682 Community Based Master's Project III 4.0 Credits

This is the third of 3 CBMP courses and represents the final stage of the CBMP process. Draft of final project will be previewed through short presentation to SPH community. Final oral defense, presentation of CBMP Poster and submission of final project paper for binding are the major activities of this course.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 683 Advanced Clinical Trials & Experiment Design 3.0 Credits

Course prepares students to design & conduct clinical trials and other health related experiments. It will cover the development of a study protocol for a clinical trial, selection of the study population, sample size, and treatment assignment methods. Advanced experimental designs will also be covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 621 [Min Grade: C]

PBHL 684 Statistical Inference II 3.0 Credits

This course is a continuation of Statistical Inference I: focusing on concepts and methods of statistical inference. Topics include point/interval estimation, methods of moments, maximum likelihood estimation, Bayes estimates, hypothesis testing, Meyman-Pearson Iemma, likelihood ration tests and large sample approximation, Bayesian analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: C]

PBHL 685 Data Analysis Project 6.0 Credits

Provides the student with experience completeing a substantive data analysis in either an academic or applied setting. The project will be performed over a full term under the supervision of the advisor. Projects based in seetings outside the Department are jointly-supervised by the advisor and a doctorally-prepared host organization researcher.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is BIOS and program is MS.

PBHL 686 Advanced Statistical Computing 3.0 Credits

This course expands on computational methods used in biostatistics. It covers numerical techniques, programming, and simulations and will connect these to fundamental concepts in probability and statistics. The course will use the statistical software, R, to apply these concepts and enable the practical application of biostatistical models to real-world problems

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 687 Readings in Biostatistics 1.0 Credit

Guided readings course designed to introduce MS Biostatistics students (and other interested students) to classic papers in Biostatistics. Provides students with exposure to classic biostatistics papers and practice critically reading statistics literature. Also exposes students to some issues relevant to the practice of biostatistics that are not covered in coursework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 688 Statistical Inference I Lab 1.0 Credit

This course is a continuation of Statistical Inference I: In the sense that statistical concepts and methods will be developed in a mathematical framework and also additional topics will developed in a mathematical framework and also additional topics will be discussed as time permits. Topics tentatively selected include distributions, conditional distributions and expectation, probability inequalities/identities, limit theorems, and Bayesian methods.

College/Department: School of Public Health Repeat Status: Can be repeated 1 times for 2 credits

Corequisite: PBHL 622

PBHL 689 Master of Science Epidemiology Project 1.0-12.0 Credit

This course is designed to provide guidance of the MS Epidemiology project. Working with a faculty advisor, students will design and conduct an epidemiologic study that poses and tests a research question using a sufficiently robust data set. Components of the project will include data collection as necessary, data management and analysis and the preparation of a manuscript for publication or a research report that is consistent with accepted thesis and publication standards in epidemiology.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 48 credits

PBHL 690 Applied time Series Analysis 3.0 Credits

Introduces students to a variety of statistical methods for modeling and analysis of time series data, with emphasis on application. Topics include Theory of stationary random processes; Non-stationary time series models; Model identification, parameter estimation, diagnostics checking and model selection; spectral analysis; and Introduction to contemporary modeling topics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Credits

This course will examine the causes of many human diseases at a molecular level, paying particular attention to the role of inflammation in disease processes and examining the role of cell cycle dysregulation in the etiology of many human cancers. In order to understand the pathologic basis for disease, the course will also cover the normal structure and function of many body systems, that when compromised lead to diseases of public health importance.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: B]

PBHL 692 Public Health Obesity Prevention Research 3.0 Credits

This class will provide students with a foundation in obesity assessment, interpretation of obesity research and study designs used to examine population level obesity interventions. The substantive focus of this class is on environmental contexts (physical environment, economic and social environments) that influence obesity risk. The methodological focus of this class is on designing and evaluating population-level / macro level policies that may affect diet, physical activity, and obesity.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 693 Applied Bayesian Analysis 3.0 Credits

The course provides a practical introduction to Bayesian statistical inference, which is now at the core of many advanced methods. The course will compare traditional frequentist estimation, which relies on maximization methods, to Bayesian estimation of the posterior distribution. Students will learn numerical integration methods, such as Markov Chain Monte Carlo, to obtain these various distributions and ultimately make inference in a Bayesian framework. The course will also use the freely available statistical software, R (http://cran.r-project.org/).

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 625 [Min Grade: B] and PBHL 684 [Min Grade: B]

and PBHL 686 [Min Grade: B]

PBHL 694 Biostatistical Literature Review 1.0 Credit

This course is designed to train students on how to conduct a systematic literature review. The final literature review produced will then be included in the student's data analysis project written report. The course will draw on the skills and experience of biostatistics faculty in the Department of Epidemiology & Biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 695 Statistical Consulting 2.0 Credits

The objective of this course is to introduce biostatistics graduate students to the fundamental aspects of statistical consulting and to provide training for being an effective statistical consultant. Topics tentatively selected include: Roles and responsibilities of biostatisticians in collaboration with scientists and other clients, oral and written communication skills, sample size and power calculations, study design, how to help researchers formulate their scientific questions in quantifiable terms, how to deal with missing data, how to write statistical analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 696 Nonparametric and Semiparametric Models 3.0 Credits

The objective of this course is to introduce students to the fundamental concepts and applicable techniques of non-parametric and semi-parametric models, in particular, nonlinear functional relationships in regression analyses. Topics tentatively selected include: Density estimation, smoothing, non-parametric regression, additive models, semi-parametric mixed models, and generalized additive models.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 686 [Min Grade: B-]

PBHL 697 Generalized Linear Model 3.0 Credits

The objective of this course is to introduce students to generalized linear regression models (theoretical properties, model interpretation and application). Topics include: 1) Review of categorical data and related sampling distributions; 2) Two/Three-way contingency tables; 3) logistic regression and poission regression;4) loglinear models for contingency tables; 5) generalized linear mixed models for categorical responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 698 [Min Grade: B]

PBHL 698 Linear Statistical Models 3.0 Credits

The objective of this course is to introduce students to linear regression models (computation, theoretical properties, model interpretation and application). Topics include: 1) Review of basic concepts of matrix algebra that are particularly useful in linear regression, and basic R programing features; 2) (weighted) least square estimation, inference and testing; 3) regression diagnostics, outlier influence; 4) variable selection and robust regression.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 699 Biostatistical Computing with Stata 3.0 Credits

Public health research often involves the management, manipulation and analysis of complicated sets of data with standard statistical software packages. This course is designed to introduce the student to practical issues in the management and analysis of public health and biomedical data using the Stata programming language. This course is designed to give students a basic introduction to the Stata computing programming and is intended for students with limited or no previous experiences with Stata. The focuses on simple data analysis such as creating data sets, combining and modifying data, preparing data for analyses, working with Stata commands and do-files, and approaches data structure. The course will also present the conventions used for statistical analysis commends in Stata, and will illustrate these through review of limited set example commands. After taking this course, students will be comfortable using Stata to manage and manipulate data in classes and basic research projects.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 699ES Special Topics in PH 1.0 Credit

Public health is a multi-disciplinary field, drawing from the disciplines of Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy Management and Social and Behavioral Sciences. Through the use of archived online presentations, this self-directed course allows students to draw from a library of lectures which focus on the five core disciplines of public health. After viewing online lectures, students will then analyze and synthesize newly learned concepts with their own understanding of public health and public health practice.

PBHL 701 Introduction to Descriptive Epidemiology and Biostatistics 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 701S Intro Descript Epidem/Biostats 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 702 Introduction to Analytic Epidemiology and Biostatistics 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 701 [Min Grade: B]

PBHL 702S Intro Analytic Epidem/Biostats 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701S [Min Grade: B] or PBHL 701S [Min Grade: S]

PBHL 703 Design and Analysis Epidemiological Studies 3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701 [Min Grade: B] and PBHL 702 [Min Grade: B]

PBHL 703S Design/Analysis Epidem Studies 2.0-3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: (PBHL 701S [Min Grade: B] and PBHL 702S [Min Grade: B]) or (PBHL 701S [Min Grade: S] and PBHL 702S [Min Grade: S])

PBHL 704 Proseminar in Global Health Ethics 1.0 Credit

The Proseminar in Global Health Ethics has been designed to afford maximum learning opportunities to: understand ethical concerns in global health; analyze social and cultural factors for better understanding of global health issues; tackle global health questions in relation to "hard to reach groups"; develop cross-cutting skills and competencies in global health. With this in mind, using global health case studies, the proseminar will also integrate student-directed problem based learning (PBL) in the review of health ethics. This focuses on providing structured learning activities to develop learner autonomy in a constructive and collaborative educational process.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 3 credits

PBHL 705 Public Health in Developing Countries 3.0 Credits

This course is designed to provide students with an overview of public health issues specific to low and middle income countries and introduce students to the core concepts of public health. The course is divided into four parts: principles and goals of international health and health services in developing countries; cross-cutting global health issues; the burden of disease in developing countries; and cooperating to improve health and human rights in developing countries.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 706 Globalization, Development and Comparative Health Systems 3.0 Credits

This course presents a survey of comprehensive examinations of the structure of health systems in selected countries worldwide and provides an understanding of ways that health systems work in other countries (and thereby to better analyze policy issues affecting health and examine both global health issues and health systems from a comparative perspective). This course also explores country-level debates on issues such as access to care and funding and will note how a country's history has influenced the development of its health system. Specific attention is paid to the development of the national health system, financing, and delivery infrastructure, the impact of globalizations, development, and international relations is also examined.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 707 Monitoring and Evaluation in Global Health 3.0 Credits

This course is designed to provide students with a systematic approach to planning, implementing, monitoring, and evaluating global health programs. Students will learn the general principles of monitoring and evaluation (M&E) as well as criteria for selecting indicators and metrics, and various tools/models will be introduced to offer students an overview of the program planning and M&E process. Utilizing knowledge and skills from this course, students will be able to: apply scientific evidence throughout the program planning, implementation, and M&E process; design program work plans based on logic models; develop a proposal to secure donor and stakeholder support - and a plan implementing, monitoring, and evaluating a global health program or intervention; plan evidence based interventions to meet internationally established health targets; develop and M&E framework to assess organizations; utilize project management techniques throughout he program planning, implementation and M&E process; and develop context-specific implementation strategies foe scaling up best-practice interventions.

PBHL 708 Global Health Integration Module and Field Practicum Experience 6.0 Credits

This course will provide students with a distributed and evaluated global health training experience that requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and apply theory and principles in a situation that approximates some aspect of professional practice in global health and international development. Students will be mentored through the experience by faculty members, and will complete online modules as well as a 2-3 week field practicum (80-120 hours as part of a "summer institute") working closely with preceptors from partnering NGOs, international agencies, Ministries of Health and foreign institutions in the global health practice setting. Geographic focus will rotate between the Americas, Middle East, Asia Pacific, Australia, Africa, and Europe - based on site availability, participating faculty, and collaborative institutions in the US and abroad. Potential themes include health equity and social justice, MCH, HIV/AIDS, disparities and vulnerable sub-population, rural and agricultural health, food security, WASH, non-communicable disease, disasters and complex emergencies, EPI, IMCI, etc. Site and theme specific cross-cultural training and formal pre-departure orientation will be required in the integration module.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 801 Theory & Practice of Community Health & Preventions I 3.0 Credits

This course introduces the student to the principles, scientific methods, and major research issues in community health and prevention. The history, concepts and methods of prevention science are presented and major theoretical contributions to prevention are discussed. Course concludes with a discussion about using theoretical-empirical frameworks to guide intervention design.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 802 Health and Human Rights 3.0 Credits

Health and wellbeing are intricately associated with fundamental human rights. This course will cover direct links between public health policies, political circumstances, and social and economic conditions and their affects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 803 Theory & Practice of Community Health and Preventions II 3.0 Credits

Course focuses on public health interventions. Discusses individual and environmental theories of change, home, school, worksite, and community-based interventions, harm reduction, and multilevel intervention. Process and outcome of intervention research is investigated.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 804 Research Methods for Community Health and Prevention 3.0 Credits

Research Methods for Community Health and Prevention. Public health leaders must understand and use diverse research methods to make significant contributions to community health and prevention. This course integrates foundations of research methodology with use of appropriate statistical procedures to prepare students to apply rigorous scientific methods to understand and solve major public health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 805 Qualitative Research in Community Health 3.0 Credits

Qualitative Research in Community Health. Students will study and use a variety of qualitative methods suited for public health practice and research. Methods include case study analysis, individual interviews, focus groups, ethnography, and observation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 806 Community Health Research Methods 3.0 Credits

This course covers key principles and methods of community epidemiology. Topics include the epidemiologic perspective on health, epidemiologic study designs, surveillance databases, and survey design. Students will design and implement a community survey, analyze and interpret results, and discuss the contributions of epidemiology to prevention and policy formulation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 807 Analytic Methods for Community Health and Prevention 3.0 Credits

Analytical Methods for Community Health and Prevention. This will cover advanced design issues, methods for exploring data, traditional statistical techniques, and techniques for prevention research. This course integrates the foundations of research methodology with the use of computers and appropriate statistical procedures to prepare students to meet the increasing demands for conducting applied research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 808 Community Program Evaluation 3.0 Credits

Much of public health is about developing programs for individual and behavioral change. Therefore, public health practitioners must be able to understand the importance of developing, implementing, and evaluating public health programs. This course highlights the natural interweaving of three program elements.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 809 Community Health Policy Development and Analysis 3.0 Credits

Community Health Policy Development Analysis. Health policy is integral to the prevention of death, illness, disability, and the promotion of health. Course participants will learn about federal, state, and local roles in policymaking, roles of public opinion and interest groups, and methods for policy development and analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 901 [Min Grade: C]

PBHL 810 Practicum in Community Health and Prevention 3.0 Credits

Practicum in Community Health and Prevention. 480 hours of supervised experience applying concepts and methods to ongoing community health programs or policy development.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 813 Theory and Practice of Health Communication 3.0 Credits

Theory and Practice of Health Communication. The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners the steps required in developing, implementing, and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 814 Community Based Participatory Research 3.0 Credits

Community Based Participatory Research. Participatory Action Research acknowledges that every human being has the capacity to be a change agent. This is accomplished through an alternate view of the research world in which collaboration is emphasized. This course provides theory and skills necessary to plan, implement and evaluate community-based Participatory Action Research initiatives.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 815 Community Participation in Decision Making 3.0 Credits

Community Participation in Decision Making. This course examines how communities accomplish planned change. We will consider a number of models including community development, social planning, social action and public advocacy using historical and contemporary examples.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 817 Economic Evaluation Methods for Community Health and Prevention 3.0 Credits

Economic Evaluation Methods for Community Health and Prevention. Understanding and applying economic concepts and methods is critical for analyzing and solving health system problems. Topics include and overview of economic theory to healthcare, and major economic evaluation methods of cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 818 Community Nutrition and Food Politics 3.0 Credits

Community Nutrition and Food Politics. The purpose of this course is to allow students to learn about and discuss the social, economic, cultural and political influences of obesity and hunger involves understanding the multi-layered influences of food production, distribution and consumption.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 819 Understanding and Preventing Domestic Violence 3.0 Credits

Understanding and Preventing Domestic Violence. Domestic violence is endemic in the United States. This course is designed to define and describe the problem as well as critically evaluate programs designed to intervene and prevent. Major topics include systems, advocacy, policy, economic, socio-political, and psychological phenomena.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 820 Adolescent Risk Behavior in a Developmental Context 3.0 Credits

Adolescent Risk Behavior in a Developmental Context. This course uses a developmental perspective to focus on key problems and issues that affect the health of adolescents. The course highlights adolescents as protagonists in a life drama as puberty raises questions about relationships, questions about fairness, equality and justice, about connection and care and ultimately about their behaviors.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 821 Public Health Practice in and with Latino Communities 3.0 Credits

Public Health Practice in and with Latino Communities. The goal of this course is to prepare students for genuine engagement in a cultural diverse experience in Latino populations within the U.S. using an interdisciplinary approach in the context of public health practice. Attention will be given to various Latino subgroups, and ways to work within and across these.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 822 Independent Study in Community Health and Prevention 1.0-3.0 Credit

Independent Study in Community Health and Prevention. Independent study concerning concepts, methods, or specific health issues in community health and prevention. May be repeated six times for credit.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 18 credits

PBHL 823 Faith, Religion, Spirituality, and Health 3.0 Credits

This course focuses on the roles that "faith", "religion", and "spirituality" play in individual and community health. The course will focus on understanding the multiplicity of definitions of these terms (particularly spirituality and religion) and how these terms relate to health across time and cultures.

PBHL 824 Public Health Ethics 3.0 Credits

Course explores emergence, philosophical, historical, political development, relationship to human rights, and future of Public Health. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 825 Measuring Health 3.0 Credits

Course for students using health measurement scales, and constructing measures of health for evaluation, research, population monitoring, or policy purposes. Methods will be xplored for measuring health in individuals and populations. Reviews fundamental theories of measurement including classical test theory, item response theory, and qualitative and quantitative approaches.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 826 Causal Inference in Epidemiology 3.0 Credits

Provides an in-depth theoretical foundation on epistemology and models of disease causation in epidemiology. Students will be expected to answer the question how can we know that A causes B from diverse perspectives ranging from theoretical models, statistical conventions around identifying causation, and mitigating bias.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 630 [Min Grade: B]

PBHL 827 Advanced Topics in Qualitative Analysis 3.0 Credits

This course teaches students how to analyze an existing qualitative dataset. The course is structured in a seminar/workshop format. A key feature of the course involves students reviewing and critiquing each other's manuscripts. Students may be first author on their manuscript and will be expected to submit their manuscript to a peer-review journal.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 805 [Min Grade: C]

PBHL 830 Advanced Epidemiology 4.0 Credits

This course covers more advanced methodologic issues in analytic epidemiology including: in-depth discussions of cohort, case-control, and case-cohort studies, missing data and methods of single/multiple imputation, theoretical basis of and analytic methods for using intermediate endpoints/surrogate markers, repeated measures analysis, the use of DAGS, and propensity socres to mitigate confounding.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 620 [Min Grade: B]

PBHL 831 Epidemiology PhD Seminar I 1.0 Credit

This seminar provides the opportunity for entering epidemiology PhD students to review intermediate-to-advanced level concepts in Epidemiology. The weekly one-hour seminar will quickly review basic concepts of epidemiology and discuss conceptual underpinnings of core concepts in epidemiologic research in more detail.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 833 Epidemiology PhD Seminar II 3.0 Credits

This course is a doctoral level seminar designed to introduce students to epidemiologic methods and substantive courses not covered and offers practical skills for funding and conducting their own research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 834 Methodological Challenges 3.0 Credits

This course is designed to provide a theoretical foundation and the practical tools necessary for addressing challenges to causal inference in epidemiological research.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 835 Proposal Writing Seminar 3.0 Credits

Designed to provide students with an understanding of the methodologic and logistic problems involved in designed and conducting epidemiologic studies. The course also offers students opportunities to critically evaluate the adequacy and scientific merit of research protocols.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

PBHL 850 Practicum in Health Policy & Social Justice 10.0 Credits

The practicum is required, invovled supervised practical experience applying concepts and methods to new health policy development and/ or modification of exisiting policy. The student will identify a health policy and social justice problem and analyze the problem through using the appropriate complement of methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Restrictions: Can enroll if major is HPSJ and classification is PhD.

PBHL 851 Health Systems Policy Analysis 3.0 Credits

This course examines alternative approaches to structuring a nation's health system and reforming existing systems. Development of an analytic framework to explore health systems of different nations and performance evaluation of those systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 852 Economics of Social Justice 3.0 Credits

The course provides an overview of the evolution of economic thought from Aristotle to the present with special emphasis on health and public health. 18th and 19th century moral philosophers a dn more recent work by economists is read and discussed. Unethical or unjust behaviors in contemporary markets are examined.

PBHL 853 Applied Health Economics: Technology Assessment and Economic Evaluation 3.0 Credits

This course reviews issues and methods of assessing health care technologies and programs, with an emphasis on economic evaluation and applications to clinical and public policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 854 The Politics of Food & Gender 3.0 Credits

This course will examine the global food crisis & community nutrition in context of maternal & child health. Using current events & news stories, students will be introduced to the complex & diverse nature of the politics of food and agriculture, & how these dynamics manifest in the health and wellbeing of young children & their families.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 855 Health Services Research 3.0 Credits

Course provides an introduction to basic and "state of the art" methods for undertaking research and program evaluation within health services organizations and systems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 856 Violence, Trauma and Adversity in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 899S REGISTERED FOR THESIS ONLY 1.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 900S Registered for Degree Only 1.0 Credit College/Department: School of Public Health

PBHL 901 Dissertation Seminar I 5.0 Credits

This is a required doctoral course to develop the dissertation proposal. Students will select and develop a research question, establish evidence of the significance, define assumptions and limitations, complete a critical analysis of literature, select and justify research methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

PBHL 902 Dissertation Seminar II 5.0 Credits

This is a required doctoral course to finalize the dissertation proposal. Students will complete the Drexel University Internal Review Board (IRB) protocol for their research. Students will prepare for the oral defense of the proposal including proposal presentation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH. Prerequisites: PBHL 901 [Min Grade: C]

PBHL 990S THESIS DEFENSE 0.0 Credits College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 995 Ph.D. Dissertation Companion 1.0-9.0 Credit

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 998 Disseration Guidance 1.0-12.0 Credit

Directed guidance of dissertation research including base-building and consent, data collection and intervention, analysis and interpretation of data and implications for future research, policy and practice. Guidance will include preparation for presenting dissertation research and preparation for the final defense.

College/Department: School of Public Health **Repeat Status:** Can be repeated 8 times for 12 credits

Restrictions: Can enroll if program is DRPH.

Prerequisites: PBHL 901 [Min Grade: C] and PBHL 902 [Min Grade: C]

PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology 1.0-12.0 Credit

Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and

preparation for the final defense.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

Doctor of Public Health in Health Policy and Social Justice

About the Program

Doctor of Public Health (DrPH): 60.0 quarter credits

Drexel University's School of Public Health (http://publichealth.drexel.edu) offers a doctoral program in Health Policy and Social Justice, leading to the doctor of public health (DrPH) degree. The Doctor of Public Health in Health Policy and Social Justice is designed to prepare students to play strong professional roles in developing and implementing policies that improve public health by focusing on those in the community who are most vulnerable.

The mission of the School of Public Health is to promote health and quality of life through graduate education, population-based research, and community service in the prevention and control of disease, injury and disability and the maintenance of health and quality of life. Effective public health practice is built on a foundation of effective programs and health policy and necessitates long-term partnerships with community, organizations and regulatory bodies.

Inequities based on social group memberships, including race, ethnicity, gender, sexual orientation and class, are well documented in the scientific literature. Equally alarming are disparities in access to health care and health outcomes based on race, ethnicity and other social indicators. Graduates of the DrPH in Health Policy and Social Justice will generate new knowledge about social justice and will use this knowledge in the analysis, evaluation and modification of existing policy as well as the design and delivery of new policy affecting public health practice.

The DrPH in Health Policy and Social Justice will prepare students to play strong professional roles in developing and implementing policies that improve public health by focusing on those who are most vulnerable. By studying important racial and ethnic, social class and gender differences within the larger social justice framework, students will emerge from the program with a sound theoretical and practical foundation for critical scholarship in health disparities, cultural competency and social justice. Furthermore, they will gain the tools to implement effective policies in both public and private health sectors.

Developing Core Competencies for Understanding and Solving Public Health Problems

The core competencies of the DrPH were developed in response to the proposed core competencies of the Council on Linkages between Academia and Public Health Practice. These competencies include the ability to:

- 1. Identify health system problems and health policy opportunities
- Analyze structural, economic and political forces that affect the health of populations
- Evaluate the social justice implications of policy formulation, analysis and implementation
- Inform and education leaders and policy-makers about public health issues and opportunities
- 5. Develop policies and plans that support the health of the public
- Apply sound health economics principals and methods to health policy analyses
- Evaluate effectiveness, accessibility, outcomes and quality of health services
- 8. Research for new insights and innovative approaches to public health policy
- Apply social justice and human rights principles when addressing health system and health policy problems and opportunities
- Conduct policy and health services research to improve health and health services in diverse populations
- Develop public health policies and strategies based upon wellarticulated problem statements and an understanding of the values of the communities involved
- Use appropriate methods of policy analysis, economic evaluation, measurement and statistical approaches to reach sound and defensible conclusions
- Disseminate findings, analyses and effective models to the lay public, leaders and policy makers across disciplines.

Additional Information

For more information about the program, contact:

Ms. Jennie Shaw, MPH School of Public Health/DrPH Program Drexel University Nesbitt Hall 3215 Market Street Philadelphia PA 19104

jas638@drexel.edu 267.359.6025 Additional information can be found on the Drexel University School of Public Health (http://publichealth.drexel.edu) website.

Admission Requirements

Applicants to the DrPH Program in Health Policy and Social Justice must meet the following requirements:

- Completed MPH degree or other health-related master's degree program.*
- Potential for high level of performance in the DrPH Program and subsequent contributions to the field of Public Health Policy.

*Must be completed at least 1-year in advance of Fall enrollment for the DrPH Program.

Students will be admitted on a competitive basis, and those with a demonstrated ability to integrate public health competencies and skills into public health practice will be preferred. The admission portfolio will include:

- · undergraduate and graduate transcript;
- three letters of recommendation from faculty or professionals who can evaluate the applicant's promise as a graduate student;
- · official Graduate Record Examination scores;
- · documented evidence of applied research or a writing sample;
- and a written statement of career and educational goals, professional experience, and area of research interest that aligns with a faculty member in the division of Health Management and Policy.

For international students or applicants who earned a degree outside of the US, an international transcript evaluation is required. For more information regarding international applicant requirements, view the International Students Admissions Information (http://drexel.edu/isss/NewStudent.html) page.

An in-person or telephone interview is required of all finalists.

Additional Information

For more information about Admissions, contact:

Ms. Jennie Shaw, MPH School of Public Health/DrPH Program Drexel University Nesbitt Hall 3215 Market Street Philadelphia PA 19104

jas638@drexel.edu (mas638@drexel.edu) 267.359.6025

Forms, details about requirements, and information about application deadlines are all available on the DrPH in Health Policy and Social Justice (http://www.drexel.edu/grad/programs/pubhealth/apply/requirements/p_phdr_psj) page of Drexel's Graduate Admissions website.

Degree Requirements

Completion of the DrPH in Health Policy and Social Justice requires the following:

- 60 quarter credit hours of coursework beyond the master's degree (33 credits of required coursework; 12 credits of elective course; a 3 credit practicum; and 12 credits for the dissertation).
- a minimum cumulative grade point average of 3.3;
- · completion of a practicum experience;
- passage of the doctoral comprehensive/candidacy examination; and
- completion of a dissertation that involves applied research, policy analysis, or management analysis.

All coursework is designed to develop the core competencies of health policy and social justice.

Electives

The 12 credits of elective coursework enable doctoral students to expand and enhance skills within specific areas of competency. New courses are developed and added regularly, based on interests of faculty and students. Students are not limited to the electives offered by the DrPH program. Each student is encouraged to choose electives that maximize the fit between the student's educational objectives and opportunities throughout the University.

Curriculum

F	Required Course	s (Doctoral Core)	15.0
	PBHL 620	Intermediate Biostatistics I	
	PBHL 630	Intermediate Epidemiology	
	PBHL 632	Applied Survey Research in Epidemiology	
	PBHL 802	Health and Human Rights	
	PBHL 804	Research Methods for Community Health and Prevention	
	Department Req	uired Courses	18.0
	PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class	
	PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic	
	PBHL 618	Historical and Contemporary Developments in Social Justice	
	PBHL 851	Health Systems Policy Analysis	
	PBHL 853	Applied Health Economics: Technology Assessment and Economic Evaluation	
	PBHL 805	Qualitative Research in Community Health	
	or PBHL 855	Health Services Research	
F	Practicum		3.0
	PBHL 850	Practicum in Health Policy & Social Justice	
0	Dissertation (12	credits minimum)	12.0
	PBHL 998	Disseration Guidance	
	PBHL 998	Disseration Guidance	
	PBHL 998	Disseration Guidance	
E	lectives		12.0
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In consultation with their advisors, students select elective courses appropriate for their educational goals. These courses may be from the School of Public Health or may be offered by other schools and colleges at Drexel University.

Total Credits 60.0

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity, diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (Temple University School of Medicine) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (*Utrecht University*) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health)
Department of Community Health and Prevention, Chair; Associate Dean

for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, gene-environmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical

trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (University of Pennsylvania) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (*The University of Michigan School of Public Health*) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority

groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Courses

PBHL 501S INTRODUCTION TO PUBLIC HEALTH 1.0-2.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 503 Public Health Independent Study 1.0-3.0 Credit

An independent study course designed to cover special topics relevant to public health and one or more of the core disciplines of biostatistics, epidemiology, environmental and occupational health, health behavior and promotion and health management. Students will work independently with the guidance of appropriate public health faculty.

College/Department: School of Public Health **Repeat Status:** Can be repeated 6 times for 9 credits

Restrictions: Can enroll if major is PH.

PBHL 503S INDEPENDENT STUDY 1.0-14.0 Credit

PBHL 505 Community Health & Prevention 3.0 Credits

This course integrates knowledge about individual health behavior and decision-making with the rich ecological context found in communities. Coverage of basic knowledge and behavior science theories, models and research methods will be provided as well as modern human rights framework to analyze and create public health interventions and policies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 507 Health Policy and Management 3.0 Credits

Health management and policy is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This area of study has both an organizational management and a public policy focus and it especially addresses issues involving the accessibility, organization, costs, financing and outcomes of health services.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 509 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of environmental and occupational health as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to environmental and occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 510ES Block I-Introduction to Public Health 2.0 Credits

This course presents an overview of the principles of public health and the concepts and foci of each of its core disciplines. It is a required course for the Executive MPH students.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 516 Introduction to Public Health 2.0 Credits

This course introduces and investigates the history, issues, function and context of public health, community health and health systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 520 Principles of Biostatistics 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 520ES BIOSTATISTICS 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 530 Principles of Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment/evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 530ES Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment and evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics taught in Block II.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 540 Prevention Principles and Practices 4.0 Credits

Focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. The goal of this course is to provide basic knowledge of social and behavioral science theories, models, and research methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 540ES Behavioral Assessment 4.0 Credits

Introduces principles of health behavior in context of the human life-cycle and covers their application to prevention and health promotion programs in a community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 550 Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building, community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540 [Min Grade: C]

PBHL 550ES Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540ES [Min Grade: C]

PBHL 560 Issues in Global Health 3.0 Credits

This course provides an overview of critical global health issues and the disproportionate effect on vulnerable populations, and will show how to apply the principles of human rights and environmental justice to those global health concerns.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 560ES MPH Comm Based MP Part A 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

PBHL 570ES Block XI- Integrated Public Health Case Analysis 4.0 Credits

This is the capstone course of the Executive MPH. Students will work in small groups to conduct a case analysis and a case development focusing on current public health issues which are multidisciplinary. All core disciplines will be examined as influences for the problem and possible solutions.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 599 Special Topics 0.5-9.0 Credits

See department for course description. **College/Department:** School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 600 Management, Leadership, Assurance and Health Services 3.0 Credits

This course explores critical elements of assurance in public health organizations by understanding overarching public health principles in leadership and through an integrated management model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 600ES Health Management and Leadership 4.0 Credits

Explores critical elements of the assurance role of public health, beginning from the premise that effectiveness of program delivery and of the assurance role itself requires an understanding of organizations, leadership, and change, in economic, strategic and systematic context. Applies management concepts and theories through an integrated model of the management process. In the latter portion of the block, extends, applies, and integrates previously developed concepts and theories with those of strategy, planning, accounting, financial management, and information systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 601 Management Health Care Systems 3.0 Credits

This course addresses the management of healthcare outcomes from several perspectives: patient, patient care and health systems. It explores how absolute clincial outcomes are impacted by intermediate outcomes in healthcare delivery and how these are evaluated from an economic outcomes perspective. It also addresses disparities observed in achieving health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 602 Public Health Practice 3.0 Credits

This course addresses current and transforming issues in public health policy and management, examines the history of each issue and analyzes forces that have led to new policy or management approaches. A key goal of the course is to build critical thinking, effective management approaches and creativity skills.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 603 Advanced Healthcare Financial Management 3.0 Credits

The Business of Healthcare: Advanced Healthcare Financial Management is a course designed for non-financial health care managers. Using the case study approach, it offers and introduction to the most-used tools and techniques of health care financial management. There is a particular focus on fundamental.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 604 Public Health Advocacy and Activism 3.0 Credits

The elective course will provide distinct, specialized training in the leadership skills, tools and techniques needed to develop effective advocacy skills. Additionally, students will learn to integrate research-based data in order to strengthen advocacy initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 650 [Min Grade: C]

PBHL 604S INTRO TO HLTH FINANCE 0.0 Credits

This course is part of a block of courses. Credit hours are tracked for

PBHL 600 only.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 605 Change Management in Public Health 3.0 Credits

Strategy, Innovation and Change Management is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course prepares students for management responsibilities in delivering new health services. The course focuses on developing strategies to adopt innovative services and management technique.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 606 Vaccines and Public Health Policy 3.0 Credits

This course examines the history and development of S Vaccine policy and the implementation of policy in the public health setting. The course will examine the history and ethics of this broad public health intervention and examine policy challenges.

PBHL 607 Evolution of United States Health Policy 3.0 Credits

This is a reading intensive seminar in the evolution of the US health system and history of 20th century US health policy: how it adapted to internal and external forces with an emphasis on the cyclic interest - and disinterest - in universal health care coverage.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 608 Fundamentals of Disaster Management 3.0 Credits

Fundamentals of Disaster Management is an elective course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course provides an understanding of the broad range of disaster management issues, and study strategies used to help a community prepare.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 609 Issues in United States Health Policy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation in the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 610 Active Issues in Public Health 3.0 Credits

Through critical review and discussion of current articles from the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report, this course provides real-world illustration of principles learned in first-year MPH courses. Students will review articles on outbreak investigations, emergent situations, public health surveillance, and program updates for a mix of acute and chronic, infectious and non-infectious, and domestic and global health problems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 611 Race, Ethnicity and Health 3.0 Credits

Race, Ethnicity and Health is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course explores racial and ethnic disparities in health status and access to healthcare, and examines intervention approaches to eliminate them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 612 Public Health Funding & Program Development 3.0 Credits

This course introduces students to the principles and procedures for writing grant proposals to fund non-profit organizations. Students identify a need, gap, or problem that is addressed by a non-profit organization and work from the vantage point of that organization. The course is organized around the effort to identify a need, develop and intervention, and write a grant proposal for the organization.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 612ES MPH BLK VII-PRGM PLAN & EVAL 4.0 Credits

Beginning from the premise that the health-assurance role of public health begins with program planning, development, and evidence-based practice, this block examines concepts and theories underlying program planning, development, and evaluation. Emphasizes program application in context of specific problems and community context.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 613 Seminar in Fire Arms and Public Health 3.0 Credits

The seminar will focus on firearms and their impact on the public's health. Using recent events of mass firearm violence and urban violence, the seminar will seek to put into perspective the evolving policy discussion about the role of firearms in affecting the health of a range of populations through homicide, intentional injury, domestic violence, suicide, as well as general issues of population safety.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 614 Coordinating a Population's Care 3.0 Credits

This course examines the evolving concepts and population health in the current area of healthcare reform. Recent debate over healthcare expenditures has highlighted that chronic and preventable conditions account for the majority of healthcare costs. Our traditional healthcare system, however, is not positioned well to combat rising healthcare costs. Care coordination and population health are receiving attention as key strategies and concepts that are critical for the transition from a reactive dysfunctional system that provides expensive, fragmented sick care to a more organized, focus systems that can deliver proactive, coordinated, preventive and wellness care as well as acute and chronic care management.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 615 Perspectives on Gender, Race, Ethnicity, and Social Class 3.0 Credits

This course will explore the history of concepts of gender, race, ethnicity and social class and probe the biology, sociology and constructed

meanings of these deeply situated ideas.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 616 Public Health Surveillance: Aligning Data and Policy Use 3.0 Credits

Public health surveillance - the monitoring of population health - is integral to public health practice. Surveillance not only informs public health programs and policies but also shapes broader public understanding of the importance of different health problems. This course provides an overview of the methods and uses of surveillance in public health practice.

PBHL 617 Health Disparities: Systemic, Structural, Environmental & Economic 3.0 Credits

This course explores racial and ethnic disparities in health status and access to health and examines interventions to eliminate them. Students learn to define and describe racial, ethnic and gender-related disparities, discuss underlying mechanisms, think critically about existing research on health disparities and develop proposals for reducing them.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 618 Historical and Contemporary Developments in Social Justice 3.0 Credits

Courses will cover direct and indirect links between public health policies, political circumstances, social and economic conditions and effects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 619 Decision Analysis in Public Health and Medicine 3.0 Credits

A survey course of decision analysis and its relevance and use in public health and public policy decisions. Focus will be directed towards population health data, decision-making in conditions of uncertainty, and health policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 620 Intermediate Biostatistics I 3.0 Credits

This course focuses on an overview of the linear modeling methods most ocmmonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data. Focus is on implementing models and interpreting results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 621 Intermediate Biostatistics II 3.0 Credits

The course reinforces and builds upon the concepts in PHBL 620. It adds theoretical background on various linear model assumptions and multivariable model-building strategies. Approaches to model diagnostics (e.g., goodness of fit, residual analysis) are also covered.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 622 Statistical Inference I 3.0 Credits

This course introduces probability and biostatistics theory. Topics include the basic concepts of probability including Bayes theorem; probability distributions of both discrete and continuous types of variables along with their properties; and the underlying theoretical foundation of the statistical inference including parameter estimation, hypothesis testing, hierarchical models and Bayesian inference.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 623 Introduction to Statistical Computing 3.0 Credits

Provides the students with sufficient data management and computing skills enabling them to manage small to intermediate size public health projects. Students will learn basic data management and analytic programming in the SAS statistical software.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 624 Regression Methods 3.0 Credits

Regression Methods is a required course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. It covers topics in linear regression, logistic regression and time until event analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 625 Longitudinal Data Analysis 3.0 Credits

Course covers modern statistical techniques for longitudinal data from an applied perspective. Suitable for doctoral and master students in biostatistics and doctoral students in epidemiology, clinical trials and social science analyzing longitudinal data.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: A] and PBHL 621 [Min Grade: A]

PBHL 626 Multivariate Linear Models 3.0 Credits

Multivariate Linear Models is an elective course for the Master of Public Health (MPH) program of study, especially for students concentrating in Epidemiology or Biostatistics, but open to students in other concentrations as well. It covers topics in analysis of variance and covariance, repeated measures analysis, factor analysis and path analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 627 Categorical Data Analysis Methods 3.0 Credits

Categorical Data Analysis Methods is an elective course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. This course discusses some of the specialized methods to model data from specific studies with categorical data as an outcome.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 624 [Min Grade: B]

PBHL 628 Survival Data Analysis 3.0 Credits

This course covers the basic techniques of survival analysis. These approaches are useful in analyzing cohort data, which are common in health studies, when the main interest outcome is the onset of even and time to event is known.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 629 Design & Analysis of Clinical Trials 3.0 Credits

The purpose of this course is to cover the design and conduct of clinical trials. The course will also cover how to evaluate the scientific rigor of studies of clinical trials published in the scientific literature. Topics which will include power and sample size, study design, randomization methods, recruitment, missing data, ethical issues and statistical analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 630 Intermediate Epidemiology 3.0 Credits

This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include: basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling. An emphasis is also placed on critically reading epidemiologic literature.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 630ES MPH BLOCK VIIIB-COMM BASED MP 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 631 Applied Multivariate Analysis 3.0 Credits

This course introduces students to statistical methods for describing and analyzing multivariate data. Topics to be covered include basic matrix algebra, multivariate normal distribution; linear models with multivariate response, multivariate analysis of variance; profile analysis, dimension reduction techniques, including principle component analysis, factor analysis, canonical correlation, multidimensional scaling; discriminate/ cluster analysis; and classification/regression trees.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 632 Applied Survey Research in Epidemiology 3.0 Credits

Applied Survey Research in Epidemiology is a required course for the Master of Public Health (MPH) program of study, concentration in Epidemiology and Biostatistics. This course addresses theoretical and practical aspects to the conduct of survey research in human populations. Practical requirements for research proposal development is covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 633 Epidemiology of Cancer 3.0 Credits

This course will provide students with training in the methods and topics specific to the epidemiology of cancer. Students will learn about cancer surveillance, etiologic studies, therapy trials, and prevention/screening studies of cancer.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 634 Epidemiology for Public Health Practice 3.0 Credits

This course is designed to enable the student to understand epidemiology as a health discipline and how epidemiology provides information for infectious/non-infectious disease prevention and control. Topics cover public health surveillance, outcomes research, health services research, principles of cancer registration, and a variety of practice-related evergises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 632 [Min Grade: B]

PBHL 635 Social Epidemiology and Psychiatric Epidemiology 3.0 Credits

This course focuses on the content and methods of social epidemiology and the clinical, methodologic, and epidemiologic aspects of psychiatric illness. In focusing on social and psychiatric/psychological issues, students are required to explore theoretical and empirical aspects of disease etiology and disease course that extends beyond a biomedical model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

and PBHL 632 [Min Grade: C]

PBHL 635ES MPH Comm Based MP Part C 2.0 Credits

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 636 Infectious Disease Epidemiology 3.0 Credits

Course will provide training in the methods specific to infectious disease epidemiology within the context of the study of several major classes of infectious diseases with global impact on public health. Students will learn about population-level data sources and surveillance methods and techniques in outbreak investigations.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PH. Prerequisites: PBHL 530 [Min Grade: C]

PBHL 636S MPH BLOCK VIII - CONCENTRATION 3.0 Credits

College/Department: School of Public Health

PBHL 637 Chronic Disease Epidemiology 3.0 Credits

Chronic Disease Epidemiology/Social Epidemiology is an elective course for the Master of Public Health (MPH) program of study, concentration in Epidemiology. This course addresses the general disciplines of chronic disease epidemiology and social epidemiology.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 637S PUBLIC HEALTH CONCENTRATION 0.0 Credits

College/Department: School of Public Health

PBHL 638 Perinatal Epidemiology 3.0 Credits

Introduces topical issues and methodological approaches to studying maternal and child health outcomes during the perinatal period. Focus is on study designs and data sources most relevant to perinatal epidemiology and examples of epidemiology research on common perinatal health issues. Current research in perinatal epidemiology and directions for research are also presented.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 639 Cardiovascular Disease Epidemiology & Prevention 3.0 Credits

This course provides a forum for in-depth discussions of one of the main public health issues. Topics include the pathophysiology of atherosclerosis and cardiovascular disease (CVD), trends in coronary heart disease, stroke, hypertension and heart failure mortality/morbidity, well-established and emerging CVD risk factors, and major strategies for CVD prevention/control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 640 Environmental Health 4.0 Credits

Introduces concepts, theories, and programmatic application within the field of environmental health.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 640ES Environmental & Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the

fields of environmental and occupational health.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit

PBHL 641 Environmental Hazard Assessment 3.0 Credits

This course provides students with a general understanding of the recognition and evaluation of chemical, physical and biological hazards. Particular emphasis is placed on airborne hazard evaluation theory and methods. Students become familiar with commonly used industrial hygiene equipment through participation in laboratory and field exercise.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 642 Healthy Housing & Built Environment 3.0 Credits

Course provides students with understanding of connection between health and housing specifically the impact factors of both built environment and indoor environment has on the health status of residents, especially those at risk for allergic and respiratory diseases.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 643 Environmental and Occupational Toxicology 3.0 Credits

This course will provide students with a basic understanding of the recognition and evaluation of chemical, physical and biological hazards in the environment and workplace. The course addresses fundamentals of toxicology, legal implications of exposure and prevention strategies. Topics will include: general toxicology principles, metals, chemical and dust exposures and physical agents.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: B]

PBHL 644 Environmental Health for Public Health Practitioners 3.0 Credits

This course will provide students with an understanding of the fundamental knowledge and basic practices necessary for environmental health professionals who practice at the municipal and state levels.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 646 Environmental Health in Vulnerable Populations 3.0 Credits

Policy instruments and tools in place to protect the health of vulnerable populations will be critically examined as well as issues related to equity and justice. A number of case studies will be examined to exemplify why certain populations are vulnerable to various environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 647 Occupational and Environmental Epidemiology 3.0 Credits

Occupational and Environmental Epidemiology for Public Health is a required course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. Students are familiarized with commonly used industrial hygiene equipment through participation in laboratory and field exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 530 [Min Grade: B] and PBHL 640 [Min Grade: B]

and PBHL 660 [Min Grade: B]

PBHL 648 Public Health and Disaster Preparedness 3.0 Credits

Public Health Readiness and Disaster Preparedness is an elective course. This course provides students with an understanding of the recognition and evaluation of chemical, physical and biological hazards related to terror attacks, and other man-made/natural disasters.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 649 Occupational and Environmental Cancers 3.0 Credits

Occupational and Environmental Cancers is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics in courses of cancer, the prevention of cancer, and public policy regarding cancer.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 650 Public Policy and Advocacy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation is the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 650ES Health Policy & Advocacy 4.0 Credits

Introduces the fundamentals of public-health law and the concepts and theories of health-policy development, adoption, and evaluation. Also introduces the advocacy process and its importance to development of sound public health policy. Students complete the M.P.H. program by exploring major public health topics in some depth. Emphasizes systemic integration and the integration of the assessment, assurance, and policy development roles of public health in problem, population, and political context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 651 Legal Aspects of Public Health 3.0 Credits

This course covers legal and policy issues in the implementation of public health programs. It emphasizes underlying themes that frame these efforts.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is LAW or major is PH or major is PHFT.

Prerequisites: PBHL 650 [Min Grade: C]

PBHL 660 Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the field of occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 661 Occupational and Environmental Diseases 3.0 Credits

Occupational and Environmental Diseases is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics related to lung diseases caused by occupational and or environmental exposures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 662 Environmental and Occupational Policy 3.0 Credits

This course provides an overview of the origines and development of environmental and occupational health policies in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 663 Injury Prevention and Control 3.0 Credits

A survey course examining the history, burden and cost of injury at the population level and its impact on health care systems. Lectures and readings will focus on critical analysis of incidence, risk, policy and prevention.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 664 Safety in Healthcare 3.0 Credits

This course examines the history of healthcare safety as an emerging public health problem in the US. Topics such as patient safety, nurse injury and other outcomes will be studied. Effects of safety climate, organizaitonal culture, and clinical knowledge on partients, healthcare workers and the healthcare system are discussed.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 665 Environmental Risk Analysis 3.0 Credits

This course will provide an overview of the fundamentals of risk for environmental health. Students will develop a critical understanding of the key components of risk assessment (hazard identification, dose modeling, exposure assessment, and risk characterization) through a series of environmental health problem case studies. Quantitative methods for conducting risk assessment will be taught, including use of software tools. We will discuss how risk assessment can inform risk management approaches (such as regulatory options) and risk communication, and vice versa. The course will emphasize the potentials, limitations, and uncertainties of the risk analysis framework for protecting human health from environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 670 Multicultural Competence in Community Health and Prevention 3.0 Credits

The goal of this course is to equip students already versed in the fundamentals of public health principles with additional practice skills and knowledge in cultural competency. Implicit in the terms cultural competence is a set of congruent behaviors, attitudes, beliefs and values enabling people to work effectively across cultures.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 671 Theory and Practice of Community Health and Prevention 3.0 Credits

This course introduces public health students to the theoretical foundation of community and population-based health promotion. The course emphasizes theories and models for individual and planned social and community change designed to improve health; and the application and impact of theoretical constructs in designing intervention strategies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 672 Theory and Practice in Health Communication 3.0 Credits

The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners in the steps required in developing, implementing and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 673 Outcomes Assessment of Community Health and Prevention 3.0 Credits

This course is designed to review the principles of identifying shortterm, mid-term and long-term outcomes and how these are linked to program goals, objectives, mission and vision. Topics include selecting outcomes in conjunction with the community, and strategies for design, data collection, analysis and interpretation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 674 Studying Rare or Hidden Groups 3.0 Credits

Target audience for this course is those intending to conduct research or evaluate programs designed for rare, stigmatized and/or hidden populations and for consumers of such programs. The course seeks to help students understand the ethics of research/evaluation in such programs, analyze health outcome measures and appropriately store data collected.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 675 LGBT Health Disparities 3.0 Credits

LGBT community ranging from HIV/AIDS to intimate partner violence.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 676 Intersectional Perspectives 3.0 Credits

This health focuses on health among gay, lesbian, bisexual and transgender (LGBT) populations from the perspective and theoretical framework of intersectionality. This course explores how the intersections of various identities such as race, ethnicity, socio-economic status result in different health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 678 Drug Use in Public Health 3.0 Credits

In the past several decades drug use has emergered as a major public health issue. The course will focus on biological, psychological, social, and cultural aspects of key licit and illicit substances. Additionally, students will learn relevant public health aspects of drug use, including prevention, intervention, and policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 680 Community Based Master's Project I 4.0 Credits

This course is the first of 3 CBMP courses and will encompass the first stages of the year long process of producing a final master?s project. Activities will include selection of CBMP site, CBMP workshops, student logs, IRB and HIPAA training. A learning agreement, community site profile and project proposal will be expected as end-products of student?s first 10 weeks at site and aforementioned activities.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 681 Community Based Master's Project II 4.0 Credits

This course is the second of 3 CBMP courses and will encompass the intermediate stages of the CBMP process. Activities will include CBMP workshops, IRB submission (if applicable) and regular attendance at community site. Student?s progress at site and on final project will be assessed through Community Site Preceptor Mid-Year Report and assessment by Faculty Advisor.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 682 Community Based Master's Project III 4.0 Credits

This is the third of 3 CBMP courses and represents the final stage of the CBMP process. Draft of final project will be previewed through short presentation to SPH community. Final oral defense, presentation of CBMP Poster and submission of final project paper for binding are the major activities of this course.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 683 Advanced Clinical Trials & Experiment Design 3.0 Credits

Course prepares students to design & conduct clinical trials and other health related experiments. It will cover the development of a study protocol for a clinical trial, selection of the study population, sample size, and treatment assignment methods. Advanced experimental designs will also be covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 621 [Min Grade: C]

PBHL 684 Statistical Inference II 3.0 Credits

This course is a continuation of Statistical Inference I: focusing on concepts and methods of statistical inference. Topics include point/interval estimation, methods of moments, maximum likelihood estimation, Bayes estimates, hypothesis testing, Meyman-Pearson Iemma, likelihood ration tests and large sample approximation, Bayesian analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: C]

PBHL 685 Data Analysis Project 6.0 Credits

Provides the student with experience completeing a substantive data analysis in either an academic or applied setting. The project will be performed over a full term under the supervision of the advisor. Projects based in seetings outside the Department are jointly-supervised by the advisor and a doctorally-prepared host organization researcher.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is BIOS and program is MS.

PBHL 686 Advanced Statistical Computing 3.0 Credits

This course expands on computational methods used in biostatistics. It covers numerical techniques, programming, and simulations and will connect these to fundamental concepts in probability and statistics. The course will use the statistical software, R, to apply these concepts and enable the practical application of biostatistical models to real-world problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 687 Readings in Biostatistics 1.0 Credit

Guided readings course designed to introduce MS Biostatistics students (and other interested students) to classic papers in Biostatistics. Provides students with exposure to classic biostatistics papers and practice critically reading statistics literature. Also exposes students to some issues relevant to the practice of biostatistics that are not covered in coursework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 688 Statistical Inference I Lab 1.0 Credit

This course is a continuation of Statistical Inference I: In the sense that statistical concepts and methods will be developed in a mathematical framework and also additional topics will developed in a mathematical framework and also additional topics will be discussed as time permits. Topics tentatively selected include distributions, conditional distributions and expectation, probability inequalities/identities, limit theorems, and Bayesian methods.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

Corequisite: PBHL 622

PBHL 689 Master of Science Epidemiology Project 1.0-12.0 Credit

This course is designed to provide guidance of the MS Epidemiology project. Working with a faculty advisor, students will design and conduct an epidemiologic study that poses and tests a research question using a sufficiently robust data set. Components of the project will include data collection as necessary, data management and analysis and the preparation of a manuscript for publication or a research report that is consistent with accepted thesis and publication standards in epidemiology.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 48 credits

PBHL 690 Applied time Series Analysis 3.0 Credits

Introduces students to a variety of statistical methods for modeling and analysis of time series data, with emphasis on application. Topics include Theory of stationary random processes; Non-stationary time series models; Model identification, parameter estimation, diagnostics checking and model selection; spectral analysis; and Introduction to contemporary modeling topics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Credits

This course will examine the causes of many human diseases at a molecular level, paying particular attention to the role of inflammation in disease processes and examining the role of cell cycle dysregulation in the etiology of many human cancers. In order to understand the pathologic basis for disease, the course will also cover the normal structure and function of many body systems, that when compromised lead to diseases of public health importance.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: B]

PBHL 692 Public Health Obesity Prevention Research 3.0 Credits

This class will provide students with a foundation in obesity assessment, interpretation of obesity research and study designs used to examine population level obesity interventions. The substantive focus of this class is on environmental contexts (physical environment, economic and social environments) that influence obesity risk. The methodological focus of this class is on designing and evaluating population-level / macro level policies that may affect diet, physical activity, and obesity.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 693 Applied Bayesian Analysis 3.0 Credits

The course provides a practical introduction to Bayesian statistical inference, which is now at the core of many advanced methods. The course will compare traditional frequentist estimation, which relies on maximization methods, to Bayesian estimation of the posterior distribution. Students will learn numerical integration methods, such as Markov Chain Monte Carlo, to obtain these various distributions and ultimately make inference in a Bayesian framework. The course will also use the freely available statistical software, R (http://cran.r-project.org/).

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 625 [Min Grade: B] and PBHL 684 [Min Grade: B]

and PBHL 686 [Min Grade: B]

PBHL 694 Biostatistical Literature Review 1.0 Credit

This course is designed to train students on how to conduct a systematic literature review. The final literature review produced will then be included in the student's data analysis project written report. The course will draw on the skills and experience of biostatistics faculty in the Department of Epidemiology & Biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 695 Statistical Consulting 2.0 Credits

The objective of this course is to introduce biostatistics graduate students to the fundamental aspects of statistical consulting and to provide training for being an effective statistical consultant. Topics tentatively selected include: Roles and responsibilities of biostatisticians in collaboration with scientists and other clients, oral and written communication skills, sample size and power calculations, study design, how to help researchers formulate their scientific questions in quantifiable terms, how to deal with missing data, how to write statistical analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 696 Nonparametric and Semiparametric Models 3.0 Credits

The objective of this course is to introduce students to the fundamental concepts and applicable techniques of non-parametric and semi-parametric models, in particular, nonlinear functional relationships in regression analyses. Topics tentatively selected include: Density estimation, smoothing, non-parametric regression, additive models, semi-parametric mixed models, and generalized additive models.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 686 [Min Grade: B-]

PBHL 697 Generalized Linear Model 3.0 Credits

The objective of this course is to introduce students to generalized linear regression models (theoretical properties, model interpretation and application). Topics include: 1) Review of categorical data and related sampling distributions; 2) Two/Three-way contingency tables; 3) logistic regression and poission regression;4) loglinear models for contingency tables; 5) generalized linear mixed models for categorical responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 698 [Min Grade: B]

PBHL 698 Linear Statistical Models 3.0 Credits

The objective of this course is to introduce students to linear regression models (computation, theoretical properties, model interpretation and application). Topics include: 1) Review of basic concepts of matrix algebra that are particularly useful in linear regression, and basic R programing features; 2) (weighted) least square estimation, inference and testing; 3) regression diagnostics, outlier influence; 4) variable selection and robust regression.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 699 Biostatistical Computing with Stata 3.0 Credits

Public health research often involves the management, manipulation and analysis of complicated sets of data with standard statistical software packages. This course is designed to introduce the student to practical issues in the management and analysis of public health and biomedical data using the Stata programming language. This course is designed to give students a basic introduction to the Stata computing programming and is intended for students with limited or no previous experiences with Stata. The focuses on simple data analysis such as creating data sets, combining and modifying data, preparing data for analyses, working with Stata commands and do-files, and approaches data structure. The course will also present the conventions used for statistical analysis commends in Stata, and will illustrate these through review of limited set example commands. After taking this course, students will be comfortable using Stata to manage and manipulate data in classes and basic research projects.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 699ES Special Topics in PH 1.0 Credit

Public health is a multi-disciplinary field, drawing from the disciplines of Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy Management and Social and Behavioral Sciences. Through the use of archived online presentations, this self-directed course allows students to draw from a library of lectures which focus on the five core disciplines of public health. After viewing online lectures, students will then analyze and synthesize newly learned concepts with their own understanding of public health and public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 701 Introduction to Descriptive Epidemiology and Biostatistics 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 701S Intro Descript Epidem/Biostats 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 702 Introduction to Analytic Epidemiology and Biostatistics 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 701 [Min Grade: B]

PBHL 702S Intro Analytic Epidem/Biostats 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701S [Min Grade: B] or PBHL 701S [Min Grade: S]

PBHL 703 Design and Analysis Epidemiological Studies 3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 701 [Min Grade: B] and PBHL 702 [Min Grade: B]

PBHL 703S Design/Analysis Epidem Studies 2.0-3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: (PBHL 701S [Min Grade: B] and PBHL 702S [Min Grade: B]) or (PBHL 701S [Min Grade: S] and PBHL 702S [Min Grade: S])

PBHL 704 Proseminar in Global Health Ethics 1.0 Credit

The Proseminar in Global Health Ethics has been designed to afford maximum learning opportunities to: understand ethical concerns in global health; analyze social and cultural factors for better understanding of global health issues; tackle global health questions in relation to "hard to reach groups"; develop cross-cutting skills and competencies in global health. With this in mind, using global health case studies, the proseminar will also integrate student-directed problem based learning (PBL) in the review of health ethics. This focuses on providing structured learning activities to develop learner autonomy in a constructive and collaborative educational process.

College/Department: School of Public Health **Repeat Status:** Can be repeated 3 times for 3 credits

PBHL 705 Public Health in Developing Countries 3.0 Credits

This course is designed to provide students with an overview of public health issues specific to low and middle income countries and introduce students to the core concepts of public health. The course is divided into four parts: principles and goals of international health and health services in developing countries; cross-cutting global health issues; the burden of disease in developing countries; and cooperating to improve health and human rights in developing countries.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 706 Globalization, Development and Comparative Health Systems 3.0 Credits

This course presents a survey of comprehensive examinations of the structure of health systems in selected countries worldwide and provides an understanding of ways that health systems work in other countries (and thereby to better analyze policy issues affecting health and examine both global health issues and health systems from a comparative perspective). This course also explores country-level debates on issues such as access to care and funding and will note how a country's history has influenced the development of its health system. Specific attention is paid to the development of the national health system, financing, and delivery infrastructure, the impact of globalizations, development, and international relations is also examined.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 707 Monitoring and Evaluation in Global Health 3.0 Credits

This course is designed to provide students with a systematic approach to planning, implementing, monitoring, and evaluating global health programs. Students will learn the general principles of monitoring and evaluation (M&E) as well as criteria for selecting indicators and metrics, and various tools/models will be introduced to offer students an overview of the program planning and M&E process. Utilizing knowledge and skills from this course, students will be able to: apply scientific evidence throughout the program planning, implementation, and M&E process; design program work plans based on logic models; develop a proposal to secure donor and stakeholder support - and a plan implementing, monitoring, and evaluating a global health program or intervention; plan evidence based interventions to meet internationally established health targets; develop and M&E framework to assess organizations; utilize project management techniques throughout he program planning, implementation and M&E process; and develop context-specific implementation strategies foe scaling up best-practice interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 708 Global Health Integration Module and Field Practicum Experience 6.0 Credits

This course will provide students with a distributed and evaluated global health training experience that requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and apply theory and principles in a situation that approximates some aspect of professional practice in global health and international development. Students will be mentored through the experience by faculty members, and will complete online modules as well as a 2-3 week field practicum (80-120 hours as part of a "summer institute") working closely with preceptors from partnering NGOs, international agencies, Ministries of Health and foreign institutions in the global health practice setting. Geographic focus will rotate between the Americas, Middle East, Asia Pacific, Australia, Africa, and Europe - based on site availability, participating faculty, and collaborative institutions in the US and abroad. Potential themes include health equity and social justice, MCH, HIV/AIDS, disparities and vulnerable sub-population, rural and agricultural health, food security, WASH, non-communicable disease, disasters and complex emergencies, EPI, IMCI, etc. Site and theme specific cross-cultural training and formal pre-departure orientation will be required in the integration module.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 801 Theory & Practice of Community Health & Preventions I 3.0 Credits

This course introduces the student to the principles, scientific methods, and major research issues in community health and prevention. The history, concepts and methods of prevention science are presented and major theoretical contributions to prevention are discussed. Course concludes with a discussion about using theoretical-empirical frameworks to guide intervention design.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 802 Health and Human Rights 3.0 Credits

Health and wellbeing are intricately associated with fundamental human rights. This course will cover direct links between public health policies, political circumstances, and social and economic conditions and their affects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 803 Theory & Practice of Community Health and Preventions II 3.0 Credits

Course focuses on public health interventions. Discusses individual and environmental theories of change, home, school, worksite, and community-based interventions, harm reduction, and multilevel intervention. Process and outcome of intervention research is investigated.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 804 Research Methods for Community Health and Prevention 3.0 Credits

Research Methods for Community Health and Prevention. Public health leaders must understand and use diverse research methods to make significant contributions to community health and prevention. This course integrates foundations of research methodology with use of appropriate statistical procedures to prepare students to apply rigorous scientific methods to understand and solve major public health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 805 Qualitative Research in Community Health 3.0 Credits

Qualitative Research in Community Health. Students will study and use a variety of qualitative methods suited for public health practice and research. Methods include case study analysis, individual interviews, focus groups, ethnography, and observation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 806 Community Health Research Methods 3.0 Credits

This course covers key principles and methods of community epidemiology. Topics include the epidemiologic perspective on health, epidemiologic study designs, surveillance databases, and survey design. Students will design and implement a community survey, analyze and interpret results, and discuss the contributions of epidemiology to prevention and policy formulation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 807 Analytic Methods for Community Health and Prevention 3.0 Credits

Analytical Methods for Community Health and Prevention. This will cover advanced design issues, methods for exploring data, traditional statistical techniques, and techniques for prevention research. This course integrates the foundations of research methodology with the use of computers and appropriate statistical procedures to prepare students to meet the increasing demands for conducting applied research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 808 Community Program Evaluation 3.0 Credits

Much of public health is about developing programs for individual and behavioral change. Therefore, public health practitioners must be able to understand the importance of developing, implementing, and evaluating public health programs. This course highlights the natural interweaving of three program elements.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 809 Community Health Policy Development and Analysis 3.0 Credits

Community Health Policy Development Analysis. Health policy is integral to the prevention of death, illness, disability, and the promotion of health. Course participants will learn about federal, state, and local roles in policymaking, roles of public opinion and interest groups, and methods for policy development and analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 901 [Min Grade: C]

PBHL 810 Practicum in Community Health and Prevention 3.0 Credits

Practicum in Community Health and Prevention. 480 hours of supervised experience applying concepts and methods to ongoing community health programs or policy development.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 813 Theory and Practice of Health Communication 3.0 Credits

Theory and Practice of Health Communication. The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners the steps required in developing, implementing, and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 814 Community Based Participatory Research 3.0 Credits

Community Based Participatory Research. Participatory Action Research acknowledges that every human being has the capacity to be a change agent. This is accomplished through an alternate view of the research world in which collaboration is emphasized. This course provides theory and skills necessary to plan, implement and evaluate community-based Participatory Action Research initiatives.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 815 Community Participation in Decision Making 3.0 Credits

Community Participation in Decision Making. This course examines how communities accomplish planned change. We will consider a number of models including community development, social planning, social action and public advocacy using historical and contemporary examples.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 817 Economic Evaluation Methods for Community Health and Prevention 3.0 Credits

Economic Evaluation Methods for Community Health and Prevention. Understanding and applying economic concepts and methods is critical for analyzing and solving health system problems. Topics include and overview of economic theory to healthcare, and major economic evaluation methods of cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.

PBHL 818 Community Nutrition and Food Politics 3.0 Credits

Community Nutrition and Food Politics. The purpose of this course is to allow students to learn about and discuss the social, economic, cultural and political influences of obesity and hunger involves understanding the multi-layered influences of food production, distribution and consumption.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 819 Understanding and Preventing Domestic Violence 3.0 Credits

Understanding and Preventing Domestic Violence. Domestic violence is endemic in the United States. This course is designed to define and describe the problem as well as critically evaluate programs designed to intervene and prevent. Major topics include systems, advocacy, policy, economic, socio-political, and psychological phenomena.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 820 Adolescent Risk Behavior in a Developmental Context 3.0 Credits

Adolescent Risk Behavior in a Developmental Context. This course uses a developmental perspective to focus on key problems and issues that affect the health of adolescents. The course highlights adolescents as protagonists in a life drama as puberty raises questions about relationships, questions about fairness, equality and justice, about connection and care and ultimately about their behaviors.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 821 Public Health Practice in and with Latino Communities 3.0 Credits

Public Health Practice in and with Latino Communities. The goal of this course is to prepare students for genuine engagement in a cultural diverse experience in Latino populations within the U.S. using an interdisciplinary approach in the context of public health practice. Attention will be given to various Latino subgroups, and ways to work within and across these.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 822 Independent Study in Community Health and Prevention 1.0-3.0 Credit

Independent Study in Community Health and Prevention. Independent study concerning concepts, methods, or specific health issues in community health and prevention. May be repeated six times for credit.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 18 credits

PBHL 823 Faith, Religion, Spirituality, and Health 3.0 Credits

This course focuses on the roles that "faith", "religion", and "spirituality" play in individual and community health. The course will focus on understanding the multiplicity of definitions of these terms (particularly spirituality and religion) and how these terms relate to health across time and cultures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 824 Public Health Ethics 3.0 Credits

Course explores emergence, philosophical, historical, political development, relationship to human rights, and future of Public Health. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 825 Measuring Health 3.0 Credits

Course for students using health measurement scales, and constructing measures of health for evaluation, research, population monitoring, or policy purposes. Methods will be xplored for measuring health in individuals and populations. Reviews fundamental theories of measurement including classical test theory, item response theory, and qualitative and quantitative approaches.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 826 Causal Inference in Epidemiology 3.0 Credits

Provides an in-depth theoretical foundation on epistemology and models of disease causation in epidemiology. Students will be expected to answer the question how can we know that A causes B from diverse perspectives ranging from theoretical models, statistical conventions around identifying causation, and mitigating bias.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 630 [Min Grade: B]

PBHL 827 Advanced Topics in Qualitative Analysis 3.0 Credits

This course teaches students how to analyze an existing qualitative dataset. The course is structured in a seminar/workshop format. A key feature of the course involves students reviewing and critiquing each other's manuscripts. Students may be first author on their manuscript and will be expected to submit their manuscript to a peer-review journal.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 805 [Min Grade: C]

PBHL 830 Advanced Epidemiology 4.0 Credits

This course covers more advanced methodologic issues in analytic epidemiology including: in-depth discussions of cohort, case-control, and case-cohort studies, missing data and methods of single/multiple imputation, theoretical basis of and analytic methods for using intermediate endpoints/surrogate markers, repeated measures analysis, the use of DAGS, and propensity socres to mitigate confounding.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 620 [Min Grade: B]

PBHL 831 Epidemiology PhD Seminar I 1.0 Credit

This seminar provides the opportunity for entering epidemiology PhD students to review intermediate-to-advanced level concepts in Epidemiology. The weekly one-hour seminar will quickly review basic concepts of epidemiology and discuss conceptual underpinnings of core concepts in epidemiologic research in more detail.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 833 Epidemiology PhD Seminar II 3.0 Credits

This course is a doctoral level seminar designed to introduce students to epidemiologic methods and substantive courses not covered and offers practical skills for funding and conducting their own research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 834 Methodological Challenges 3.0 Credits

This course is designed to provide a theoretical foundation and the practical tools necessary for addressing challenges to causal inference in epidemiological research.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 835 Proposal Writing Seminar 3.0 Credits

Designed to provide students with an understanding of the methodologic and logistic problems involved in designed and conducting epidemiologic studies. The course also offers students opportunities to critically evaluate the adequacy and scientific merit of research protocols.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

PBHL 850 Practicum in Health Policy & Social Justice 10.0 Credits

The practicum is required, invovled supervised practical experience applying concepts and methods to new health policy development and/ or modification of exisiting policy. The student will identify a health policy and social justice problem and analyze the problem through using the appropriate complement of methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is HPSJ and classification is PhD.

PBHL 851 Health Systems Policy Analysis 3.0 Credits

This course examines alternative approaches to structuring a nation's health system and reforming existing systems. Development of an analytic framework to explore health systems of different nations and performance evaluation of those systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 852 Economics of Social Justice 3.0 Credits

The course provides an overview of the evolution of economic thought from Aristotle to the present with special emphasis on health and public health. 18th and 19th century moral philosophers a dn more recent work by economists is read and discussed. Unethical or unjust behaviors in contemporary markets are examined.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 853 Applied Health Economics: Technology Assessment and Economic Evaluation 3.0 Credits

This course reviews issues and methods of assessing health care technologies and programs, with an emphasis on economic evaluation and applications to clinical and public policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 854 The Politics of Food & Gender 3.0 Credits

This course will examine the global food crisis & community nutrition in context of maternal & child health. Using current events & news stories, students will be introduced to the complex & diverse nature of the politics of food and agriculture, & how these dynamics manifest in the health and wellbeing of young children & their families.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 855 Health Services Research 3.0 Credits

Course provides an introduction to basic and "state of the art" methods for undertaking research and program evaluation within health services organizations and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 856 Violence, Trauma and Adversity in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 899S REGISTERED FOR THESIS ONLY 1.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 900S Registered for Degree Only 1.0 Credit

College/Department: School of Public Health

PBHL 901 Dissertation Seminar I 5.0 Credits

This is a required doctoral course to develop the dissertation proposal. Students will select and develop a research question, establish evidence of the significance, define assumptions and limitations, complete a critical analysis of literature, select and justify research methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

PBHL 902 Dissertation Seminar II 5.0 Credits

This is a required doctoral course to finalize the dissertation proposal. Students will complete the Drexel University Internal Review Board (IRB) protocol for their research. Students will prepare for the oral defense of the proposal including proposal presentation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH. Prerequisites: PBHL 901 [Min Grade: C]

PBHL 990S THESIS DEFENSE 0.0 Credits College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 995 Ph.D. Dissertation Companion 1.0-9.0 Credit

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 998 Disseration Guidance 1.0-12.0 Credit

Directed guidance of dissertation research including base-building and consent, data collection and intervention, analysis and interpretation of data and implications for future research, policy and practice. Guidance will include preparation for presenting dissertation research and preparation for the final defense.

College/Department: School of Public Health Repeat Status: Can be repeated 8 times for 12 credits

Restrictions: Can enroll if program is DRPH.

Prerequisites: PBHL 901 [Min Grade: C] and PBHL 902 [Min Grade: C]

PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology 1.0-12.0 Credit

Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and preparation for the final defense.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

Environmental & Occupational Health

Master of Public Health (MPH): 64.0 quarter credits

About the Program

The Master of Public Health program is intended for individuals interested in careers as community educators; population health planners; policy analysts, evaluators, researchers; and managers of health service delivery organizations and systems, managed-care programs, and other population-based organizations.

The program is interdisciplinary and requires students to complete a community-based master's project. It prepares students to enter an array of fields related to public health or a range of doctoral programs. Drexel University's Master of Public Health (MPH) program provides practical skills and experience, with a unique focus on relevant community issues, challenges, and priorities. The 64.0 quarter-credit program is interdisciplinary and requires students to complete a comprehensive, community-based master's project. The program prepares students to enter an array of fields related to public health or a range of doctoral programs.

Program Highlights

The first year of the program covers the five core disciplines offered within the context of culture and community. These include environmental and occupational health; health care systems organization, management, and policy; social and behavioral sciences for population health; epidemiology; biostatistics. Throughout the program, group case discussion sessions, case-related activities and didactic sessions are integrated into the experience.

These include:

- Skill development labs and workshops (year two)
- Public health grand rounds (for all faculty, students, and community partners) provide access to scholars and their cutting-edge research and initiatives in public health

Curriculum

The MPH full-time educational program is structured on a quarter-term basis, with a total of 64.0 credit hours required. This is generally taken as a two-year program; all coursework must be completed within five years of the date of matriculation for the full-time program.

The second-year curriculum is composed of four required courses, three elective courses, and the Community-Based Master's Project (CBMP), the culminating experience required of full-time Drexel MPH students. Students spend approximately 12 hours each week working on a community-oriented, health-related project, often working as an integral part of a community-based organization. This can be in the areas of government, healthcare and social services, among others.

In preparation for developing their final paper, students are required to identify an issue or problem of significance to the target community or agency, synthesize the literature, develop an approach or methodology to address the issue and either implement and test the validity of a proposed approach or set out a detailed prescription for addressing the problem. Students may also work with faculty in specific research areas.

Joint Doctor of Medicine and Master of Public Health Degree (MD/MPH)

Students wishing to complete a course of study earning the joint MD/MPH degree can complete such a program in 5 years. They must apply for the joint program and be accepted by both the Drexel University College of Medicine and the School of Public Health. Students in this program have enriched public health content in their first two years of medical school and spend their third year of study full time in the School of Public Health. Students are able to enter clinical rotations and residency selection having obtained the MPH degree.

Additional Information

For additional information about this program, contact:

Stephanie Johnson snj22@drexel.edu 267.359.6065

	Foundation Cou	rses	28.0
	PBHL 516	Introduction to Public Health	
	PBHL 520	Principles of Biostatistics	
	PBHL 530	Principles of Epidemiology	
	PBHL 540	Prevention Principles and Practices	
	PBHL 550	Community Based Prevention Practices	
	PBHL 600	Management, Leadership, Assurance and Health Services	
	PBHL 640	Environmental Health	
	PBHL 650	Public Policy and Advocacy	
	Required Comm	unity-Based Master's Project Courses	12.0
	PBHL 680	Community Based Master's Project I	
	PBHL 681	Community Based Master's Project II	

	PBHL 682	Community Based Master's Project III	
F	Required Cour	ses	12.0
	PBHL 641	Environmental Hazard Assessment	
	PBHL 643	Environmental and Occupational Toxicology	
	PBHL 647	Occupational and Environmental Epidemiology	
	PBHL 665	Environmental Risk Analysis	
Electives		12.0	

Students are required to successfully complete four electives (12.0 credits). These courses may be within the School of Public Health, or from other academic units within the University. Students must meet with their Academic Advisor in selecting their electives. It is the responsibility of the student to determine course restrictions and the registration process for campus electives taken at the Main Campus. The following is a sample of some of the School of Public Health electives offered by department:

Biostatistics Electives

PBHL 664

PBHL 621	Intermediate Biostatistics II
PBHL 622	Statistical Inference I
PBHL 628	Survival Data Analysis
PBHL 629	Design & Analysis of Clinical Trials
PBHL 631	Applied Multivariate Analysis
PBHL 683	Advanced Clinical Trials & Experiment Design
PBHL 684	Statistical Inference II
PBHL 686	Advanced Statistical Computing
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
PBHL 693	Applied Bayesian Analysis
PBHL 696	Nonparametric and Semiparametric Models
PBHL 699	Biostatistical Computing with Stata

F	PBHL 699	Biostatistical Computing with Stata
Cor	mmunity Heal	th and Prevention Electives
*80	0 level courses	s may require professor's permission
F	PBHL 674	Studying Rare or Hidden Groups
F	PBHL 675	LGBT Health Disparities
F	PBHL 676	Intersectional Perspectives
F	PBHL 678	Drug Use in Public Health
F	PBHL 801	Theory & Practice of Community Health & Preventions I
F	PBHL 803	Theory & Practice of Community Health and Preventions II
F	PBHL 804	Research Methods for Community Health and Prevention
F	PBHL 805	Qualitative Research in Community Health
F	PBHL 810	Practicum in Community Health and Prevention
F	PBHL 814	Community Based Participatory Research
F	PBHL 823	Faith, Religion, Spirituality, and Health
F	PBHL 824	Public Health Ethics
F	PBHL 827	Advanced Topics in Qualitative Analysis
Environmental and Occupational Health Electives		
F	PBHL 642	Healthy Housing & Built Environment
F	PBHL 646	Environmental Health in Vulnerable Populations
F	PBHL 648	Public Health and Disaster Preparedness
F	PBHL 649	Occupational and Environmental Cancers
F	PBHL 663	Injury Prevention and Control

Safety in Healthcare

Epidemiology Electives

PBHL 633	Epidemiology of Cancer
PBHL 635	Social Epidemiology and Psychiatric Epidemiology
PBHL 636	Infectious Disease Epidemiology
PBHL 638	Perinatal Epidemiology
PBHL 639	Cardiovascular Disease Epidemiology & Prevention
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
Health Managem	ent and Policy Electives

riculti management and ronoy Electives		
*800 level course	s may require professor's permission	
PBHL 604	Public Health Advocacy and Activism	
PBHL 605	Change Management in Public Health	
PBHL 610	Active Issues in Public Health	
PBHL 612	Public Health Funding & Program Development	
PBHL 613	Seminar in Fire Arms and Public Health	
PBHL 614	Coordinating a Population's Care	
PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class	
PBHL 616	Public Health Surveillance: Aligning Data and Policy Use	
PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic	
PBHL 618	Historical and Contemporary Developments in Social Justice	
PBHL 802	Health and Human Rights	
PBHL 851	Health Systems Policy Analysis	
PBHL 852	Economics of Health Policy & Social Justice	
PBHL 853	Applied Health Economics: Technology Assessment and Economic Evaluation	
PBHL 854	The Politics of Food & Gender	
PBHL 856	Violence, Trauma and Adversity in Public Health	

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity, diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (Temple University School of Medicine) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor.

Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (*Utrecht University*) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (*University of Pennsylvania*) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health;

ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, geneenvironmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (*University of Pennsylvania*) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (Duke University Medical School) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (*University of Pennsylvania*) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (*The University of Michigan School of Public Health*) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate

Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning: Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Courses

PBHL 501S INTRODUCTION TO PUBLIC HEALTH 1.0-2.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 503 Public Health Independent Study 1.0-3.0 Credit

An independent study course designed to cover special topics relevant to public health and one or more of the core disciplines of biostatistics, epidemiology, environmental and occupational health, health behavior and promotion and health management. Students will work independently with the guidance of appropriate public health faculty.

College/Department: School of Public Health **Repeat Status:** Can be repeated 6 times for 9 credits

Restrictions: Can enroll if major is PH.

PBHL 503S INDEPENDENT STUDY 1.0-14.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 505 Community Health & Prevention 3.0 Credits

This course integrates knowledge about individual health behavior and decision-making with the rich ecological context found in communities. Coverage of basic knowledge and behavior science theories, models and research methods will be provided as well as modern human rights framework to analyze and create public health interventions and policies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 507 Health Policy and Management 3.0 Credits

Health management and policy is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This area of study has both an organizational management and a public policy focus and it especially addresses issues involving the accessibility, organization, costs, financing and outcomes of health services.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 509 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of environmental and occupational health as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to environmental and occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 510ES Block I-Introduction to Public Health 2.0 Credits

This course presents an overview of the principles of public health and the concepts and foci of each of its core disciplines. It is a required course for the Executive MPH students.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 516 Introduction to Public Health 2.0 Credits

This course introduces and investigates the history, issues, function and context of public health, community health and health systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 520 Principles of Biostatistics 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 520ES BIOSTATISTICS 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 530 Principles of Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment/evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 530ES Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment and evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics taught in Block II.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 540 Prevention Principles and Practices 4.0 Credits

Focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. The goal of this course is to provide basic knowledge of social and behavioral science theories, models, and research methods.

PBHL 540ES Behavioral Assessment 4.0 Credits

Introduces principles of health behavior in context of the human life-cycle and covers their application to prevention and health promotion programs in a community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 550 Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building, community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540 [Min Grade: C]

PBHL 550ES Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540ES [Min Grade: C]

PBHL 560 Issues in Global Health 3.0 Credits

This course provides an overview of critical global health issues and the disproportionate effect on vulnerable populations, and will show how to apply the principles of human rights and environmental justice to those global health concerns.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 560ES MPH Comm Based MP Part A 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

PBHL 570ES Block XI- Integrated Public Health Case Analysis 4.0 Credits

This is the capstone course of the Executive MPH. Students will work in small groups to conduct a case analysis and a case development focusing on current public health issues which are multidisciplinary. All core disciplines will be examined as influences for the problem and possible solutions.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 599 Special Topics 0.5-9.0 Credits

See department for course description. **College/Department:** School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 600 Management, Leadership, Assurance and Health Services 3.0 Credits

This course explores critical elements of assurance in public health organizations by understanding overarching public health principles in leadership and through an integrated management model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 600ES Health Management and Leadership 4.0 Credits

Explores critical elements of the assurance role of public health, beginning from the premise that effectiveness of program delivery and of the assurance role itself requires an understanding of organizations, leadership, and change, in economic, strategic and systematic context. Applies management concepts and theories through an integrated model of the management process. In the latter portion of the block, extends, applies, and integrates previously developed concepts and theories with those of strategy, planning, accounting, financial management, and information systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 601 Management Health Care Systems 3.0 Credits

This course addresses the management of healthcare outcomes from several perspectives: patient, patient care and health systems. It explores how absolute clincial outcomes are impacted by intermediate outcomes in healthcare delivery and how these are evaluated from an economic outcomes perspective. It also addresses disparities observed in achieving health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 602 Public Health Practice 3.0 Credits

This course addresses current and transforming issues in public health policy and management, examines the history of each issue and analyzes forces that have led to new policy or management approaches. A key goal of the course is to build critical thinking, effective management approaches and creativity skills.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 603 Advanced Healthcare Financial Management 3.0 Credits

The Business of Healthcare: Advanced Healthcare Financial Management is a course designed for non-financial health care managers. Using the case study approach, it offers and introduction to the most-used tools and techniques of health care financial management. There is a particular focus on fundamental.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 604 Public Health Advocacy and Activism 3.0 Credits

The elective course will provide distinct, specialized training in the leadership skills, tools and techniques needed to develop effective advocacy skills. Additionally, students will learn to integrate research-based data in order to strengthen advocacy initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 650 [Min Grade: C]

PBHL 604S INTRO TO HLTH FINANCE 0.0 Credits

This course is part of a block of courses. Credit hours are tracked for PBHL 600 only.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 605 Change Management in Public Health 3.0 Credits

Strategy, Innovation and Change Management is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course prepares students for management responsibilities in delivering new health services. The course focuses on developing strategies to adopt innovative services and management technique.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 606 Vaccines and Public Health Policy 3.0 Credits

This course examines the history and development of S Vaccine policy and the implementation of policy in the public health setting. The course will examine the history and ethics of this broad public health intervention and examine policy challenges.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 607 Evolution of United States Health Policy 3.0 Credits

This is a reading intensive seminar in the evolution of the US health system and history of 20th century US health policy: how it adapted to internal and external forces with an emphasis on the cyclic interest - and disinterest - in universal health care coverage.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 608 Fundamentals of Disaster Management 3.0 Credits

Fundamentals of Disaster Management is an elective course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course provides an understanding of the broad range of disaster management issues, and study strategies used to help a community prepare.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 609 Issues in United States Health Policy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation in the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 610 Active Issues in Public Health 3.0 Credits

Through critical review and discussion of current articles from the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report, this course provides real-world illustration of principles learned in first-year MPH courses. Students will review articles on outbreak investigations, emergent situations, public health surveillance, and program updates for a mix of acute and chronic, infectious and non-infectious, and domestic and global health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 611 Race, Ethnicity and Health 3.0 Credits

Race, Ethnicity and Health is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course explores racial and ethnic disparities in health status and access to healthcare, and examines intervention approaches to eliminate them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 612 Public Health Funding & Program Development 3.0 Credits

This course introduces students to the principles and procedures for writing grant proposals to fund non-profit organizations. Students identify a need, gap, or problem that is addressed by a non-profit organization and work from the vantage point of that organization. The course is organized around the effort to identify a need, develop and intervention, and write a grant proposal for the organization.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 612ES MPH BLK VII-PRGM PLAN & EVAL 4.0 Credits

Beginning from the premise that the health-assurance role of public health begins with program planning, development, and evidence-based practice, this block examines concepts and theories underlying program planning, development, and evaluation. Emphasizes program application in context of specific problems and community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 613 Seminar in Fire Arms and Public Health 3.0 Credits

The seminar will focus on firearms and their impact on the public's health. Using recent events of mass firearm violence and urban violence, the seminar will seek to put into perspective the evolving policy discussion about the role of firearms in affecting the health of a range of populations through homicide, intentional injury, domestic violence, suicide, as well as general issues of population safety.

PBHL 614 Coordinating a Population's Care 3.0 Credits

This course examines the evolving concepts and population health in the current area of healthcare reform. Recent debate over healthcare expenditures has highlighted that chronic and preventable conditions account for the majority of healthcare costs. Our traditional healthcare system, however, is not positioned well to combat rising healthcare costs. Care coordination and population health are receiving attention as key strategies and concepts that are critical for the transition from a reactive dysfunctional system that provides expensive, fragmented sick care to a more organized, focus systems that can deliver proactive, coordinated, preventive and wellness care as well as acute and chronic care management.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 615 Perspectives on Gender, Race, Ethnicity, and Social Class 3.0 Credits

This course will explore the history of concepts of gender, race, ethnicity and social class and probe the biology, sociology and constructed

meanings of these deeply situated ideas.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 616 Public Health Surveillance: Aligning Data and Policy Use 3.0 Credits

Public health surveillance - the monitoring of population health - is integral to public health practice. Surveillance not only informs public health programs and policies but also shapes broader public understanding of the importance of different health problems. This course provides an overview of the methods and uses of surveillance in public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 617 Health Disparities: Systemic, Structural, Environmental & Economic 3.0 Credits

This course explores racial and ethnic disparities in health status and access to health and examines interventions to eliminate them. Students learn to define and describe racial, ethnic and gender-related disparities, discuss underlying mechanisms, think critically about existing research on health disparities and develop proposals for reducing them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 618 Historical and Contemporary Developments in Social Justice 3.0 Credits

Courses will cover direct and indirect links between public health policies, political circumstances, social and economic conditions and effects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 619 Decision Analysis in Public Health and Medicine 3.0 Credits

A survey course of decision analysis and its relevance and use in public health and public policy decisions. Focus will be directed towards population health data, decision-making in conditions of uncertainty, and health policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 620 Intermediate Biostatistics I 3.0 Credits

This course focuses on an overview of the linear modeling methods most ocmmonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data.

Focus is on implemeting models and interpreting results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 621 Intermediate Biostatistics II 3.0 Credits

The course reinforces and builds upon the concepts in PHBL 620. It adds theoretical background on various linear model assumptions and multivariable model-building strategies. Approaches to model diagnostics (e.g., goodness of fit, residual analysis) are also covered.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 622 Statistical Inference I 3.0 Credits

This course introduces probability and biostatistics theory. Topics include the basic concepts of probability including Bayes theorem; probability distributions of both discrete and continuous types of variables along with their properties; and the underlying theoretical foundation of the statistical inference including parameter estimation, hypothesis testing, hierarchical models and Bayesian inference.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 623 Introduction to Statistical Computing 3.0 Credits

Provides the students with sufficient data management and computing skills enabling them to manage small to intermediate size public health projects. Students will learn basic data management and analytic programming in the SAS statistical software.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 624 Regression Methods 3.0 Credits

Regression Methods is a required course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. It covers topics in linear regression, logistic regression and time until event analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 625 Longitudinal Data Analysis 3.0 Credits

Course covers modern statistical techniques for longitudinal data from an applied perspective. Suitable for doctoral and master students in biostatistics and doctoral students in epidemiology, clinical trials and social science analyzing longitudinal data.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: A] and PBHL 621 [Min Grade: A]

PBHL 626 Multivariate Linear Models 3.0 Credits

Multivariate Linear Models is an elective course for the Master of Public Health (MPH) program of study, especially for students concentrating in Epidemiology or Biostatistics, but open to students in other concentrations as well. It covers topics in analysis of variance and covariance, repeated measures analysis, factor analysis and path analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 627 Categorical Data Analysis Methods 3.0 Credits

Categorical Data Analysis Methods is an elective course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. This course discusses some of the specialized methods to model data from specific studies with categorical data as an outcome.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 624 [Min Grade: B]

PBHL 628 Survival Data Analysis 3.0 Credits

This course covers the basic techniques of survival analysis. These approaches are useful in analyzing cohort data, which are common in health studies, when the main interest outcome is the onset of even and time to event is known.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 629 Design & Analysis of Clinical Trials 3.0 Credits

The purpose of this course is to cover the design and conduct of clinical trials. The course will also cover how to evaluate the scientific rigor of studies of clinical trials published in the scientific literature. Topics which will include power and sample size, study design, randomization methods, recruitment, missing data, ethical issues and statistical analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 630 Intermediate Epidemiology 3.0 Credits

This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include: basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling. An emphasis is also placed on critically reading epidemiologic literature.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 630ES MPH BLOCK VIIIB-COMM BASED MP 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 631 Applied Multivariate Analysis 3.0 Credits

This course introduces students to statistical methods for describing and analyzing multivariate data. Topics to be covered include basic matrix algebra, multivariate normal distribution; linear models with multivariate response, multivariate analysis of variance; profile analysis, dimension reduction techniques, including principle component analysis, factor analysis, canonical correlation, multidimensional scaling; discriminate/ cluster analysis; and classification/regression trees.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 632 Applied Survey Research in Epidemiology 3.0 Credits

Applied Survey Research in Epidemiology is a required course for the Master of Public Health (MPH) program of study, concentration in Epidemiology and Biostatistics. This course addresses theoretical and practical aspects to the conduct of survey research in human populations. Practical requirements for research proposal development is covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 633 Epidemiology of Cancer 3.0 Credits

This course will provide students with training in the methods and topics specific to the epidemiology of cancer. Students will learn about cancer surveillance, etiologic studies, therapy trials, and prevention/screening studies of cancer.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 634 Epidemiology for Public Health Practice 3.0 Credits

This course is designed to enable the student to understand epidemiology as a health discipline and how epidemiology provides information for infectious/non-infectious disease prevention and control. Topics cover public health surveillance, outcomes research, health services research, principles of cancer registration, and a variety of practice-related exercises.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 632 [Min Grade: B]

PBHL 635 Social Epidemiology and Psychiatric Epidemiology 3.0 Credits

This course focuses on the content and methods of social epidemiology and the clinical, methodologic, and epidemiologic aspects of psychiatric illness. In focusing on social and psychiatric/psychological issues, students are required to explore theoretical and empirical aspects of disease etiology and disease course that extends beyond a biomedical model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

and PBHL 632 [Min Grade: C]

PBHL 635ES MPH Comm Based MP Part C 2.0 Credits

Independent Study.

PBHL 636 Infectious Disease Epidemiology 3.0 Credits

Course will provide training in the methods specific to infectious disease epidemiology within the context of the study of several major classes of infectious diseases with global impact on public health. Students will learn about population-level data sources and surveillance methods and techniques in outbreak investigations.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PH. Prerequisites: PBHL 530 [Min Grade: C]

PBHL 636S MPH BLOCK VIII - CONCENTRATION 3.0 Credits

College/Department: School of Public Health

PBHL 637 Chronic Disease Epidemiology 3.0 Credits

Chronic Disease Epidemiology/Social Epidemiology is an elective course for the Master of Public Health (MPH) program of study, concentration in Epidemiology. This course addresses the general disciplines of chronic disease epidemiology and social epidemiology.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 637S PUBLIC HEALTH CONCENTRATION 0.0 Credits

College/Department: School of Public Health

PBHL 638 Perinatal Epidemiology 3.0 Credits

Introduces topical issues and methodological approaches to studying maternal and child health outcomes during the perinatal period. Focus is on study designs and data sources most relevant to perinatal epidemiology and examples of epidemiology research on common perinatal health issues. Current research in perinatal epidemiology and directions for research are also presented.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 639 Cardiovascular Disease Epidemiology & Prevention 3.0 Credits

This course provides a forum for in-depth discussions of one of the main public health issues. Topics include the pathophysiology of atherosclerosis and cardiovascular disease (CVD), trends in coronary heart disease, stroke, hypertension and heart failure mortality/morbidity, well-established and emerging CVD risk factors, and major strategies for CVD prevention/control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 640 Environmental Health 4.0 Credits

Introduces concepts, theories, and programmatic application within the field of environmental health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 640ES Environmental & Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the

fields of environmental and occupational health.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit

PBHL 641 Environmental Hazard Assessment 3.0 Credits

This course provides students with a general understanding of the recognition and evaluation of chemical, physical and biological hazards. Particular emphasis is placed on airborne hazard evaluation theory and methods. Students become familiar with commonly used industrial hygiene equipment through participation in laboratory and field exercise.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 642 Healthy Housing & Built Environment 3.0 Credits

Course provides students with understanding of connection between health and housing specifically the impact factors of both built environment and indoor environment has on the health status of residents, especially those at risk for allergic and respiratory diseases.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 643 Environmental and Occupational Toxicology 3.0 Credits

This course will provide students with a basic understanding of the recognition and evaluation of chemical, physical and biological hazards in the environment and workplace. The course addresses fundamentals of toxicology, legal implications of exposure and prevention strategies. Topics will include: general toxicology principles, metals, chemical and dust exposures and physical agents.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: B]

PBHL 644 Environmental Health for Public Health Practitioners 3.0 Credits

This course will provide students with an understanding of the fundamental knowledge and basic practices necessary for environmental health professionals who practice at the municipal and state levels.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 646 Environmental Health in Vulnerable Populations 3.0 Credits

Policy instruments and tools in place to protect the health of vulnerable populations will be critically examined as well as issues related to equity and justice. A number of case studies will be examined to exemplify why certain populations are vulnerable to various environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 647 Occupational and Environmental Epidemiology 3.0 Credits

Occupational and Environmental Epidemiology for Public Health is a required course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. Students are familiarized with commonly used industrial hygiene equipment through participation in laboratory and field exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 530 [Min Grade: B] and PBHL 640 [Min Grade: B]

and PBHL 660 [Min Grade: B]

PBHL 648 Public Health and Disaster Preparedness 3.0 Credits

Public Health Readiness and Disaster Preparedness is an elective course. This course provides students with an understanding of the recognition and evaluation of chemical, physical and biological hazards related to terror attacks, and other man-made/natural disasters.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 649 Occupational and Environmental Cancers 3.0 Credits

Occupational and Environmental Cancers is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics in courses of cancer, the prevention of cancer, and public policy regarding cancer.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 650 Public Policy and Advocacy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation is the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 650ES Health Policy & Advocacy 4.0 Credits

Introduces the fundamentals of public-health law and the concepts and theories of health-policy development, adoption, and evaluation. Also introduces the advocacy process and its importance to development of sound public health policy. Students complete the M.P.H. program by exploring major public health topics in some depth. Emphasizes systemic integration and the integration of the assessment, assurance, and policy development roles of public health in problem, population, and political context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 651 Legal Aspects of Public Health 3.0 Credits

This course covers legal and policy issues in the implementation of public health programs. It emphasizes underlying themes that frame these efforts.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is LAW or major is PH or major is PHFT.

Prerequisites: PBHL 650 [Min Grade: C]

PBHL 660 Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the field of occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 661 Occupational and Environmental Diseases 3.0 Credits

Occupational and Environmental Diseases is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics related to lung diseases caused by occupational and or environmental exposures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 662 Environmental and Occupational Policy 3.0 Credits

This course provides an overview of the origines and development of environmental and occupational health policies in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 663 Injury Prevention and Control 3.0 Credits

A survey course examining the history, burden and cost of injury at the population level and its impact on health care systems. Lectures and readings will focus on critical analysis of incidence, risk, policy and prevention.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 664 Safety in Healthcare 3.0 Credits

This course examines the history of healthcare safety as an emerging public health problem in the US. Topics such as patient safety, nurse injury and other outcomes will be studied. Effects of safety climate, organizaitonal culture, and clinical knowledge on partients, healthcare workers and the healthcare system are discussed.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 665 Environmental Risk Analysis 3.0 Credits

This course will provide an overview of the fundamentals of risk for environmental health. Students will develop a critical understanding of the key components of risk assessment (hazard identification, dose modeling, exposure assessment, and risk characterization) through a series of environmental health problem case studies. Quantitative methods for conducting risk assessment will be taught, including use of software tools. We will discuss how risk assessment can inform risk management approaches (such as regulatory options) and risk communication, and vice versa. The course will emphasize the potentials, limitations, and uncertainties of the risk analysis framework for protecting human health from environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 670 Multicultural Competence in Community Health and Prevention 3.0 Credits

The goal of this course is to equip students already versed in the fundamentals of public health principles with additional practice skills and knowledge in cultural competency. Implicit in the terms cultural competence is a set of congruent behaviors, attitudes, beliefs and values enabling people to work effectively across cultures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 671 Theory and Practice of Community Health and Prevention 3.0 Credits

This course introduces public health students to the theoretical foundation of community and population-based health promotion. The course emphasizes theories and models for individual and planned social and community change designed to improve health; and the application and impact of theoretical constructs in designing intervention strategies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 672 Theory and Practice in Health Communication 3.0 Credits

The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners in the steps required in developing, implementing and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 673 Outcomes Assessment of Community Health and Prevention 3.0 Credits

This course is designed to review the principles of identifying short-term, mid-term and long-term outcomes and how these are linked to program goals, objectives, mission and vision. Topics include selecting outcomes in conjunction with the community, and strategies for design, data collection, analysis and interpretation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 674 Studying Rare or Hidden Groups 3.0 Credits

Target audience for this course is those intending to conduct research or evaluate programs designed for rare, stigmatized and/or hidden populations and for consumers of such programs. The course seeks to help students understand the ethics of research/evaluation in such programs, analyze health outcome measures and appropriately store data collected.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 675 LGBT Health Disparities 3.0 Credits

LGBT community ranging from HIV/AIDS to intimate partner violence.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 676 Intersectional Perspectives 3.0 Credits

This health focuses on health among gay, lesbian, bisexual and transgender (LGBT) populations from the perspective and theoretical framework of intersectionality. This course explores how the intersections of various identities such as race, ethnicity, socio-economic status result in different health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 678 Drug Use in Public Health 3.0 Credits

In the past several decades drug use has emergered as a major public health issue. The course will focus on biological, psychological, social, and cultural aspects of key licit and illicit substances. Additionally, students will learn relevant public health aspects of drug use, including prevention, intervention, and policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 680 Community Based Master's Project I 4.0 Credits

This course is the first of 3 CBMP courses and will encompass the first stages of the year long process of producing a final master?s project. Activities will include selection of CBMP site, CBMP workshops, student logs, IRB and HIPAA training. A learning agreement, community site profile and project proposal will be expected as end-products of student?s first 10 weeks at site and aforementioned activities.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 681 Community Based Master's Project II 4.0 Credits

This course is the second of 3 CBMP courses and will encompass the intermediate stages of the CBMP process. Activities will include CBMP workshops, IRB submission (if applicable) and regular attendance at community site. Student?s progress at site and on final project will be assessed through Community Site Preceptor Mid-Year Report and assessment by Faculty Advisor.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 682 Community Based Master's Project III 4.0 Credits

This is the third of 3 CBMP courses and represents the final stage of the CBMP process. Draft of final project will be previewed through short presentation to SPH community. Final oral defense, presentation of CBMP Poster and submission of final project paper for binding are the major activities of this course.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 683 Advanced Clinical Trials & Experiment Design 3.0 Credits

Course prepares students to design & conduct clinical trials and other health related experiments. It will cover the development of a study protocol for a clinical trial, selection of the study population, sample size, and treatment assignment methods. Advanced experimental designs will also be covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 621 [Min Grade: C]

PBHL 684 Statistical Inference II 3.0 Credits

This course is a continuation of Statistical Inference I: focusing on concepts and methods of statistical inference. Topics include point/interval estimation, methods of moments, maximum likelihood estimation, Bayes estimates, hypothesis testing, Meyman-Pearson lemma, likelihood ration tests and large sample approximation, Bayesian analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: C]

PBHL 685 Data Analysis Project 6.0 Credits

Provides the student with experience completeing a substantive data analysis in either an academic or applied setting. The project will be performed over a full term under the supervision of the advisor. Projects based in seetings outside the Department are jointly-supervised by the advisor and a doctorally-prepared host organization researcher.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is BIOS and program is MS.

PBHL 686 Advanced Statistical Computing 3.0 Credits

This course expands on computational methods used in biostatistics. It covers numerical techniques, programming, and simulations and will connect these to fundamental concepts in probability and statistics. The course will use the statistical software, R, to apply these concepts and enable the practical application of biostatistical models to real-world problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 687 Readings in Biostatistics 1.0 Credit

Guided readings course designed to introduce MS Biostatistics students (and other interested students) to classic papers in Biostatistics. Provides students with exposure to classic biostatistics papers and practice critically reading statistics literature. Also exposes students to some issues relevant to the practice of biostatistics that are not covered in coursework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 688 Statistical Inference I Lab 1.0 Credit

This course is a continuation of Statistical Inference I: In the sense that statistical concepts and methods will be developed in a mathematical framework and also additional topics will developed in a mathematical framework and also additional topics will be discussed as time permits. Topics tentatively selected include distributions, conditional distributions and expectation, probability inequalities/identities, limit theorems, and Bayesian methods.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

Corequisite: PBHL 622

PBHL 689 Master of Science Epidemiology Project 1.0-12.0 Credit

This course is designed to provide guidance of the MS Epidemiology project. Working with a faculty advisor, students will design and conduct an epidemiologic study that poses and tests a research question using a sufficiently robust data set. Components of the project will include data collection as necessary, data management and analysis and the preparation of a manuscript for publication or a research report that is consistent with accepted thesis and publication standards in epidemiology.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 48 credits

PBHL 690 Applied time Series Analysis 3.0 Credits

Introduces students to a variety of statistical methods for modeling and analysis of time series data, with emphasis on application. Topics include Theory of stationary random processes; Non-stationary time series models; Model identification, parameter estimation, diagnostics checking and model selection; spectral analysis; and Introduction to contemporary modeling topics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Credits

This course will examine the causes of many human diseases at a molecular level, paying particular attention to the role of inflammation in disease processes and examining the role of cell cycle dysregulation in the etiology of many human cancers. In order to understand the pathologic basis for disease, the course will also cover the normal structure and function of many body systems, that when compromised lead to diseases of public health importance.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: B]

PBHL 692 Public Health Obesity Prevention Research 3.0 Credits

This class will provide students with a foundation in obesity assessment, interpretation of obesity research and study designs used to examine population level obesity interventions. The substantive focus of this class is on environmental contexts (physical environment, economic and social environments) that influence obesity risk. The methodological focus of this class is on designing and evaluating population-level / macro level policies that may affect diet, physical activity, and obesity.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 693 Applied Bayesian Analysis 3.0 Credits

The course provides a practical introduction to Bayesian statistical inference, which is now at the core of many advanced methods. The course will compare traditional frequentist estimation, which relies on maximization methods, to Bayesian estimation of the posterior distribution. Students will learn numerical integration methods, such as Markov Chain Monte Carlo, to obtain these various distributions and ultimately make inference in a Bayesian framework. The course will also use the freely available statistical software, R (http://cran.r-project.org/).

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 625 [Min Grade: B] and PBHL 684 [Min Grade: B]

and PBHL 686 [Min Grade: B]

PBHL 694 Biostatistical Literature Review 1.0 Credit

This course is designed to train students on how to conduct a systematic literature review. The final literature review produced will then be included in the student's data analysis project written report. The course will draw on the skills and experience of biostatistics faculty in the Department of Epidemiology & Biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 695 Statistical Consulting 2.0 Credits

The objective of this course is to introduce biostatistics graduate students to the fundamental aspects of statistical consulting and to provide training for being an effective statistical consultant. Topics tentatively selected include: Roles and responsibilities of biostatisticians in collaboration with scientists and other clients, oral and written communication skills, sample size and power calculations, study design, how to help researchers formulate their scientific questions in quantifiable terms, how to deal with missing data, how to write statistical analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 696 Nonparametric and Semiparametric Models 3.0 Credits

The objective of this course is to introduce students to the fundamental concepts and applicable techniques of non-parametric and semi-parametric models, in particular, nonlinear functional relationships in regression analyses. Topics tentatively selected include: Density estimation, smoothing, non-parametric regression, additive models, semi-parametric mixed models, and generalized additive models.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 686 [Min Grade: B-]

PBHL 697 Generalized Linear Model 3.0 Credits

The objective of this course is to introduce students to generalized linear regression models (theoretical properties, model interpretation and application). Topics include: 1) Review of categorical data and related sampling distributions; 2) Two/Three-way contingency tables; 3) logistic regression and poission regression;4) loglinear models for contingency tables; 5) generalized linear mixed models for categorical responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 698 [Min Grade: B]

PBHL 698 Linear Statistical Models 3.0 Credits

The objective of this course is to introduce students to linear regression models (computation, theoretical properties, model interpretation and application). Topics include: 1) Review of basic concepts of matrix algebra that are particularly useful in linear regression, and basic R programing features; 2) (weighted) least square estimation, inference and testing; 3) regression diagnostics, outlier influence; 4) variable selection and robust regression.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 699 Biostatistical Computing with Stata 3.0 Credits

Public health research often involves the management, manipulation and analysis of complicated sets of data with standard statistical software packages. This course is designed to introduce the student to practical issues in the management and analysis of public health and biomedical data using the Stata programming language. This course is designed to give students a basic introduction to the Stata computing programming and is intended for students with limited or no previous experiences with Stata. The focuses on simple data analysis such as creating data sets, combining and modifying data, preparing data for analyses, working with Stata commands and do-files, and approaches data structure. The course will also present the conventions used for statistical analysis commends in Stata, and will illustrate these through review of limited set example commands. After taking this course, students will be comfortable using Stata to manage and manipulate data in classes and basic research projects.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 699ES Special Topics in PH 1.0 Credit

Public health is a multi-disciplinary field, drawing from the disciplines of Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy Management and Social and Behavioral Sciences. Through the use of archived online presentations, this self-directed course allows students to draw from a library of lectures which focus on the five core disciplines of public health. After viewing online lectures, students will then analyze and synthesize newly learned concepts with their own understanding of public health and public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 701 Introduction to Descriptive Epidemiology and Biostatistics 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 701S Intro Descript Epidem/Biostats 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 702 Introduction to Analytic Epidemiology and Biostatistics 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 701 [Min Grade: B]

PBHL 702S Intro Analytic Epidem/Biostats 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701S [Min Grade: B] or PBHL 701S [Min Grade: S]

PBHL 703 Design and Analysis Epidemiological Studies 3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701 [Min Grade: B] and PBHL 702 [Min Grade: B]

PBHL 703S Design/Analysis Epidem Studies 2.0-3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: (PBHL 701S [Min Grade: B] and PBHL 702S [Min Grade: B]) or (PBHL 701S [Min Grade: S] and PBHL 702S [Min Grade: S])

PBHL 704 Proseminar in Global Health Ethics 1.0 Credit

The Proseminar in Global Health Ethics has been designed to afford maximum learning opportunities to: understand ethical concerns in global health; analyze social and cultural factors for better understanding of global health issues; tackle global health questions in relation to "hard to reach groups"; develop cross-cutting skills and competencies in global health. With this in mind, using global health case studies, the proseminar will also integrate student-directed problem based learning (PBL) in the review of health ethics. This focuses on providing structured learning activities to develop learner autonomy in a constructive and collaborative educational process.

College/Department: School of Public Health **Repeat Status:** Can be repeated 3 times for 3 credits

PBHL 705 Public Health in Developing Countries 3.0 Credits

This course is designed to provide students with an overview of public health issues specific to low and middle income countries and introduce students to the core concepts of public health. The course is divided into four parts: principles and goals of international health and health services in developing countries; cross-cutting global health issues; the burden of disease in developing countries; and cooperating to improve health and human rights in developing countries.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 706 Globalization, Development and Comparative Health Systems 3.0 Credits

This course presents a survey of comprehensive examinations of the structure of health systems in selected countries worldwide and provides an understanding of ways that health systems work in other countries (and thereby to better analyze policy issues affecting health and examine both global health issues and health systems from a comparative perspective). This course also explores country-level debates on issues such as access to care and funding and will note how a country's history has influenced the development of its health system. Specific attention is paid to the development of the national health system, financing, and delivery infrastructure, the impact of globalizations, development, and international relations is also examined.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 707 Monitoring and Evaluation in Global Health 3.0 Credits

This course is designed to provide students with a systematic approach to planning, implementing, monitoring, and evaluating global health programs. Students will learn the general principles of monitoring and evaluation (M&E) as well as criteria for selecting indicators and metrics, and various tools/models will be introduced to offer students an overview of the program planning and M&E process. Utilizing knowledge and skills from this course, students will be able to: apply scientific evidence throughout the program planning, implementation, and M&E process; design program work plans based on logic models; develop a proposal to secure donor and stakeholder support - and a plan implementing, monitoring, and evaluating a global health program or intervention; plan evidence based interventions to meet internationally established health targets; develop and M&E framework to assess organizations; utilize project management techniques throughout he program planning, implementation and M&E process; and develop context-specific implementation strategies foe scaling up best-practice interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 708 Global Health Integration Module and Field Practicum Experience 6.0 Credits

This course will provide students with a distributed and evaluated global health training experience that requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and apply theory and principles in a situation that approximates some aspect of professional practice in global health and international development. Students will be mentored through the experience by faculty members, and will complete online modules as well as a 2-3 week field practicum (80-120 hours as part of a "summer institute") working closely with preceptors from partnering NGOs, international agencies, Ministries of Health and foreign institutions in the global health practice setting. Geographic focus will rotate between the Americas, Middle East, Asia Pacific, Australia, Africa, and Europe - based on site availability, participating faculty, and collaborative institutions in the US and abroad. Potential themes include health equity and social justice, MCH, HIV/AIDS, disparities and vulnerable sub-population, rural and agricultural health, food security, WASH, non-communicable disease, disasters and complex emergencies, EPI, IMCI, etc. Site and theme specific cross-cultural training and formal pre-departure orientation will be required in the integration module.

PBHL 801 Theory & Practice of Community Health & Preventions I 3.0 Credits

This course introduces the student to the principles, scientific methods, and major research issues in community health and prevention. The history, concepts and methods of prevention science are presented and major theoretical contributions to prevention are discussed. Course concludes with a discussion about using theoretical-empirical frameworks to guide intervention design.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 802 Health and Human Rights 3.0 Credits

Health and wellbeing are intricately associated with fundamental human rights. This course will cover direct links between public health policies, political circumstances, and social and economic conditions and their affects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 803 Theory & Practice of Community Health and Preventions II 3.0 Credits

Course focuses on public health interventions. Discusses individual and environmental theories of change, home, school, worksite, and community-based interventions, harm reduction, and multilevel intervention. Process and outcome of intervention research is investigated.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 804 Research Methods for Community Health and Prevention 3.0 Credits

Research Methods for Community Health and Prevention. Public health leaders must understand and use diverse research methods to make significant contributions to community health and prevention. This course integrates foundations of research methodology with use of appropriate statistical procedures to prepare students to apply rigorous scientific methods to understand and solve major public health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 805 Qualitative Research in Community Health 3.0 Credits

Qualitative Research in Community Health. Students will study and use a variety of qualitative methods suited for public health practice and research. Methods include case study analysis, individual interviews, focus groups, ethnography, and observation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 806 Community Health Research Methods 3.0 Credits

This course covers key principles and methods of community epidemiology. Topics include the epidemiologic perspective on health, epidemiologic study designs, surveillance databases, and survey design. Students will design and implement a community survey, analyze and interpret results, and discuss the contributions of epidemiology to prevention and policy formulation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 807 Analytic Methods for Community Health and Prevention 3.0 Credits

Analytical Methods for Community Health and Prevention. This will cover advanced design issues, methods for exploring data, traditional statistical techniques, and techniques for prevention research. This course integrates the foundations of research methodology with the use of computers and appropriate statistical procedures to prepare students to meet the increasing demands for conducting applied research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 808 Community Program Evaluation 3.0 Credits

Much of public health is about developing programs for individual and behavioral change. Therefore, public health practitioners must be able to understand the importance of developing, implementing, and evaluating public health programs. This course highlights the natural interweaving of three program elements.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 809 Community Health Policy Development and Analysis 3.0 Credits

Community Health Policy Development Analysis. Health policy is integral to the prevention of death, illness, disability, and the promotion of health. Course participants will learn about federal, state, and local roles in policymaking, roles of public opinion and interest groups, and methods for policy development and analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 901 [Min Grade: C]

PBHL 810 Practicum in Community Health and Prevention 3.0 Credits

Practicum in Community Health and Prevention. 480 hours of supervised experience applying concepts and methods to ongoing community health programs or policy development.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 813 Theory and Practice of Health Communication 3.0 Credits

Theory and Practice of Health Communication. The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners the steps required in developing, implementing, and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 814 Community Based Participatory Research 3.0 Credits

Community Based Participatory Research. Participatory Action Research acknowledges that every human being has the capacity to be a change agent. This is accomplished through an alternate view of the research world in which collaboration is emphasized. This course provides theory and skills necessary to plan, implement and evaluate community-based Participatory Action Research initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 815 Community Participation in Decision Making 3.0 Credits

Community Participation in Decision Making. This course examines how communities accomplish planned change. We will consider a number of models including community development, social planning, social action and public advocacy using historical and contemporary examples.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 817 Economic Evaluation Methods for Community Health and Prevention 3.0 Credits

Economic Evaluation Methods for Community Health and Prevention. Understanding and applying economic concepts and methods is critical for analyzing and solving health system problems. Topics include and overview of economic theory to healthcare, and major economic evaluation methods of cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 818 Community Nutrition and Food Politics 3.0 Credits

Community Nutrition and Food Politics. The purpose of this course is to allow students to learn about and discuss the social, economic, cultural and political influences of obesity and hunger involves understanding the multi-layered influences of food production, distribution and consumption.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 819 Understanding and Preventing Domestic Violence 3.0 Credits

Understanding and Preventing Domestic Violence. Domestic violence is endemic in the United States. This course is designed to define and describe the problem as well as critically evaluate programs designed to intervene and prevent. Major topics include systems, advocacy, policy, economic, socio-political, and psychological phenomena.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 820 Adolescent Risk Behavior in a Developmental Context 3.0 Credits

Adolescent Risk Behavior in a Developmental Context. This course uses a developmental perspective to focus on key problems and issues that affect the health of adolescents. The course highlights adolescents as protagonists in a life drama as puberty raises questions about relationships, questions about fairness, equality and justice, about connection and care and ultimately about their behaviors.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 821 Public Health Practice in and with Latino Communities 3.0 Credits

Public Health Practice in and with Latino Communities. The goal of this course is to prepare students for genuine engagement in a cultural diverse experience in Latino populations within the U.S. using an interdisciplinary approach in the context of public health practice. Attention will be given to various Latino subgroups, and ways to work within and across these.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 822 Independent Study in Community Health and Prevention 1.0-3.0 Credit

Independent Study in Community Health and Prevention. Independent study concerning concepts, methods, or specific health issues in community health and prevention. May be repeated six times for credit.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 18 credits

PBHL 823 Faith, Religion, Spirituality, and Health 3.0 Credits

This course focuses on the roles that "faith", "religion", and "spirituality" play in individual and community health. The course will focus on understanding the multiplicity of definitions of these terms (particularly spirituality and religion) and how these terms relate to health across time and cultures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 824 Public Health Ethics 3.0 Credits

Course explores emergence, philosophical, historical, political development, relationship to human rights, and future of Public Health. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 825 Measuring Health 3.0 Credits

Course for students using health measurement scales, and constructing measures of health for evaluation, research, population monitoring, or policy purposes. Methods will be xplored for measuring health in individuals and populations. Reviews fundamental theories of measurement including classical test theory, item response theory, and qualitative and quantitative approaches.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 826 Causal Inference in Epidemiology 3.0 Credits

Provides an in-depth theoretical foundation on epistemology and models of disease causation in epidemiology. Students will be expected to answer the question how can we know that A causes B from diverse perspectives ranging from theoretical models, statistical conventions around identifying causation, and mitigating bias.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 630 [Min Grade: B]

PBHL 827 Advanced Topics in Qualitative Analysis 3.0 Credits

This course teaches students how to analyze an existing qualitative dataset. The course is structured in a seminar/workshop format. A key feature of the course involves students reviewing and critiquing each other's manuscripts. Students may be first author on their manuscript and will be expected to submit their manuscript to a peer-review journal.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 805 [Min Grade: C]

PBHL 830 Advanced Epidemiology 4.0 Credits

This course covers more advanced methodologic issues in analytic epidemiology including: in-depth discussions of cohort, case-control, and case-cohort studies, missing data and methods of single/multiple imputation, theoretical basis of and analytic methods for using intermediate endpoints/surrogate markers, repeated measures analysis, the use of DAGS, and propensity socres to mitigate confounding.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 620 [Min Grade: B]

PBHL 831 Epidemiology PhD Seminar I 1.0 Credit

This seminar provides the opportunity for entering epidemiology PhD students to review intermediate-to-advanced level concepts in Epidemiology. The weekly one-hour seminar will quickly review basic concepts of epidemiology and discuss conceptual underpinnings of core concepts in epidemiologic research in more detail.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 833 Epidemiology PhD Seminar II 3.0 Credits

This course is a doctoral level seminar designed to introduce students to epidemiologic methods and substantive courses not covered and offers practical skills for funding and conducting their own research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 834 Methodological Challenges 3.0 Credits

This course is designed to provide a theoretical foundation and the practical tools necessary for addressing challenges to causal inference in epidemiological research.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 835 Proposal Writing Seminar 3.0 Credits

Designed to provide students with an understanding of the methodologic and logistic problems involved in designed and conducting epidemiologic studies. The course also offers students opportunities to critically evaluate the adequacy and scientific merit of research protocols.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

PBHL 850 Practicum in Health Policy & Social Justice 10.0 Credits

The practicum is required, invovled supervised practical experience applying concepts and methods to new health policy development and/ or modification of exisiting policy. The student will identify a health policy and social justice problem and analyze the problem through using the appropriate complement of methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is HPSJ and classification is PhD.

PBHL 851 Health Systems Policy Analysis 3.0 Credits

This course examines alternative approaches to structuring a nation's health system and reforming existing systems. Development of an analytic framework to explore health systems of different nations and performance evaluation of those systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 852 Economics of Social Justice 3.0 Credits

The course provides an overview of the evolution of economic thought from Aristotle to the present with special emphasis on health and public health. 18th and 19th century moral philosophers a dn more recent work by economists is read and discussed. Unethical or unjust behaviors in contemporary markets are examined.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 853 Applied Health Economics: Technology Assessment and Economic Evaluation 3.0 Credits

This course reviews issues and methods of assessing health care technologies and programs, with an emphasis on economic evaluation and applications to clinical and public policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 854 The Politics of Food & Gender 3.0 Credits

This course will examine the global food crisis & community nutrition in context of maternal & child health. Using current events & news stories, students will be introduced to the complex & diverse nature of the politics of food and agriculture, & how these dynamics manifest in the health and wellbeing of young children & their families.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 855 Health Services Research 3.0 Credits

Course provides an introduction to basic and "state of the art" methods for undertaking research and program evaluation within health services organizations and systems.

PBHL 856 Violence, Trauma and Adversity in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 899S REGISTERED FOR THESIS ONLY 1.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 900S Registered for Degree Only 1.0 Credit College/Department: School of Public Health

PBHL 901 Dissertation Seminar I 5.0 Credits

This is a required doctoral course to develop the dissertation proposal. Students will select and develop a research question, establish evidence of the significance, define assumptions and limitations, complete a critical analysis of literature, select and justify research methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

PBHL 902 Dissertation Seminar II 5.0 Credits

This is a required doctoral course to finalize the dissertation proposal. Students will complete the Drexel University Internal Review Board (IRB) protocol for their research. Students will prepare for the oral defense of the proposal including proposal presentation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH. Prerequisites: PBHL 901 [Min Grade: C]

PBHL 990S THESIS DEFENSE 0.0 Credits College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 995 Ph.D. Dissertation Companion 1.0-9.0 Credit

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 998 Disseration Guidance 1.0-12.0 Credit

Directed guidance of dissertation research including base-building and consent, data collection and intervention, analysis and interpretation of data and implications for future research, policy and practice. Guidance will include preparation for presenting dissertation research and preparation for the final defense.

College/Department: School of Public Health **Repeat Status:** Can be repeated 8 times for 12 credits

Restrictions: Can enroll if program is DRPH.

Prerequisites: PBHL 901 [Min Grade: C] and PBHL 902 [Min Grade: C]

PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology 1.0-12.0 Credit

Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and preparation for the final defense.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH.

Epidemiology

Master of Science: 58.0 quarter credits Master of Public Health: 64.0 quarter credits Doctor of Philosophy: 69.0 quarter credits

About the Programs The MS in Epidemiology

The goal of the MS in Epidemiology program is to produce graduates who have a solid understanding of epidemiologic principles and methods and the demonstrated ability and capacity to apply that understanding and skill. The curriculum and project requirements are designed to provide and then demonstrate the ability to effectively engage in research.

This includes the development of appropriate research questions and aims, the design and conduct of epidemiologic studies, and the appropriate analysis and interpretation and presentation of research data. Upon graduation, MS students will have attained competencies in two areas: general epidemiology knowledge and skills, and epidemiologic research methods.

The MPH in Epidemiology

The Master of Public Health program is intended for individuals interested in careers as community educators; population health planners; policy analysts, evaluators, researchers; and managers of health service delivery organizations and systems, managed-care programs, and other population-based organizations. It provides practical skills and experience, with a unique focus on relevant community issues, challenges, and priorities.

The 64.0 quarter-credit program is interdisciplinary and requires students to complete a comprehensive, community-based master's project. The program prepares students to enter an array of fields related to public health or a range of doctoral programs.

Program Highlights

The first year of the program covers the five core disciplines offered within the context of culture and community. These include environmental and occupational health; health care systems organization, management, and policy; social and behavioral sciences for population health; epidemiology; biostatistics.

Throughout the program, group case discussion sessions, case-related activities and didactic sessions are integrated into the experience. These include:

- skill development labs and workshops (year two)
- public health grand rounds (for all faculty, students, and community partners) provide access to scholars and their cutting-edge research and initiatives in public health

The PhD in Epidemiology

The PhD in Epidemiology program prepares students to approach problems with the critical analytic skills necessary for the generation of substantial and significant epidemiologic questions, and to utilize the most rigorous and parsimonious research strategies to answer such questions. Additionally, integral values of the Department and School will infuse students with the commitment to pursue important and innovative topics of inquiry even when faced with methodological challenges, and to undertake studies that generate knowledge applicable to diverse social, ethnic, and geographically defined populations.

Graduates will develop the skill and expertise necessary to initiate and direct the scientifically rigorous research necessary to generate the knowledge upon which to base public health and medical care policies and procedures designed to foster the maintenance and improvement of the health and well being of populations.

For additional information about these programs, visit Drexel's School of Public Health (http://publichealth.drexel.edu) web site.

Admission Requirements Master of Science Program

Applicants to the MS in Epidemiology program must meet the following requirements:

- · A baccalaureate degree
- · Two semesters of calculus in college
- Two courses of biology (i.e. microbiology, physiology, genetics, etc.) in college
- The application package will include: undergraduate and graduate transcripts, three letters of recommendation from faculty or professionals who can evaluate the applicant's promise as a graduate student, GRE or MCAT scores, and a written statement of career and educational goals.
- Competitive applicants will possess a undergraduate GPA of 3.30 or higher and GRE or MCAT scores above the 60th percentile.

PhD Program

Applicants to the PhD program in Epidemiology must meet the following requirements:

- MPH degree or master's degree in epidemiology or a related field.
- Potential for high level of performance in the PhD program and subsequent contributions to the field of epidemiology.

The application package will include:

- · undergraduate and graduate transcripts,
- three letters of recommendation from faculty or professionals who can evaluate the applicant's promise as a graduate student,
- official Graduate Record Examination scores (no other standardized test accepted for this program),
- a written statement of career and educational goals, professional experience, and area of research interest.

An in-person or telephone interview is required of all finalists.

All entering students are expected to have already completed introductory and intermediate level epidemiology and biostatistics courses (equivalents

of PBHL 520 and PBHL 530) as part of their Master's program or must enroll in these courses, or their equivalents, as additional requirements.

Forms, details about requirements, and information about application deadlines are all available on the School of Public Health Programs (http://www.drexel.edu/grad/programs/pubhealth) page on Drexel's Graduate Admissions website.

Degree Requirements: MS in Epidemiology

Required Courses

PBHL 516 Introduction to Public Health 2.0 Epidemiology PBHL 530 Principles of Epidemiology 4.0 PBHL 630 Intermediate Epidemiology 3.0 PBHL 632 Applied Survey Research in Epidemiology 3.0 PBHL 633 Epidemiology of Cancer 3.0 PBHL 636 Infectious Disease Epidemiology 3.0 PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Biostatistics PBHL 520 Principles of Biostatistics 4.0 PBHL 620 Intermediate Biostatistics I 3.0 PBHL 623 Introduction to Statistical Computing 3.0 PBHL 625 Longitudinal Data Analysis 3.0 PBHL 628 Survival Data Analysis 3.0 Master's Project Courses PBHL 503 Public Health Independent Study (MS in Epidemiology Project) PBHL 685 Data Analysis Project 6.0 PBHL 835 Proposal Writing Seminar 3.0 Electives 9.0 Students must select 9.0 credits total. Some potential electives	Total Credits		58.0
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PBHL 516 Introduction to Public Health 2.0 Epidemiology PBHL 530 Principles of Epidemiology 4.0 PBHL 630 Intermediate Epidemiology 3.0 PBHL 632 Applied Survey Research in Epidemiology 3.0 PBHL 633 Epidemiology of Cancer 3.0 PBHL 636 Infectious Disease Epidemiology 3.0 PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Biostatistics PBHL 520 Principles of Biostatistics 4.0 PBHL 620 Intermediate Biostatistics I 3.0 PBHL 623 Introduction to Statistical Computing 3.0 PBHL 625 Longitudinal Data Analysis 3.0 PBHL 628 Survival Data Analysis 3.0 Master's Project Courses PBHL 503 Public Health Independent Study (MS in Epidemiology Project) PBHL 685 Data Analysis Project 6.0 PBHL 835 Proposal Writing Seminar 3.0 Electives 9.0 Students must select 9.0 credits total. Some potential electives include the following: PBHL 629 Design & Analysis of Clinical Trials PBHL 634 Epidemiology for Public Health Practice PBHL 635 Social Epidemiology and Psychiatric Epidemiology		, 6,	
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PBHL 516 Introduction to Public Health 2.0 Epidemiology	PBHL 630	Intermediate Epidemiology	3.0
PBHL 516 Introduction to Public Health 2.0	PBHL 530	Principles of Epidemiology	4.0
	Epidemiology		
Public Health	PBHL 516	Introduction to Public Health	2.0
	Public Health		

Sample Plan of Study

First Year

Fall		Credits
PBHL 516	Introduction to Public Health	2.0
PBHL 520	Principles of Biostatistics	4.0
PBHL 530	Principles of Epidemiology	4.0
	Term Credits	10.0
Winter		
Winter PBHL 620	Intermediate Biostatistics I	3.0

		12.0
	Term Credits	12.0
Two MS in E	pidemiology electives*	6.0
Spring PBHL 685	Data Analysis Project	6.0
	Term Credits	9.0
MS in Epide	miology elective	3.0
PBHL 625	Longitudinal Data Analysis	3.0
DDIII oos	Epidemiology Project)	0.0
Winter PBHL 503	Public Health Independent Study (MS in	3.0
	Term Credits	9.0
PBHL 835	Proposal Writing Seminar	3.0
PBHL 633	Epidemiology of Cancer	3.0
PBHL 628	Survival Data Analysis	3.0
Fall		
Second Year	nr	
	Term Credits	9.0
PBHL 691	Pathophysiology Basis of Epidemiologic Research	3.0
PBHL 636	Infectious Disease Epidemiology	3.0
PBHL 623	Introduction to Statistical Computing	3.0
Spring	Term Credits	9.0
	Term Credits	9.0
PBHL 632	Applied Survey Research in Epidemiology	3.0

Total Credit: 58.0

Students must take 6.0 credits of electives in the second year. View the degree requirements for a list of potential electives, or check with the Department. Two electives may be taken in either fall, winter, or spring. This sample plan of study illustrates both electives being taken in the spring term.

Degree Requirements: MPH in Epidemiology

The MPH full-time educational program is structured on a quarter-term basis, with a total of 64.0 credit hours required. This is generally taken as a two-year program; all coursework must be completed within five years of the date of matriculation for the full-time program.

The second-year curriculum is composed of four required courses, three elective courses, and the Community-Based Master's Project (CBMP), the culminating experience required of full-time Drexel MPH students.

Students spend approximately 12 hours each week working on a community-oriented, health-related project, often working as an integral part of a community-based organization. This can be in the areas of government, healthcare and social services, among others. In preparation for developing their final paper, students are required to identify an issue or problem of significance to the target community or agency, synthesize the literature, develop an approach or methodology to address the issue and either implement and test the validity of a proposed approach or set out a detailed prescription for addressing the problem. Students may also work with faculty in specific research areas.

Foundation C	Courses	28.0
PBHL 516	Introduction to Public Health	
PBHI 520	Principles of Biostatistics	

PBHL 530	Principles of Epidemiology	
PBHL 540	Prevention Principles and Practices	
PBHL 550	Community Based Prevention Practices	
PBHL 600	Management, Leadership, Assurance and Health Services	
PBHL 640	Environmental Health	
PBHL 650	Public Policy and Advocacy	
Required Comn	nunity-Based Master's Project Courses	12.0
PBHL 680	Community Based Master's Project I	
PBHL 681	Community Based Master's Project II	
PBHL 682	Community Based Master's Project III	
Required Cours	es	15.0
PBHL 620	Intermediate Biostatistics I	
PBHL 623	Introduction to Statistical Computing	
PBHL 630	Intermediate Epidemiology	
PBHL 632	Applied Survey Research in Epidemiology	
PBHL 634	Epidemiology for Public Health Practice	
Electives		9.0
Students are red	uired to successfully complete three electives (9.0	

Students are required to successfully complete three electives (9.0 credits). These courses may be within the School of Public Health, or from other academic units within the University. Students must meet with their Academic Advisor in selecting their electives. It is the responsibility of the student to determine course restrictions and the registration process for campus electives taken at the Main Campus. The following is a sample of some of the School of Public Health electives offered by department:

Biostatistics Ele	ectives
PBHL 621	Intermediate Biostatistics II
PBHL 622	Statistical Inference I
PBHL 628	Survival Data Analysis
PBHL 629	Design & Analysis of Clinical Trials
PBHL 631	Applied Multivariate Analysis
PBHL 683	Advanced Clinical Trials & Experiment Design
PBHL 684	Statistical Inference II
PBHL 686	Advanced Statistical Computing
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
PBHL 693	Applied Bayesian Analysis
PBHL 696	Nonparametric and Semiparametric Models
PBHL 699	Biostatistical Computing with Stata

Community Health and Prevention Electives

*800 Level cours	ses may require professor's permission
PBHL 674	Studying Rare or Hidden Groups
PBHL 675	LGBT Health Disparities
PBHL 676	Intersectional Perspectives
PBHL 678	Drug Use in Public Health
PBHL 801	Theory & Practice of Community Health & Preventions I
PBHL 803	Theory & Practice of Community Health and Preventions II
PBHL 804	Research Methods for Community Health and Prevention
PBHL 805	Qualitative Research in Community Health
PBHI 808	Community Program Evaluation

PBHL 810	Practicum in Community Health and Prevention
PBHL 814	Community Based Participatory Research
PBHL 823	· · ·
	Faith, Religion, Spirituality, and Health
PBHL 824	Public Health Ethics
PBHL 827	Advanced Topics in Qualitative Analysis
	and Occupational Health Electives
PBHL 642	Healthy Housing & Built Environment
PBHL 646	Environmental Health in Vulnerable Populations
PBHL 648	Public Health and Disaster Preparedness
PBHL 649	Occupational and Environmental Cancers
PBHL 663	Injury Prevention and Control
PBHL 664	Safety in Healthcare
Epidemiology E	lectives
PBHL 633	Epidemiology of Cancer
PBHL 635	Social Epidemiology and Psychiatric Epidemiology
PBHL 636	Infectious Disease Epidemiology
PBHL 638	Perinatal Epidemiology
PBHL 639	Cardiovascular Disease Epidemiology & Prevention
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
Health Manager	nent and Policy Electives
*800 level course	es may require professor's permission
PBHL 604	Public Health Advocacy and Activism
PBHL 606	Vaccines and Public Health Policy
PBHL 610	Active Issues in Public Health
PBHL 612	Public Health Funding & Program Development
PBHL 613	Seminar in Fire Arms and Public Health
PBHL 614	Coordinating a Population's Care
PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class
PBHL 616	Public Health Surveillance: Aligning Data and Policy Use
PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic
PBHL 618	Historical and Contemporary Developments in Social Justice
PBHL 802	Health and Human Rights
PBHL 851	Health Systems Policy Analysis
PBHL 852	Economics of Health Policy & Social Justice
PBHL 853	Applied Health Economics: Technology
	Assessment and Economic Evaluation
PBHL 854	The Politics of Food & Gender
PBHL 856	Violence, Trauma and Adversity in Public Health
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Degree Requirements: PhD in Epidemiology

Completion of the PhD in Epidemiology requires: (1) a minimum of 69.0 quarter credit hours of course work beyond the master's degree; (2) a minimum cumulative grade point average of 3.3; (3) passing the doctoral comprehensive examination; (4) passing the candidacy oral examination; (5) completing a dissertation of publishable quality; and (6) passing the final defense.

A student in the PhD degree program shall have seven calendar years from the date of initial registration to complete and successfully defend a dissertation.

Electives

All students must complete two epidemiology area electives and two biostatistics area electives.

Sahaal	۰f	Dublia	Hoolth	Cara	Courses
School	OT	Public	Health	Core	Courses

PBHL 630 Intermediate Epidemiology 3.0 Select one of the following courses: PBHL 802 Health and Human Rights PBHL 824 Public Health Ethics PBHL 824 Public Health Ethics PBHL 621 Intermediate Biostatistics II 3.0 PBHL 623 Introduction to Statistical Computing 3.0 PBHL 625 Longitudinal Data Analysis 3.0 PBHL 636 Infectious Disease Epidemiology 3.0 PBHL 830 Advanced Epidemiology 4.0 PBHL 831 Epidemiology PhD Seminar I 1.0 PBHL 833 Epidemiology PhD Seminar II 3.0 PBHL 834 Methodological Challenges 3.0 PBHL 835 Proposal Writing Seminar 3.0 PBHL 899 Thesis Research: Dissertation Guidance and Epidemiology * University Required Course EDUC 531 College Teaching & Communication Skills 1.0 A minimum of two Epidemiology Area electives: 6.0 PBHL 634 Epidemiology for Public Health Practice PBHL 635 Social Epidemiology and Psychiatric Epidemiology PBHL 638 Perinatal Epidemiology PBHL 639 Cardiovascular Disease Epidemiology & PPBHL 639 Cardiovascular Disease Epidemiology & PPBHL 622 Statistical Inference I PBHL 628 Survival Data Analysis of Clinical Trials		Intermediate Diseastration I	2.0
Select one of the following courses: PBHL 802	PBHL 620	Intermediate Biostatistics I	3.0
PBHL 802 Health and Human Rights PBHL 824 Public Health Ethics Departmental Required Courses PBHL 621 Intermediate Biostatistics II 3.0 PBHL 623 Introduction to Statistical Computing 3.0 PBHL 625 Longitudinal Data Analysis 3.0 PBHL 636 Infectious Disease Epidemiology 3.0 PBHL 826 Causal Inference in Epidemiology 4.0 PBHL 830 Advanced Epidemiology 4.0 PBHL 831 Epidemiology PhD Seminar I 1.0 PBHL 833 Epidemiology PhD Seminar II 3.0 PBHL 834 Methodological Challenges 3.0 PBHL 835 Proposal Writing Seminar 3.0 Dissertation 12. PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology University Required Course EDUC 531 College Teaching & Communication Skills 1.0 A minimum of two Epidemiology Area electives: 6.0 PBHL 633 Epidemiology of Cancer PBHL 634 Epidemiology for Public Health Practice PBHL 635 Social Epidemiology and Psychiatric Epidemiology PBHL 638 Perinatal Epidemiology PBHL 639 Cardiovascular Disease Epidemiology & Prevention A minimum of two Biostatistics Area electives: 6.0 PBHL 622 Statistical Inference I PBHL 628 Survival Data Analysis PBHL 629 Design & Analysis of Clinical Trials Additional electives Students select other epidemiology or biostatistics courses, or electives from other graduate-level courses across the university		·	
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PBHL 629 Design & Analysis of Clinical Trials Additional electives 6.0 Students select other epidemiology or biostatistics courses, or electives from other graduate-level courses across the university	PBHL 622	Statistical Inference I	
Additional electives 6.0 Students select other epidemiology or biostatistics courses, or electives from other graduate-level courses across the university	PBHL 628	Survival Data Analysis	
Students select other epidemiology or biostatistics courses, or electives from other graduate-level courses across the university	PBHL 629	Design & Analysis of Clinical Trials	
electives from other graduate-level courses across the university	Additional elec	tives	6.0
	electives from o	ther graduate-level courses across the university	

Total Credits 69.0

See the PhD Program Guide (http://publichealth.drexel.edu/Academics/Degrees/PhD-Degree-in-Epidemiology/540) for additional information.

* Number of credits taken each quarter is variable depending on stage of the project and other credit load. May be taken for additional credits if necessary.

Joint Doctor of Medicine and Master of Public Health Degree (MD/MPH)

Students wishing to complete a course of study earning the joint MD/MPH degree can complete such a program in 5 years. They must apply for the joint program and be accepted by both the Drexel University College of Medicine (http://www.drexelmed.edu/home/Admissions/MDProgram.aspx) and the School of Public Health.

Students in this program have enriched public health content in their first two years of medical school and spend their third year of study full time in the School of Public Health. Students are able to enter clinical rotations and residency selection having obtained the MPH degree.

For additional information about this program, contact: Stephanie Johnson snj22@drexel.edu 267.359.6065

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity, diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (Temple University School of Medicine) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (Utrecht University) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-

level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (*University of North Carolina, Reconstructionist Rabbinical College*) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health

administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, geneenvironmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology

of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (*University of Pennsylvania*) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (The University of Michigan School of Public Health) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Courses

PBHL 501S INTRODUCTION TO PUBLIC HEALTH 1.0-2.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 503 Public Health Independent Study 1.0-3.0 Credit

An independent study course designed to cover special topics relevant to public health and one or more of the core disciplines of biostatistics, epidemiology, environmental and occupational health, health behavior and promotion and health management. Students will work independently with the guidance of appropriate public health faculty.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 9 credits

Restrictions: Can enroll if major is PH.

PBHL 503S INDEPENDENT STUDY 1.0-14.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 505 Community Health & Prevention 3.0 Credits

This course integrates knowledge about individual health behavior and decision-making with the rich ecological context found in communities. Coverage of basic knowledge and behavior science theories, models and research methods will be provided as well as modern human rights framework to analyze and create public health interventions and policies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 507 Health Policy and Management 3.0 Credits

Health management and policy is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This area of study has both an organizational management and a public policy focus and it especially addresses issues involving the accessibility, organization, costs, financing and outcomes of health services.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 509 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of environmental and occupational health as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to environmental and occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 510ES Block I-Introduction to Public Health 2.0 Credits

This course presents an overview of the principles of public health and the concepts and foci of each of its core disciplines. It is a required course for the Executive MPH students.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 516 Introduction to Public Health 2.0 Credits

This course introduces and investigates the history, issues, function and context of public health, community health and health systems.

PBHL 520 Principles of Biostatistics 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 520ES BIOSTATISTICS 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 530 Principles of Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment/evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 530ES Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment and evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics taught in Block II.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 540 Prevention Principles and Practices 4.0 Credits

Focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. The goal of this course is to provide basic knowledge of social and behavioral science theories, models, and research methods.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 540ES Behavioral Assessment 4.0 Credits

Introduces principles of health behavior in context of the human life-cycle and covers their application to prevention and health promotion programs in a community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 550 Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building, community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540 [Min Grade: C]

PBHL 550ES Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540ES [Min Grade: C]

PBHL 560 Issues in Global Health 3.0 Credits

This course provides an overview of critical global health issues and the disproportionate effect on vulnerable populations, and will show how to apply the principles of human rights and environmental justice to those global health concerns.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 560ES MPH Comm Based MP Part A 1.0 Credit

Independent Study.

College/Department: School of Public Health Repeat Status: Can be repeated 1 times for 2 credits

PBHL 570ES Block XI- Integrated Public Health Case Analysis 4.0 Credits

This is the capstone course of the Executive MPH. Students will work in small groups to conduct a case analysis and a case development focusing on current public health issues which are multidisciplinary. All core disciplines will be examined as influences for the problem and possible solutions.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 599 Special Topics 0.5-9.0 Credits

See department for course description. **College/Department:** School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 600 Management, Leadership, Assurance and Health Services 3.0 Credits

This course explores critical elements of assurance in public health organizations by understanding overarching public health principles in leadership and through an integrated management model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 600ES Health Management and Leadership 4.0 Credits

Explores critical elements of the assurance role of public health, beginning from the premise that effectiveness of program delivery and of the assurance role itself requires an understanding of organizations, leadership, and change, in economic, strategic and systematic context. Applies management concepts and theories through an integrated model of the management process. In the latter portion of the block, extends, applies, and integrates previously developed concepts and theories with those of strategy, planning, accounting, financial management, and information systems.

PBHL 601 Management Health Care Systems 3.0 Credits

This course addresses the management of healthcare outcomes from several perspectives: patient, patient care and health systems. It explores how absolute clincial outcomes are impacted by intermediate outcomes in healthcare delivery and how these are evaluated from an economic outcomes perspective. It also addresses disparities observed in achieving health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 602 Public Health Practice 3.0 Credits

This course addresses current and transforming issues in public health policy and management, examines the history of each issue and analyzes forces that have led to new policy or management approaches. A key goal of the course is to build critical thinking, effective management approaches and creativity skills.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 603 Advanced Healthcare Financial Management 3.0 Credits

The Business of Healthcare: Advanced Healthcare Financial Management is a course designed for non-financial health care managers. Using the case study approach, it offers and introduction to the most-used tools and techniques of health care financial management. There is a particular focus on fundamental.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 604 Public Health Advocacy and Activism 3.0 Credits

The elective course will provide distinct, specialized training in the leadership skills, tools and techniques needed to develop effective advocacy skills. Additionally, students will learn to integrate research-based data in order to strengthen advocacy initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 650 [Min Grade: C]

PBHL 604S INTRO TO HLTH FINANCE 0.0 Credits

This course is part of a block of courses. Credit hours are tracked for PBHL 600 only.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 605 Change Management in Public Health 3.0 Credits

Strategy, Innovation and Change Management is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course prepares students for management responsibilities in delivering new health services. The course focuses on developing strategies to adopt innovative services and management technique.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 606 Vaccines and Public Health Policy 3.0 Credits

This course examines the history and development of S Vaccine policy and the implementation of policy in the public health setting. The course will examine the history and ethics of this broad public health intervention and examine policy challenges.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 607 Evolution of United States Health Policy 3.0 Credits

This is a reading intensive seminar in the evolution of the US health system and history of 20th century US health policy: how it adapted to internal and external forces with an emphasis on the cyclic interest - and

disinterest - in universal health care coverage.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 608 Fundamentals of Disaster Management 3.0 Credits

Fundamentals of Disaster Management is an elective course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course provides an understanding of the broad range of disaster management issues, and study strategies used to help a community prepare.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 609 Issues in United States Health Policy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation in the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 610 Active Issues in Public Health 3.0 Credits

Through critical review and discussion of current articles from the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report, this course provides real-world illustration of principles learned in first-year MPH courses. Students will review articles on outbreak investigations, emergent situations, public health surveillance, and program updates for a mix of acute and chronic, infectious and non-infectious, and domestic and global health problems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 611 Race, Ethnicity and Health 3.0 Credits

Race, Ethnicity and Health is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course explores racial and ethnic disparities in health status and access to healthcare, and examines intervention approaches to eliminate them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 612 Public Health Funding & Program Development 3.0 Credits

This course introduces students to the principles and procedures for writing grant proposals to fund non-profit organizations. Students identify a need, gap, or problem that is addressed by a non-profit organization and work from the vantage point of that organization. The course is organized around the effort to identify a need, develop and intervention, and write a grant proposal for the organization.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 612ES MPH BLK VII-PRGM PLAN & EVAL 4.0 Credits

Beginning from the premise that the health-assurance role of public health begins with program planning, development, and evidence-based practice, this block examines concepts and theories underlying program planning, development, and evaluation. Emphasizes program application in context of specific problems and community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 613 Seminar in Fire Arms and Public Health 3.0 Credits

The seminar will focus on firearms and their impact on the public's health. Using recent events of mass firearm violence and urban violence, the seminar will seek to put into perspective the evolving policy discussion about the role of firearms in affecting the health of a range of populations through homicide, intentional injury, domestic violence, suicide, as well as general issues of population safety.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 614 Coordinating a Population's Care 3.0 Credits

This course examines the evolving concepts and population health in the current area of healthcare reform. Recent debate over healthcare expenditures has highlighted that chronic and preventable conditions account for the majority of healthcare costs. Our traditional healthcare system, however, is not positioned well to combat rising healthcare costs. Care coordination and population health are receiving attention as key strategies and concepts that are critical for the transition from a reactive dysfunctional system that provides expensive, fragmented sick care to a more organized, focus systems that can deliver proactive, coordinated, preventive and wellness care as well as acute and chronic care management.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 615 Perspectives on Gender, Race, Ethnicity, and Social Class 3.0 Credits

This course will explore the history of concepts of gender, race, ethnicity and social class and probe the biology, sociology and constructed meanings of these deeply situated ideas.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 616 Public Health Surveillance: Aligning Data and Policy Use 3.0 Credits

Public health surveillance - the monitoring of population health - is integral to public health practice. Surveillance not only informs public health programs and policies but also shapes broader public understanding of the importance of different health problems. This course provides an overview of the methods and uses of surveillance in public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 617 Health Disparities: Systemic, Structural, Environmental & Economic 3.0 Credits

This course explores racial and ethnic disparities in health status and access to health and examines interventions to eliminate them. Students learn to define and describe racial, ethnic and gender-related disparities, discuss underlying mechanisms, think critically about existing research on health disparities and develop proposals for reducing them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 618 Historical and Contemporary Developments in Social Justice 3.0 Credits

Courses will cover direct and indirect links between public health policies, political circumstances, social and economic conditions and effects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 619 Decision Analysis in Public Health and Medicine 3.0 Credits

A survey course of decision analysis and its relevance and use in public health and public policy decisions. Focus will be directed towards population health data, decision-making in conditions of uncertainty, and health policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 620 Intermediate Biostatistics I 3.0 Credits

This course focuses on an overview of the linear modeling methods most ocmmonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data. Focus is on implementing models and interpreting results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 621 Intermediate Biostatistics II 3.0 Credits

The course reinforces and builds upon the concepts in PHBL 620. It adds theoretical background on various linear model assumptions and multivariable model-building strategies. Approaches to model diagnostics (e.g., goodness of fit, residual analysis) are also covered.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 622 Statistical Inference I 3.0 Credits

This course introduces probability and biostatistics theory. Topics include the basic concepts of probability including Bayes theorem; probability distributions of both discrete and continuous types of variables along with their properties; and the underlying theoretical foundation of the statistical inference including parameter estimation, hypothesis testing, hierarchical models and Bayesian inference.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 623 Introduction to Statistical Computing 3.0 Credits

Provides the students with sufficient data management and computing skills enabling them to manage small to intermediate size public health projects. Students will learn basic data management and analytic programming in the SAS statistical software.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 624 Regression Methods 3.0 Credits

Regression Methods is a required course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. It covers topics in linear regression, logistic regression and time until event analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 625 Longitudinal Data Analysis 3.0 Credits

Course covers modern statistical techniques for longitudinal data from an applied perspective. Suitable for doctoral and master students in biostatistics and doctoral students in epidemiology, clinical trials and

social science analyzing longitudinal data.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: A] and PBHL 621 [Min Grade: A]

PBHL 626 Multivariate Linear Models 3.0 Credits

Multivariate Linear Models is an elective course for the Master of Public Health (MPH) program of study, especially for students concentrating in Epidemiology or Biostatistics, but open to students in other concentrations as well. It covers topics in analysis of variance and covariance, repeated measures analysis, factor analysis and path analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 627 Categorical Data Analysis Methods 3.0 Credits

Categorical Data Analysis Methods is an elective course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. This course discusses some of the specialized methods to model data from specific studies with categorical data as an outcome.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 624 [Min Grade: B]

PBHL 628 Survival Data Analysis 3.0 Credits

This course covers the basic techniques of survival analysis. These approaches are useful in analyzing cohort data, which are common in health studies, when the main interest outcome is the onset of even and time to event is known.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 629 Design & Analysis of Clinical Trials 3.0 Credits

The purpose of this course is to cover the design and conduct of clinical trials. The course will also cover how to evaluate the scientific rigor of studies of clinical trials published in the scientific literature. Topics which will include power and sample size, study design, randomization methods, recruitment, missing data, ethical issues and statistical analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 630 Intermediate Epidemiology 3.0 Credits

This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include: basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling. An emphasis is also placed on critically reading epidemiologic literature.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 630ES MPH BLOCK VIIIB-COMM BASED MP 1.0 Credit

Independent Study.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 631 Applied Multivariate Analysis 3.0 Credits

This course introduces students to statistical methods for describing and analyzing multivariate data. Topics to be covered include basic matrix algebra, multivariate normal distribution; linear models with multivariate response, multivariate analysis of variance; profile analysis, dimension reduction techniques, including principle component analysis, factor analysis, canonical correlation, multidimensional scaling; discriminate/ cluster analysis; and classification/regression trees.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 632 Applied Survey Research in Epidemiology 3.0 Credits

Applied Survey Research in Epidemiology is a required course for the Master of Public Health (MPH) program of study, concentration in Epidemiology and Biostatistics. This course addresses theoretical and practical aspects to the conduct of survey research in human populations. Practical requirements for research proposal development is covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 633 Epidemiology of Cancer 3.0 Credits

This course will provide students with training in the methods and topics specific to the epidemiology of cancer. Students will learn about cancer surveillance, etiologic studies, therapy trials, and prevention/screening studies of cancer.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 634 Epidemiology for Public Health Practice 3.0 Credits

This course is designed to enable the student to understand epidemiology as a health discipline and how epidemiology provides information for infectious/non-infectious disease prevention and control. Topics cover public health surveillance, outcomes research, health services research, principles of cancer registration, and a variety of practice-related exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 632 [Min Grade: B]

PBHL 635 Social Epidemiology and Psychiatric Epidemiology 3.0 Credits

This course focuses on the content and methods of social epidemiology and the clinical, methodologic, and epidemiologic aspects of psychiatric illness. In focusing on social and psychiatric/psychological issues, students are required to explore theoretical and empirical aspects of disease etiology and disease course that extends beyond a biomedical model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

and PBHL 632 [Min Grade: C]

PBHL 635ES MPH Comm Based MP Part C 2.0 Credits

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 636 Infectious Disease Epidemiology 3.0 Credits

Course will provide training in the methods specific to infectious disease epidemiology within the context of the study of several major classes of infectious diseases with global impact on public health. Students will learn about population-level data sources and surveillance methods and techniques in outbreak investigations.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PH. Prerequisites: PBHL 530 [Min Grade: C]

PBHL 636S MPH BLOCK VIII - CONCENTRATION 3.0 Credits

College/Department: School of Public Health

PBHL 637 Chronic Disease Epidemiology 3.0 Credits

Chronic Disease Epidemiology/Social Epidemiology is an elective course for the Master of Public Health (MPH) program of study, concentration in Epidemiology. This course addresses the general disciplines of chronic disease epidemiology and social epidemiology.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 637S PUBLIC HEALTH CONCENTRATION 0.0 Credits

College/Department: School of Public Health

PBHL 638 Perinatal Epidemiology 3.0 Credits

Introduces topical issues and methodological approaches to studying maternal and child health outcomes during the perinatal period. Focus is on study designs and data sources most relevant to perinatal epidemiology and examples of epidemiology research on common perinatal health issues. Current research in perinatal epidemiology and directions for research are also presented.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 639 Cardiovascular Disease Epidemiology & Prevention 3.0 Credits

This course provides a forum for in-depth discussions of one of the main public health issues. Topics include the pathophysiology of atherosclerosis and cardiovascular disease (CVD), trends in coronary heart disease, stroke, hypertension and heart failure mortality/morbidity, well-established and emerging CVD risk factors, and major strategies for CVD prevention/control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 640 Environmental Health 4.0 Credits

Introduces concepts, theories, and programmatic application within the field of environmental health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 640ES Environmental & Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the

fields of environmental and occupational health.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit

PBHL 641 Environmental Hazard Assessment 3.0 Credits

This course provides students with a general understanding of the recognition and evaluation of chemical, physical and biological hazards. Particular emphasis is placed on airborne hazard evaluation theory and methods. Students become familiar with commonly used industrial hygiene equipment through participation in laboratory and field exercise.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 642 Healthy Housing & Built Environment 3.0 Credits

Course provides students with understanding of connection between health and housing specifically the impact factors of both built environment and indoor environment has on the health status of residents, especially those at risk for allergic and respiratory diseases.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 643 Environmental and Occupational Toxicology 3.0 Credits

This course will provide students with a basic understanding of the recognition and evaluation of chemical, physical and biological hazards in the environment and workplace. The course addresses fundamentals of toxicology, legal implications of exposure and prevention strategies. Topics will include: general toxicology principles, metals, chemical and dust exposures and physical agents.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: B]

PBHL 644 Environmental Health for Public Health Practitioners 3.0 Credits

This course will provide students with an understanding of the fundamental knowledge and basic practices necessary for environmental health professionals who practice at the municipal and state levels.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 646 Environmental Health in Vulnerable Populations 3.0 Credits

Policy instruments and tools in place to protect the health of vulnerable populations will be critically examined as well as issues related to equity and justice. A number of case studies will be examined to exemplify why certain populations are vulnerable to various environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 647 Occupational and Environmental Epidemiology 3.0 Credits

Occupational and Environmental Epidemiology for Public Health is a required course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. Students are familiarized with commonly used industrial hygiene equipment through participation in laboratory and field exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 530 [Min Grade: B] and PBHL 640 [Min Grade: B]

and PBHL 660 [Min Grade: B]

PBHL 648 Public Health and Disaster Preparedness 3.0 Credits

Public Health Readiness and Disaster Preparedness is an elective course. This course provides students with an understanding of the recognition and evaluation of chemical, physical and biological hazards related to terror attacks, and other man-made/natural disasters.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 649 Occupational and Environmental Cancers 3.0 Credits

Occupational and Environmental Cancers is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics in courses of cancer, the prevention of cancer, and public policy regarding cancer.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 650 Public Policy and Advocacy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation is the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 650ES Health Policy & Advocacy 4.0 Credits

Introduces the fundamentals of public-health law and the concepts and theories of health-policy development, adoption, and evaluation. Also introduces the advocacy process and its importance to development of sound public health policy. Students complete the M.P.H. program by exploring major public health topics in some depth. Emphasizes systemic integration and the integration of the assessment, assurance, and policy development roles of public health in problem, population, and political context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 651 Legal Aspects of Public Health 3.0 Credits

This course covers legal and policy issues in the implementation of public health programs. It emphasizes underlying themes that frame these efforts.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is LAW or major is PH or major is PHFT.

Prerequisites: PBHL 650 [Min Grade: C]

PBHL 660 Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the field of occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 661 Occupational and Environmental Diseases 3.0 Credits

Occupational and Environmental Diseases is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics related to lung diseases caused by occupational and or environmental exposures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 662 Environmental and Occupational Policy 3.0 Credits

This course provides an overview of the origines and development of environmental and occupational health policies in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 663 Injury Prevention and Control 3.0 Credits

A survey course examining the history, burden and cost of injury at the population level and its impact on health care systems. Lectures and readings will focus on critical analysis of incidence, risk, policy and

PBHL 664 Safety in Healthcare 3.0 Credits

This course examines the history of healthcare safety as an emerging public health problem in the US. Topics such as patient safety, nurse injury and other outcomes will be studied. Effects of safety climate, organizaitonal culture, and clinical knowledge on partients, healthcare workers and the healthcare system are discussed.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 665 Environmental Risk Analysis 3.0 Credits

This course will provide an overview of the fundamentals of risk for environmental health. Students will develop a critical understanding of the key components of risk assessment (hazard identification, dose modeling, exposure assessment, and risk characterization) through a series of environmental health problem case studies. Quantitative methods for conducting risk assessment will be taught, including use of software tools. We will discuss how risk assessment can inform risk management approaches (such as regulatory options) and risk communication, and vice versa. The course will emphasize the potentials, limitations, and uncertainties of the risk analysis framework for protecting human health from environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 670 Multicultural Competence in Community Health and Prevention 3.0 Credits

The goal of this course is to equip students already versed in the fundamentals of public health principles with additional practice skills and knowledge in cultural competency. Implicit in the terms cultural competence is a set of congruent behaviors, attitudes, beliefs and values enabling people to work effectively across cultures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 671 Theory and Practice of Community Health and Prevention 3.0 Credits

This course introduces public health students to the theoretical foundation of community and population-based health promotion. The course emphasizes theories and models for individual and planned social and community change designed to improve health; and the application and impact of theoretical constructs in designing intervention strategies.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 672 Theory and Practice in Health Communication 3.0 Credits

The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners in the steps required in developing, implementing and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 673 Outcomes Assessment of Community Health and Prevention 3.0 Credits

This course is designed to review the principles of identifying short-term, mid-term and long-term outcomes and how these are linked to program goals, objectives, mission and vision. Topics include selecting outcomes in conjunction with the community, and strategies for design, data collection, analysis and interpretation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 674 Studying Rare or Hidden Groups 3.0 Credits

Target audience for this course is those intending to conduct research or evaluate programs designed for rare, stigmatized and/or hidden populations and for consumers of such programs. The course seeks to help students understand the ethics of research/evaluation in such programs, analyze health outcome measures and appropriately store data collected.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 675 LGBT Health Disparities 3.0 Credits

LGBT community ranging from HIV/AIDS to intimate partner violence.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 676 Intersectional Perspectives 3.0 Credits

This health focuses on health among gay, lesbian, bisexual and transgender (LGBT) populations from the perspective and theoretical framework of intersectionality. This course explores how the intersections of various identities such as race, ethnicity, socio-economic status result in different health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 678 Drug Use in Public Health 3.0 Credits

In the past several decades drug use has emergered as a major public health issue. The course will focus on biological, psychological, social, and cultural aspects of key licit and illicit substances. Additionally, students will learn relevant public health aspects of drug use, including prevention, intervention, and policy.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 680 Community Based Master's Project I 4.0 Credits

This course is the first of 3 CBMP courses and will encompass the first stages of the year long process of producing a final master?s project. Activities will include selection of CBMP site, CBMP workshops, student logs, IRB and HIPAA training. A learning agreement, community site profile and project proposal will be expected as end-products of student?s first 10 weeks at site and aforementioned activities.

PBHL 681 Community Based Master's Project II 4.0 Credits

This course is the second of 3 CBMP courses and will encompass the intermediate stages of the CBMP process. Activities will include CBMP workshops, IRB submission (if applicable) and regular attendance at community site. Student?s progress at site and on final project will be assessed through Community Site Preceptor Mid-Year Report and assessment by Faculty Advisor.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 682 Community Based Master's Project III 4.0 Credits

This is the third of 3 CBMP courses and represents the final stage of the CBMP process. Draft of final project will be previewed through short presentation to SPH community. Final oral defense, presentation of CBMP Poster and submission of final project paper for binding are the major activities of this course.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 683 Advanced Clinical Trials & Experiment Design 3.0 Credits

Course prepares students to design & conduct clinical trials and other health related experiments. It will cover the development of a study protocol for a clinical trial, selection of the study population, sample size, and treatment assignment methods. Advanced experimental designs will also be covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 621 [Min Grade: C]

PBHL 684 Statistical Inference II 3.0 Credits

This course is a continuation of Statistical Inference I: focusing on concepts and methods of statistical inference. Topics include point/interval estimation, methods of moments, maximum likelihood estimation, Bayes estimates, hypothesis testing, Meyman-Pearson lemma, likelihood ration tests and large sample approximation, Bayesian analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: C]

PBHL 685 Data Analysis Project 6.0 Credits

Provides the student with experience completeing a substantive data analysis in either an academic or applied setting. The project will be performed over a full term under the supervision of the advisor. Projects based in seetings outside the Department are jointly-supervised by the advisor and a doctorally-prepared host organization researcher.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is BIOS and program is MS.

PBHL 686 Advanced Statistical Computing 3.0 Credits

This course expands on computational methods used in biostatistics. It covers numerical techniques, programming, and simulations and will connect these to fundamental concepts in probability and statistics. The course will use the statistical software, R, to apply these concepts and enable the practical application of biostatistical models to real-world problems

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 687 Readings in Biostatistics 1.0 Credit

Guided readings course designed to introduce MS Biostatistics students (and other interested students) to classic papers in Biostatistics. Provides students with exposure to classic biostatistics papers and practice critically reading statistics literature. Also exposes students to some issues relevant to the practice of biostatistics that are not covered in coursework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 688 Statistical Inference I Lab 1.0 Credit

This course is a continuation of Statistical Inference I: In the sense that statistical concepts and methods will be developed in a mathematical framework and also additional topics will developed in a mathematical framework and also additional topics will be discussed as time permits. Topics tentatively selected include distributions, conditional distributions and expectation, probability inequalities/identities, limit theorems, and Bayesian methods.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

Corequisite: PBHL 622

PBHL 689 Master of Science Epidemiology Project 1.0-12.0 Credit

This course is designed to provide guidance of the MS Epidemiology project. Working with a faculty advisor, students will design and conduct an epidemiologic study that poses and tests a research question using a sufficiently robust data set. Components of the project will include data collection as necessary, data management and analysis and the preparation of a manuscript for publication or a research report that is consistent with accepted thesis and publication standards in epidemiology.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 48 credits

PBHL 690 Applied time Series Analysis 3.0 Credits

Introduces students to a variety of statistical methods for modeling and analysis of time series data, with emphasis on application. Topics include Theory of stationary random processes; Non-stationary time series models; Model identification, parameter estimation, diagnostics checking and model selection; spectral analysis; and Introduction to contemporary modeling topics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Credits

This course will examine the causes of many human diseases at a molecular level, paying particular attention to the role of inflammation in disease processes and examining the role of cell cycle dysregulation in the etiology of many human cancers. In order to understand the pathologic basis for disease, the course will also cover the normal structure and function of many body systems, that when compromised lead to diseases of public health importance.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: B]

PBHL 692 Public Health Obesity Prevention Research 3.0 Credits

This class will provide students with a foundation in obesity assessment, interpretation of obesity research and study designs used to examine population level obesity interventions. The substantive focus of this class is on environmental contexts (physical environment, economic and social environments) that influence obesity risk. The methodological focus of this class is on designing and evaluating population-level / macro level policies that may affect diet, physical activity, and obesity.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 693 Applied Bayesian Analysis 3.0 Credits

The course provides a practical introduction to Bayesian statistical inference, which is now at the core of many advanced methods. The course will compare traditional frequentist estimation, which relies on maximization methods, to Bayesian estimation of the posterior distribution. Students will learn numerical integration methods, such as Markov Chain Monte Carlo, to obtain these various distributions and ultimately make inference in a Bayesian framework. The course will also use the freely available statistical software, R (http://cran.r-project.org/).

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 625 [Min Grade: B] and PBHL 684 [Min Grade: B]

and PBHL 686 [Min Grade: B]

PBHL 694 Biostatistical Literature Review 1.0 Credit

This course is designed to train students on how to conduct a systematic literature review. The final literature review produced will then be included in the student's data analysis project written report. The course will draw on the skills and experience of biostatistics faculty in the Department of Epidemiology & Biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 695 Statistical Consulting 2.0 Credits

The objective of this course is to introduce biostatistics graduate students to the fundamental aspects of statistical consulting and to provide training for being an effective statistical consultant. Topics tentatively selected include: Roles and responsibilities of biostatisticians in collaboration with scientists and other clients, oral and written communication skills, sample size and power calculations, study design, how to help researchers formulate their scientific questions in quantifiable terms, how to deal with missing data, how to write statistical analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 696 Nonparametric and Semiparametric Models 3.0 Credits

The objective of this course is to introduce students to the fundamental concepts and applicable techniques of non-parametric and semi-parametric models, in particular, nonlinear functional relationships in regression analyses. Topics tentatively selected include: Density estimation, smoothing, non-parametric regression, additive models, semi-parametric mixed models, and generalized additive models.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 686 [Min Grade: B-]

PBHL 697 Generalized Linear Model 3.0 Credits

The objective of this course is to introduce students to generalized linear regression models (theoretical properties, model interpretation and application). Topics include: 1) Review of categorical data and related sampling distributions; 2) Two/Three-way contingency tables; 3) logistic regression and poission regression;4) loglinear models for contingency tables; 5) generalized linear mixed models for categorical responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 698 [Min Grade: B]

PBHL 698 Linear Statistical Models 3.0 Credits

The objective of this course is to introduce students to linear regression models (computation, theoretical properties, model interpretation and application). Topics include: 1) Review of basic concepts of matrix algebra that are particularly useful in linear regression, and basic R programing features; 2) (weighted) least square estimation, inference and testing; 3) regression diagnostics, outlier influence; 4) variable selection and robust regression.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 699 Biostatistical Computing with Stata 3.0 Credits

Public health research often involves the management, manipulation and analysis of complicated sets of data with standard statistical software packages. This course is designed to introduce the student to practical issues in the management and analysis of public health and biomedical data using the Stata programming language. This course is designed to give students a basic introduction to the Stata computing programming and is intended for students with limited or no previous experiences with Stata. The focuses on simple data analysis such as creating data sets, combining and modifying data, preparing data for analyses, working with Stata commands and do-files, and approaches data structure. The course will also present the conventions used for statistical analysis commends in Stata, and will illustrate these through review of limited set example commands. After taking this course, students will be comfortable using Stata to manage and manipulate data in classes and basic research projects.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 699ES Special Topics in PH 1.0 Credit

Public health is a multi-disciplinary field, drawing from the disciplines of Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy Management and Social and Behavioral Sciences. Through the use of archived online presentations, this self-directed course allows students to draw from a library of lectures which focus on the five core disciplines of public health. After viewing online lectures, students will then analyze and synthesize newly learned concepts with their own understanding of public health and public health practice.

PBHL 701 Introduction to Descriptive Epidemiology and Biostatistics 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 701S Intro Descript Epidem/Biostats 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 702 Introduction to Analytic Epidemiology and Biostatistics 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 701 [Min Grade: B]

PBHL 702S Intro Analytic Epidem/Biostats 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701S [Min Grade: B] or PBHL 701S [Min Grade: S]

PBHL 703 Design and Analysis Epidemiological Studies 3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701 [Min Grade: B] and PBHL 702 [Min Grade: B]

PBHL 703S Design/Analysis Epidem Studies 2.0-3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: (PBHL 701S [Min Grade: B] and PBHL 702S [Min Grade: B]) or (PBHL 701S [Min Grade: S] and PBHL 702S [Min Grade: S])

PBHL 704 Proseminar in Global Health Ethics 1.0 Credit

The Proseminar in Global Health Ethics has been designed to afford maximum learning opportunities to: understand ethical concerns in global health; analyze social and cultural factors for better understanding of global health issues; tackle global health questions in relation to "hard to reach groups"; develop cross-cutting skills and competencies in global health. With this in mind, using global health case studies, the proseminar will also integrate student-directed problem based learning (PBL) in the review of health ethics. This focuses on providing structured learning activities to develop learner autonomy in a constructive and collaborative educational process.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 3 credits

PBHL 705 Public Health in Developing Countries 3.0 Credits

This course is designed to provide students with an overview of public health issues specific to low and middle income countries and introduce students to the core concepts of public health. The course is divided into four parts: principles and goals of international health and health services in developing countries; cross-cutting global health issues; the burden of disease in developing countries; and cooperating to improve health and human rights in developing countries.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 706 Globalization, Development and Comparative Health Systems 3.0 Credits

This course presents a survey of comprehensive examinations of the structure of health systems in selected countries worldwide and provides an understanding of ways that health systems work in other countries (and thereby to better analyze policy issues affecting health and examine both global health issues and health systems from a comparative perspective). This course also explores country-level debates on issues such as access to care and funding and will note how a country's history has influenced the development of its health system. Specific attention is paid to the development of the national health system, financing, and delivery infrastructure, the impact of globalizations, development, and international relations is also examined.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 707 Monitoring and Evaluation in Global Health 3.0 Credits

This course is designed to provide students with a systematic approach to planning, implementing, monitoring, and evaluating global health programs. Students will learn the general principles of monitoring and evaluation (M&E) as well as criteria for selecting indicators and metrics, and various tools/models will be introduced to offer students an overview of the program planning and M&E process. Utilizing knowledge and skills from this course, students will be able to: apply scientific evidence throughout the program planning, implementation, and M&E process; design program work plans based on logic models; develop a proposal to secure donor and stakeholder support - and a plan implementing, monitoring, and evaluating a global health program or intervention; plan evidence based interventions to meet internationally established health targets; develop and M&E framework to assess organizations; utilize project management techniques throughout he program planning, implementation and M&E process; and develop context-specific implementation strategies foe scaling up best-practice interventions.

PBHL 708 Global Health Integration Module and Field Practicum Experience 6.0 Credits

This course will provide students with a distributed and evaluated global health training experience that requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and apply theory and principles in a situation that approximates some aspect of professional practice in global health and international development. Students will be mentored through the experience by faculty members, and will complete online modules as well as a 2-3 week field practicum (80-120 hours as part of a "summer institute") working closely with preceptors from partnering NGOs, international agencies, Ministries of Health and foreign institutions in the global health practice setting. Geographic focus will rotate between the Americas, Middle East, Asia Pacific, Australia, Africa, and Europe - based on site availability, participating faculty, and collaborative institutions in the US and abroad. Potential themes include health equity and social justice, MCH, HIV/AIDS, disparities and vulnerable sub-population, rural and agricultural health, food security, WASH, non-communicable disease, disasters and complex emergencies, EPI, IMCI, etc. Site and theme specific cross-cultural training and formal pre-departure orientation will be required in the integration module.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 801 Theory & Practice of Community Health & Preventions I 3.0 Credits

This course introduces the student to the principles, scientific methods, and major research issues in community health and prevention. The history, concepts and methods of prevention science are presented and major theoretical contributions to prevention are discussed. Course concludes with a discussion about using theoretical-empirical frameworks to guide intervention design.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 802 Health and Human Rights 3.0 Credits

Health and wellbeing are intricately associated with fundamental human rights. This course will cover direct links between public health policies, political circumstances, and social and economic conditions and their affects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 803 Theory & Practice of Community Health and Preventions II 3.0 Credits

Course focuses on public health interventions. Discusses individual and environmental theories of change, home, school, worksite, and community-based interventions, harm reduction, and multilevel intervention. Process and outcome of intervention research is investigated.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 804 Research Methods for Community Health and Prevention 3.0 Credits

Research Methods for Community Health and Prevention. Public health leaders must understand and use diverse research methods to make significant contributions to community health and prevention. This course integrates foundations of research methodology with use of appropriate statistical procedures to prepare students to apply rigorous scientific methods to understand and solve major public health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 805 Qualitative Research in Community Health 3.0 Credits

Qualitative Research in Community Health. Students will study and use a variety of qualitative methods suited for public health practice and research. Methods include case study analysis, individual interviews, focus groups, ethnography, and observation.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit
Prerequisites: PBHL 801 [Min Grade: C]

PBHL 806 Community Health Research Methods 3.0 Credits

This course covers key principles and methods of community epidemiology. Topics include the epidemiologic perspective on health, epidemiologic study designs, surveillance databases, and survey design. Students will design and implement a community survey, analyze and interpret results, and discuss the contributions of epidemiology to prevention and policy formulation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 807 Analytic Methods for Community Health and Prevention 3.0 Credits

Analytical Methods for Community Health and Prevention. This will cover advanced design issues, methods for exploring data, traditional statistical techniques, and techniques for prevention research. This course integrates the foundations of research methodology with the use of computers and appropriate statistical procedures to prepare students to meet the increasing demands for conducting applied research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 808 Community Program Evaluation 3.0 Credits

Much of public health is about developing programs for individual and behavioral change. Therefore, public health practitioners must be able to understand the importance of developing, implementing, and evaluating public health programs. This course highlights the natural interweaving of three program elements.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 809 Community Health Policy Development and Analysis 3.0 Credits

Community Health Policy Development Analysis. Health policy is integral to the prevention of death, illness, disability, and the promotion of health. Course participants will learn about federal, state, and local roles in policymaking, roles of public opinion and interest groups, and methods for policy development and analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 901 [Min Grade: C]

PBHL 810 Practicum in Community Health and Prevention 3.0 Credits

Practicum in Community Health and Prevention. 480 hours of supervised experience applying concepts and methods to ongoing community health programs or policy development.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 813 Theory and Practice of Health Communication 3.0 Credits

Theory and Practice of Health Communication. The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners the steps required in developing, implementing, and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 814 Community Based Participatory Research 3.0 Credits

Community Based Participatory Research. Participatory Action Research acknowledges that every human being has the capacity to be a change agent. This is accomplished through an alternate view of the research world in which collaboration is emphasized. This course provides theory and skills necessary to plan, implement and evaluate community-based Participatory Action Research initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 815 Community Participation in Decision Making 3.0 Credits

Community Participation in Decision Making. This course examines how communities accomplish planned change. We will consider a number of models including community development, social planning, social action and public advocacy using historical and contemporary examples.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 817 Economic Evaluation Methods for Community Health and Prevention 3.0 Credits

Economic Evaluation Methods for Community Health and Prevention. Understanding and applying economic concepts and methods is critical for analyzing and solving health system problems. Topics include and overview of economic theory to healthcare, and major economic evaluation methods of cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 818 Community Nutrition and Food Politics 3.0 Credits

Community Nutrition and Food Politics. The purpose of this course is to allow students to learn about and discuss the social, economic, cultural and political influences of obesity and hunger involves understanding the multi-layered influences of food production, distribution and consumption.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 819 Understanding and Preventing Domestic Violence 3.0 Credits

Understanding and Preventing Domestic Violence. Domestic violence is endemic in the United States. This course is designed to define and describe the problem as well as critically evaluate programs designed to intervene and prevent. Major topics include systems, advocacy, policy, economic, socio-political, and psychological phenomena.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 820 Adolescent Risk Behavior in a Developmental Context 3.0 Credits

Adolescent Risk Behavior in a Developmental Context. This course uses a developmental perspective to focus on key problems and issues that affect the health of adolescents. The course highlights adolescents as protagonists in a life drama as puberty raises questions about relationships, questions about fairness, equality and justice, about connection and care and ultimately about their behaviors.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 821 Public Health Practice in and with Latino Communities 3.0 Credits

Public Health Practice in and with Latino Communities. The goal of this course is to prepare students for genuine engagement in a cultural diverse experience in Latino populations within the U.S. using an interdisciplinary approach in the context of public health practice. Attention will be given to various Latino subgroups, and ways to work within and across these.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 822 Independent Study in Community Health and Prevention 1.0-3.0 Credit

Independent Study in Community Health and Prevention. Independent study concerning concepts, methods, or specific health issues in community health and prevention. May be repeated six times for credit.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 18 credits

PBHL 823 Faith, Religion, Spirituality, and Health 3.0 Credits

This course focuses on the roles that "faith", "religion", and "spirituality" play in individual and community health. The course will focus on understanding the multiplicity of definitions of these terms (particularly spirituality and religion) and how these terms relate to health across time and cultures.

PBHL 824 Public Health Ethics 3.0 Credits

Course explores emergence, philosophical, historical, political development, relationship to human rights, and future of Public Health. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 825 Measuring Health 3.0 Credits

Course for students using health measurement scales, and constructing measures of health for evaluation, research, population monitoring, or policy purposes. Methods will be xplored for measuring health in individuals and populations. Reviews fundamental theories of measurement including classical test theory, item response theory, and qualitative and quantitative approaches.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 826 Causal Inference in Epidemiology 3.0 Credits

Provides an in-depth theoretical foundation on epistemology and models of disease causation in epidemiology. Students will be expected to answer the question how can we know that A causes B from diverse perspectives ranging from theoretical models, statistical conventions around identifying causation, and mitigating bias.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 630 [Min Grade: B]

PBHL 827 Advanced Topics in Qualitative Analysis 3.0 Credits

This course teaches students how to analyze an existing qualitative dataset. The course is structured in a seminar/workshop format. A key feature of the course involves students reviewing and critiquing each other's manuscripts. Students may be first author on their manuscript and will be expected to submit their manuscript to a peer-review journal.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 805 [Min Grade: C]

PBHL 830 Advanced Epidemiology 4.0 Credits

This course covers more advanced methodologic issues in analytic epidemiology including: in-depth discussions of cohort, case-control, and case-cohort studies, missing data and methods of single/multiple imputation, theoretical basis of and analytic methods for using intermediate endpoints/surrogate markers, repeated measures analysis, the use of DAGS, and propensity socres to mitigate confounding.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 620 [Min Grade: B]

PBHL 831 Epidemiology PhD Seminar I 1.0 Credit

This seminar provides the opportunity for entering epidemiology PhD students to review intermediate-to-advanced level concepts in Epidemiology. The weekly one-hour seminar will quickly review basic concepts of epidemiology and discuss conceptual underpinnings of core concepts in epidemiologic research in more detail.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit
Restrictions: Can enroll if major is EPID.

PBHL 833 Epidemiology PhD Seminar II 3.0 Credits

This course is a doctoral level seminar designed to introduce students to epidemiologic methods and substantive courses not covered and offers

practical skills for funding and conducting their own research.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit
Restrictions: Can enroll if major is EPID.

PBHL 834 Methodological Challenges 3.0 Credits

This course is designed to provide a theoretical foundation and the practical tools necessary for addressing challenges to causal inference in epidemiological research.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 835 Proposal Writing Seminar 3.0 Credits

Designed to provide students with an understanding of the methodologic and logistic problems involved in designed and conducting epidemiologic studies. The course also offers students opportunities to critically evaluate the adequacy and scientific merit of research protocols.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

PBHL 850 Practicum in Health Policy & Social Justice 10.0 Credits

The practicum is required, invovled supervised practical experience applying concepts and methods to new health policy development and/ or modification of exisiting policy. The student will identify a health policy and social justice problem and analyze the problem through using the appropriate complement of methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is HPSJ and classification is PhD.

PBHL 851 Health Systems Policy Analysis 3.0 Credits

This course examines alternative approaches to structuring a nation's health system and reforming existing systems. Development of an analytic framework to explore health systems of different nations and performance evaluation of those systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 852 Economics of Social Justice 3.0 Credits

The course provides an overview of the evolution of economic thought from Aristotle to the present with special emphasis on health and public health. 18th and 19th century moral philosophers a dn more recent work by economists is read and discussed. Unethical or unjust behaviors in contemporary markets are examined.

PBHL 853 Applied Health Economics: Technology Assessment and Economic Evaluation 3.0 Credits

This course reviews issues and methods of assessing health care technologies and programs, with an emphasis on economic evaluation and applications to clinical and public policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 854 The Politics of Food & Gender 3.0 Credits

This course will examine the global food crisis & community nutrition in context of maternal & child health. Using current events & news stories, students will be introduced to the complex & diverse nature of the politics of food and agriculture, & how these dynamics manifest in the health and wellbeing of young children & their families.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 855 Health Services Research 3.0 Credits

Course provides an introduction to basic and "state of the art" methods for undertaking research and program evaluation within health services organizations and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 856 Violence, Trauma and Adversity in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 899S REGISTERED FOR THESIS ONLY 1.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 900S Registered for Degree Only 1.0 Credit College/Department: School of Public Health

PBHL 901 Dissertation Seminar I 5.0 Credits

This is a required doctoral course to develop the dissertation proposal. Students will select and develop a research question, establish evidence of the significance, define assumptions and limitations, complete a critical analysis of literature, select and justify research methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit **Restrictions:** Can enroll if program is DRPH.

PBHL 902 Dissertation Seminar II 5.0 Credits

This is a required doctoral course to finalize the dissertation proposal. Students will complete the Drexel University Internal Review Board (IRB) protocol for their research. Students will prepare for the oral defense of the proposal including proposal presentation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH. Prerequisites: PBHL 901 [Min Grade: C]

PBHL 990S THESIS DEFENSE 0.0 Credits College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 995 Ph.D. Dissertation Companion 1.0-9.0 Credit

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 998 Disseration Guidance 1.0-12.0 Credit

Directed guidance of dissertation research including base-building and consent, data collection and intervention, analysis and interpretation of data and implications for future research, policy and practice. Guidance will include preparation for presenting dissertation research and preparation for the final defense.

College/Department: School of Public Health Repeat Status: Can be repeated 8 times for 12 credits

Restrictions: Can enroll if program is DRPH.

Prerequisites: PBHL 901 [Min Grade: C] and PBHL 902 [Min Grade: C]

PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology 1.0-12.0 Credit

Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and preparation for the final defense.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit **Restrictions:** Can enroll if program is DRPH.

Executive Master of Public Health

Master of Public Health (MPH) 42.0 semester credits

About the Program

Designed for working professionals, the Executive Masters of Public Health (MPH) program offers a convenient class schedule in which students can earn their degree in 21 months. Whether working in public health, a related health care setting or seeking a career change, the Executive MPH program is tailored for individuals who are committed to advancing their careers and acquiring the knowledge and tools to advance to leadership roles in public health. The program is fast-paced, intensive and demanding, but builds on each individual's former education, work experience and skills. The Executive MPH degree program is offered at Drexel's Philadelphia campus, as well as the University's Center for Graduate Studies in Sacramento. The Executive MPH program is fully accredited by the Council on Education for Public Health (CEPH).

The Executive MPH curriculum combines both on-campus coursework and online modalities. Classes meet on-campus one Friday and one Saturday per month, and utilize web-based technologies to interact with faculty and students during the weeks when not in class. Classes are taught by full-time School of Public Health faculty with active and diverse research interests as well as adjunct faculty with leadership roles as practicing public health professionals.

Like the full-time MPH program, the Executive MPH program covers the major disciplines of public health including community health and prevention, environmental and occupational health, epidemiology and biostatistics, and health management and policy. A significant portion of the curriculum incorporates a problem based learning (PBL) model in which the student becomes a self-directed learner as well as a

collaborator in learning with their peers, assisted by the faculty facilitator. The PBL model develops the students' skill sets to design and effectively address the increasingly dynamic and evolving discipline of public health, and prepares each individual to be an effective life-long learner.

Additional Information

For more information, about this program, contact:

Colleen Baillie Director of Enrollment MPH Program cpb32@drexel.edu

William Hickey, PhD Executive MPH Program Director wh34@drexel.edu

For more information on the Executive MPH at the Drexel University Sacramento campus, please contact:

Marcella Gonsalves, MPH Director, Sacramento Executive MPH Program mdg58@drexel.edu

Or visit the School of Public Health's Executive Master of Public Health Degree (http://publichealth.drexel.edu/academics/degrees/executive-mphdegree) page.

Admission Requirements

The School of Public Health seeks students with intellectual and interpersonal competencies as well as those with potential for leadership. The school has set a high priority on establishing a student body that is representative of the nation's population. We strive to recruit and to admit applicants from underrepresented minority groups who can contribute to the richness of our student population and to that of the nation's public health professionals.

While most of the students in the Executive MPH program are from the Philadelphia area, the format of the program does not limit students from outside of the Philadelphia region from attending.

Admissions process:

- The Admissions Committee carefully reviews applications and gives personal essays and letters of recommendation particular attention.
- The selection process weighs prior academic and personal accomplishments, emphasizing demonstrated leadership.
- Diversity of background and outside interests, depth of self-appraisal, commitment to public heath, and working with individuals are highly valued.
- · A minimum of 3 years of professional work experience is required.

Applicants should have:

- Satisfactorily completed an undergraduate bachelor degree program in an accredited US college or university, or its equivalent in another country
- · A course in Statistics is highly recommended
- Six undergraduate or graduate credits in the social or behavioral sciences and three in the biological sciences are preferred, but not required.
- Satisfactory results from one of the following taken within the past five years (the GRE or GMAT is preferred):

- o Graduate Record Examination (GRE)
- o Graduate Management Admission Test (GMAT)
- o Medical College Admission Test (MCAT)
- o Law School Admission Test (LSAT)
- Test of English as a Foreign Language (TOEFL) for applicants whose first language is not English

The Application Process also requires:

- · Completion of the School's application
- A personal essay describing what you perceive to be pressing public health issues, why a career in the field appeals to you, and how it will use your strengths and commitment
- Two letters of recommendation, preferably from individuals who can assess the applicant's ability to handle a rigorous graduate curriculum (i.e., faculty, supervisor, etc.)
- · Resume or CV.

Forms, details about requirements, and information about application deadlines are all available on the Executive MPH (http://www.drexel.edu/grad/programs/pubhealth/public-health-executive) page of Drexel's Graduate Admissions website.

Degree Requirements

The Executive Program is designed for working professionals, whether in public health or considering a career change to public health. The program is tailored for individuals who are committed to advancing their careers and acquiring the knowledge and tools to advance to leadership roles in public health.

The Executive MPH program requires a minimum of 42.0 credits. All degree requirements must be completed within sevem years of the date of matriculation. A minimum of five consecutive academic semesters is required for the degree. Enrollment must be continuous unless academic leaves are granted. A minimum overall GPA of 3.0 is required for graduation.

Required Courses

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PBHL 520ES	BIOSTATISTICS	4.0		
PBHL 530ES	Epidemiology	4.0		
PBHL 540ES	Behavioral Assessment	4.0		
PBHL 550ES	Community Based Prevention Practices	4.0		
PBHL 570ES	Block XI- Integrated Public Health Case Analysis,Integrated Public Health Case Analysis	4.0		
PBHL 600ES	Health Management and Leadership	4.0		
PBHL 612ES	Program Planning & Evaluation	4.0		
PBHL 640ES	Environmental & Occupational Health	4.0		
PBHL 650ES	Health Policy & Advocacy	4.0		
Master's Project	Courses			
PBHL 560ES	MPH Comm Based MP Part A	1.0		
PBHL 630ES	MPH Comm Based MP Part B	1.0		
PBHL 635ES	MPH Comm Based MP Part C	2.0		
Elective Courses				
Students must tal	ke two of the four courses listed below:	2.0		
PBHL 516ES	Public Health History and Ethics			
PBHL 602ES	Practicing Public Health			
PBHL 699ES	Special Topics in PH			

PBHL 855ES Research Methods: An Introduction

Total Credits 42.0

Students interested in the Executive Public Health program in Sacramento students should visit the Public Health, Executive MPH page (http://sacramento.drexel.edu/academics/master-public-health) on the Center for Graduate Studies, Sacramento web site.

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity, diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (*Temple University School of Medicine*) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco)
Department of Health Management and Policy. Professor. Public health
systems and services research, methods and uses of population health
monitoring, health care and public health interactions, public health impact
of health information automation.

Igor Burstyn, PhD (Utrecht University) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational

Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, genenvironmental interaction, propensity score methods, machine learning, stress

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (*University of Hong Kong*) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina)
Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of

aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (University of Pennsylvania) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (The University of Michigan School of Public Health) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Health Management and Policy

Master of Public Health (MPH): 64.0 quarter credits

About the Program

The Master of Public Health program is intended for individuals interested in careers as community educators; population health planners; policy analysts, evaluators, researchers; and managers of health service delivery organizations and systems, managed-care programs, and other population-based organizations.

The program is interdisciplinary and requires students to complete a community-based master's project. It prepares students to enter an

array of fields related to public health or a range of doctoral programs. Drexel University's Master of Public Health (MPH) program provides practical skills and experience, with a unique focus on relevant community issues, challenges, and priorities. The 64.0 quarter-credit program is interdisciplinary and requires students to complete a comprehensive, community-based master's project. The program prepares students to enter an array of fields related to public health or a range of doctoral programs.

Program Highlights

The first year of the program covers the five core disciplines offered within the context of culture and community. These include environmental and occupational health; health care systems organization, management, and policy; social and behavioral sciences for population health; epidemiology; biostatistics. Throughout the program, group case discussion sessions, case-related activities and didactic sessions are integrated into the experience.

These include:

- Skill development labs and workshops (year two)
- Public health grand rounds (for all faculty, students, and community partners) provide access to scholars and their cutting-edge research and initiatives in public health

Curriculum

The MPH full-time educational program is structured on a quarter-term basis, with a total of 64.0 credit hours required. This is generally taken as a two-year program; all coursework must be completed within five years of the date of matriculation for the full-time program.

The second-year curriculum is composed of four required courses, three elective courses, and the Community-Based Master's Project (CBMP), the culminating experience required of full-time Drexel MPH students. Students spend approximately 12 hours each week working on a community-oriented, health-related project, often working as an integral part of a community-based organization. This can be in the areas of government, healthcare and social services, among others.

In preparation for developing their final paper, students are required to identify an issue or problem of significance to the target community or agency, synthesize the literature, develop an approach or methodology to address the issue and either implement and test the validity of a proposed approach or set out a detailed prescription for addressing the problem. Students may also work with faculty in specific research areas.

Joint Doctor of Medicine and Master of Public Health Degree (MD/MPH)

Students wishing to complete a course of study earning the joint MD/MPH degree can complete such a program in 5 years. They must apply for the joint program and be accepted by both the Drexel University College of Medicine and the School of Public Health. Students in this program have enriched public health content in their first two years of medical school and spend their third year of study full time in the School of Public Health. Students are able to enter clinical rotations and residency selection having obtained the MPH degree.

Additional Information

For additional information about this program, contact:

Stephanie Johnson

snj22@drexel.edu 267.359.6065

Program Requirements

Foundation Co	urses	28.0
PBHL 516	Introduction to Public Health	
PBHL 520	Principles of Biostatistics	
PBHL 530	Principles of Epidemiology	
PBHL 540	Prevention Principles and Practices	
PBHL 550	Community Based Prevention Practices	
PBHL 600	Management, Leadership, Assurance and Health Services	
PBHL 640	Environmental Health	
PBHL 650	Public Policy and Advocacy	
Required Comm	unity-Based Master's Project Courses	12.0
PBHL 680	Community Based Master's Project I	
PBHL 681	Community Based Master's Project II	
PBHL 682	Community Based Master's Project III	
Required Course	es	12.0
Students must choose two courses from each of the following two categorries of courses:		
Macro Theory ar	nd Practice	
PBHL 607	Evolution of United States Health Policy	
PBHL 609	Issues in United States Health Policy	
PBHL 618	Historical and Contemporary Developments in Social Justice	
PBHL 651	Legal Aspects of Public Health	
PBHL 852	Economics of Health Policy & Social Justice	
Micro Theory an	d Practice	
PBHL 601	Management of Healthcare Outcomes	
PBHL 602	Public Health Practice	
PBHL 603	Advanced Healthcare Financial Management	
PBHL 605	Change Management in Public Health	
Electives		12.0

students are required to successfully complete four electives (12.0 credits). These courses may be within the School of Public Health, or from other academic units within the University. Students must meet with their Academic Advisor in selecting their electives. It is the responsibility of the student to determine course restrictions and the registration process for campus electives taken at the Main Campus. The following is a sample of some of the School of Public Health electives offered by department:

Biostatistics Electives

PBHL 621	Intermediate Biostatistics II
PBHL 622	Statistical Inference I
PBHL 628	Survival Data Analysis
PBHL 629	Design & Analysis of Clinical Trials
PBHL 631	Applied Multivariate Analysis
PBHL 683	Advanced Clinical Trials & Experiment Design
PBHL 684	Statistical Inference II
PBHL 686	Advanced Statistical Computing
PBHL 691	Pathophysiology Basis of Epidemiologic Research
PBHL 692	Public Health Obesity Prevention Research
PBHL 693	Applied Bayesian Analysis

PBHL 696	Nonparametric and Semiparametric Models		
PBHL 699	Biostatistical Computing with Stata		
Community Hea	Ilth and Prevention Electives		
*800 level course	es may require professor's permission		
PBHL 674	Studying Rare or Hidden Groups		
PBHL 675	LGBT Health Disparities		
PBHL 676	Intersectional Perspectives		
PBHL 678	Drug Use in Public Health		
PBHL 801	Theory & Practice of Community Health & Preventions I		
PBHL 803	Theory & Practice of Community Health and Preventions II		
PBHL 804	Research Methods for Community Health and Prevention		
PBHL 805	Qualitative Research in Community Health		
PBHL 808	Community Program Evaluation		
PBHL 810	Practicum in Community Health and Prevention		
PBHL 814	Community Based Participatory Research		
PBHL 823	Faith, Religion, Spirituality, and Health		
PBHL 824	Public Health Ethics		
PBHL 827	Advanced Topics in Qualitative Analysis		
Environmental a	and Occupational Health Electives		
PBHL 642	Healthy Housing & Built Environment		
PBHL 646	Environmental Health in Vulnerable Populations		
PBHL 648	Public Health and Disaster Preparedness		
PBHL 649	Occupational and Environmental Cancers		
PBHL 663	Injury Prevention and Control		
PBHL 664	Safety in Healthcare		
Epidemiology Electives			
PBHL 633	Epidemiology of Cancer		
PBHL 635	Social Epidemiology and Psychiatric Epidemiology		
PBHL 636	Infectious Disease Epidemiology		
PBHL 638	Perinatal Epidemiology		
PBHL 639	Cardiovascular Disease Epidemiology & Prevention		
PBHL 691	Pathophysiology Basis of Epidemiologic Research		
PBHL 692	Public Health Obesity Prevention Research		
Health Managen	nent and Policy Electives		
*800 level course	es may require professor's permission		
PBHL 604	Public Health Advocacy and Activism		
PBHL 606	Vaccines and Public Health Policy		
PBHL 610	Active Issues in Public Health		
PBHL 612	Public Health Funding & Program Development		
PBHL 613	Seminar in Fire Arms and Public Health		
PBHL 614	Coordinating a Population's Care		
PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class		
PBHL 616	Public Health Surveillance: Aligning Data and Policy Use		
PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic		
PBHL 802	Health and Human Rights		
PBHL 851	Health Systems Policy Analysis		

PBHL 853	Applied Health Economics: Technology Assessment and Economic Evaluation
PBHL 854	The Politics of Food & Gender
PBHL 856	Violence, Trauma and Adversity in Public Health

School of Public Health Faculty

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity, diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (*Temple University School of Medicine*) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (*University of California, San Francisco*) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (*Utrecht University*) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights

and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (Temple University) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation,

environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (University of Maryland) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, geneenvironmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism

spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (*University of Pennsylvania*) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (*The University of Michigan School of Public Health*) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.

Courses

PBHL 501S INTRODUCTION TO PUBLIC HEALTH 1.0-2.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 503 Public Health Independent Study 1.0-3.0 Credit

An independent study course designed to cover special topics relevant to public health and one or more of the core disciplines of biostatistics, epidemiology, environmental and occupational health, health behavior and promotion and health management. Students will work independently with the guidance of appropriate public health faculty.

College/Department: School of Public Health
Repeat Status: Can be repeated 6 times for 9 credits

Restrictions: Can enroll if major is PH.

PBHL 503S INDEPENDENT STUDY 1.0-14.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 505 Community Health & Prevention 3.0 Credits

This course integrates knowledge about individual health behavior and decision-making with the rich ecological context found in communities. Coverage of basic knowledge and behavior science theories, models and research methods will be provided as well as modern human rights framework to analyze and create public health interventions and policies.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 507 Health Policy and Management 3.0 Credits

Health management and policy is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This area of study has both an organizational management and a public policy focus and it especially addresses issues involving the accessibility, organization, costs, financing and outcomes of health services.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 509 Environmental and Occupational Health 3.0 Credits

The goal of this course is to provide students with basic knowledge of environmental and occupational health as it applies to the practice of public health from individual, community and political perspectives. Students will also gain skills needed to understand and conduct scientific research related to environmental and occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 510ES Block I-Introduction to Public Health 2.0 Credits

This course presents an overview of the principles of public health and the concepts and foci of each of its core disciplines. It is a required course for the Executive MPH students.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 516 Introduction to Public Health 2.0 Credits

This course introduces and investigates the history, issues, function and context of public health, community health and health systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 520 Principles of Biostatistics 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 520ES BIOSTATISTICS 4.0 Credits

Introduces and applies the biostatistics and analytical base required for population-based and community health assessment and evaluation. The focus is on providing a broad and basic understanding of biostatistics, with more advanced methods included as appropriate.

PBHL 530 Principles of Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment/evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 530ES Epidemiology 4.0 Credits

Introduces and applies the principles of epidemiology and study design needed to support population-based and community health assessment and evaluation. Basic and more advanced methods are covered as appropriate with applications to public health and community contexts, and integration with the biostatistics taught in Block II.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 540 Prevention Principles and Practices 4.0 Credits

Focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. The goal of this course is to provide basic knowledge of social and behavioral science theories, models, and research methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 540ES Behavioral Assessment 4.0 Credits

Introduces principles of health behavior in context of the human life-cycle and covers their application to prevention and health promotion programs in a community context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 550 Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building, community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540 [Min Grade: C]

PBHL 550ES Community Based Prevention Practices 4.0 Credits

Provides an interdisciplinary foundation that is focused on strategies designed to enhance the health of the community. Also, to focus on the role of community capacity building community empowerment, action-oriented community diagnosis and the central role of community residents in the identification of local issues, goals, and priorities affecting their lives and neighborhoods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 540ES [Min Grade: C]

PBHL 560 Issues in Global Health 3.0 Credits

This course provides an overview of critical global health issues and the disproportionate effect on vulnerable populations, and will show how to apply the principles of human rights and environmental justice to those global health concerns.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 560ES MPH Comm Based MP Part A 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

PBHL 570ES Block XI- Integrated Public Health Case Analysis 4.0 Credits

This is the capstone course of the Executive MPH. Students will work in small groups to conduct a case analysis and a case development focusing on current public health issues which are multidisciplinary. All core disciplines will be examined as influences for the problem and possible solutions.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PHEX.

PBHL 599 Special Topics 0.5-9.0 Credits

See department for course description. **College/Department:** School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 600 Management, Leadership, Assurance and Health Services 3.0 Credits

This course explores critical elements of assurance in public health organizations by understanding overarching public health principles in leadership and through an integrated management model.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 600ES Health Management and Leadership 4.0 Credits

Explores critical elements of the assurance role of public health, beginning from the premise that effectiveness of program delivery and of the assurance role itself requires an understanding of organizations, leadership, and change, in economic, strategic and systematic context. Applies management concepts and theories through an integrated model of the management process. In the latter portion of the block, extends, applies, and integrates previously developed concepts and theories with those of strategy, planning, accounting, financial management, and information systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 601 Management Health Care Systems 3.0 Credits

This course addresses the management of healthcare outcomes from several perspectives: patient, patient care and health systems. It explores how absolute clincial outcomes are impacted by intermediate outcomes in healthcare delivery and how these are evaluated from an economic outcomes perspective. It also addresses disparities observed in achieving health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 602 Public Health Practice 3.0 Credits

This course addresses current and transforming issues in public health policy and management, examines the history of each issue and analyzes forces that have led to new policy or management approaches. A key goal of the course is to build critical thinking, effective management approaches and creativity skills.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 603 Advanced Healthcare Financial Management 3.0 Credits

The Business of Healthcare: Advanced Healthcare Financial Management is a course designed for non-financial health care managers. Using the case study approach, it offers and introduction to the most-used tools and techniques of health care financial management. There is a particular focus on fundamental.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 604 Public Health Advocacy and Activism 3.0 Credits

The elective course will provide distinct, specialized training in the leadership skills, tools and techniques needed to develop effective advocacy skills. Additionally, students will learn to integrate research-based data in order to strengthen advocacy initiatives.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 650 [Min Grade: C]

PBHL 604S INTRO TO HLTH FINANCE 0.0 Credits

This course is part of a block of courses. Credit hours are tracked for

PBHL 600 only.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 605 Change Management in Public Health 3.0 Credits

Strategy, Innovation and Change Management is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course prepares students for management responsibilities in delivering new health services. The course focuses on developing strategies to adopt innovative services and management technique.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 606 Vaccines and Public Health Policy 3.0 Credits

This course examines the history and development of S Vaccine policy and the implementation of policy in the public health setting. The course will examine the history and ethics of this broad public health intervention and examine policy challenges.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 607 Evolution of United States Health Policy 3.0 Credits

This is a reading intensive seminar in the evolution of the US health system and history of 20th century US health policy: how it adapted to internal and external forces with an emphasis on the cyclic interest - and disinterest - in universal health care coverage.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 608 Fundamentals of Disaster Management 3.0 Credits

Fundamentals of Disaster Management is an elective course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course provides an understanding of the broad range of disaster management issues, and study strategies used to help a community prepare.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 609 Issues in United States Health Policy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation in the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 610 Active Issues in Public Health 3.0 Credits

Through critical review and discussion of current articles from the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report, this course provides real-world illustration of principles learned in first-year MPH courses. Students will review articles on outbreak investigations, emergent situations, public health surveillance, and program updates for a mix of acute and chronic, infectious and non-infectious, and domestic and global health problems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 611 Race, Ethnicity and Health 3.0 Credits

Race, Ethnicity and Health is a required course for the Master of Public Health (MPH) program of study, concentration in Health Management and Policy. This course explores racial and ethnic disparities in health status and access to healthcare, and examines intervention approaches to eliminate them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 600 [Min Grade: B] and PBHL 650 [Min Grade: B]

PBHL 612 Public Health Funding & Program Development 3.0 Credits

This course introduces students to the principles and procedures for writing grant proposals to fund non-profit organizations. Students identify a need, gap, or problem that is addressed by a non-profit organization and work from the vantage point of that organization. The course is organized around the effort to identify a need, develop and intervention, and write a grant proposal for the organization.

PBHL 612ES MPH BLK VII-PRGM PLAN & EVAL 4.0 Credits

Beginning from the premise that the health-assurance role of public health begins with program planning, development, and evidence-based practice, this block examines concepts and theories underlying program planning, development, and evaluation. Emphasizes program application in context of specific problems and community context.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 613 Seminar in Fire Arms and Public Health 3.0 Credits

The seminar will focus on firearms and their impact on the public's health. Using recent events of mass firearm violence and urban violence, the seminar will seek to put into perspective the evolving policy discussion about the role of firearms in affecting the health of a range of populations through homicide, intentional injury, domestic violence, suicide, as well as general issues of population safety.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 614 Coordinating a Population's Care 3.0 Credits

This course examines the evolving concepts and population health in the current area of healthcare reform. Recent debate over healthcare expenditures has highlighted that chronic and preventable conditions account for the majority of healthcare costs. Our traditional healthcare system, however, is not positioned well to combat rising healthcare costs. Care coordination and population health are receiving attention as key strategies and concepts that are critical for the transition from a reactive dysfunctional system that provides expensive, fragmented sick care to a more organized, focus systems that can deliver proactive, coordinated, preventive and wellness care as well as acute and chronic care management.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 615 Perspectives on Gender, Race, Ethnicity, and Social Class 3.0 Credits

This course will explore the history of concepts of gender, race, ethnicity and social class and probe the biology, sociology and constructed meanings of these deeply situated ideas.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 616 Public Health Surveillance: Aligning Data and Policy Use 3.0 Credits

Public health surveillance - the monitoring of population health - is integral to public health practice. Surveillance not only informs public health programs and policies but also shapes broader public understanding of the importance of different health problems. This course provides an overview of the methods and uses of surveillance in public health practice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 617 Health Disparities: Systemic, Structural, Environmental & Economic 3.0 Credits

This course explores racial and ethnic disparities in health status and access to health and examines interventions to eliminate them. Students learn to define and describe racial, ethnic and gender-related disparities, discuss underlying mechanisms, think critically about existing research on health disparities and develop proposals for reducing them.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 618 Historical and Contemporary Developments in Social Justice 3.0 Credits

Courses will cover direct and indirect links between public health policies, political circumstances, social and economic conditions and effects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 619 Decision Analysis in Public Health and Medicine 3.0 Credits

A survey course of decision analysis and its relevance and use in public health and public policy decisions. Focus will be directed towards population health data, decision-making in conditions of uncertainty, and health policy.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 620 Intermediate Biostatistics I 3.0 Credits

This course focuses on an overview of the linear modeling methods most ocmmonly used in epidemiological and public health studies. Models include simple/multivariate linear regression, analysis of variance, logistic/conditional regression, Poisson regression and models for survival data. Focus is on implemeting models and interpreting results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 621 Intermediate Biostatistics II 3.0 Credits

The course reinforces and builds upon the concepts in PHBL 620. It adds theoretical background on various linear model assumptions and multivariable model-building strategies. Approaches to model diagnostics (e.g., goodness of fit, residual analysis) are also covered.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 622 Statistical Inference I 3.0 Credits

This course introduces probability and biostatistics theory. Topics include the basic concepts of probability including Bayes theorem; probability distributions of both discrete and continuous types of variables along with their properties; and the underlying theoretical foundation of the statistical inference including parameter estimation, hypothesis testing, hierarchical models and Bayesian inference.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 623 Introduction to Statistical Computing 3.0 Credits

Provides the students with sufficient data management and computing skills enabling them to manage small to intermediate size public health projects. Students will learn basic data management and analytic programming in the SAS statistical software.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 624 Regression Methods 3.0 Credits

Regression Methods is a required course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. It covers topics in linear regression, logistic regression and time until event analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 625 Longitudinal Data Analysis 3.0 Credits

Course covers modern statistical techniques for longitudinal data from an applied perspective. Suitable for doctoral and master students in biostatistics and doctoral students in epidemiology, clinical trials and social science analyzing longitudinal data.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: A] and PBHL 621 [Min Grade: A]

PBHL 626 Multivariate Linear Models 3.0 Credits

Multivariate Linear Models is an elective course for the Master of Public Health (MPH) program of study, especially for students concentrating in Epidemiology or Biostatistics, but open to students in other concentrations as well. It covers topics in analysis of variance and covariance, repeated measures analysis, factor analysis and path analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 620 [Min Grade: B]

PBHL 627 Categorical Data Analysis Methods 3.0 Credits

Categorical Data Analysis Methods is an elective course for the Master of Public Health (MPH) program of study, concentration in Biostatistics. This course discusses some of the specialized methods to model data from specific studies with categorical data as an outcome.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

and PBHL 624 [Min Grade: B]

PBHL 628 Survival Data Analysis 3.0 Credits

This course covers the basic techniques of survival analysis. These approaches are useful in analyzing cohort data, which are common in health studies, when the main interest outcome is the onset of even and time to event is known.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 629 Design & Analysis of Clinical Trials 3.0 Credits

The purpose of this course is to cover the design and conduct of clinical trials. The course will also cover how to evaluate the scientific rigor of studies of clinical trials published in the scientific literature. Topics which will include power and sample size, study design, randomization methods, recruitment, missing data, ethical issues and statistical analysis methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 630 Intermediate Epidemiology 3.0 Credits

This course expands on basic methods used in epidemiologic thinking and research - with a focus on observational studies of disease risk factors. Topics covered include: basic principles of causal inference; observational study designs; bias; confounding; effect modification; stratified analysis; and the epidemiologic approach to multivariable modeling. An emphasis is also placed on critically reading epidemiologic literature.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 630ES MPH BLOCK VIIIB-COMM BASED MP 1.0 Credit

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 631 Applied Multivariate Analysis 3.0 Credits

This course introduces students to statistical methods for describing and analyzing multivariate data. Topics to be covered include basic matrix algebra, multivariate normal distribution; linear models with multivariate response, multivariate analysis of variance; profile analysis, dimension reduction techniques, including principle component analysis, factor analysis, canonical correlation, multidimensional scaling; discriminate/ cluster analysis; and classification/regression trees.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: C]

PBHL 632 Applied Survey Research in Epidemiology 3.0 Credits

Applied Survey Research in Epidemiology is a required course for the Master of Public Health (MPH) program of study, concentration in Epidemiology and Biostatistics. This course addresses theoretical and practical aspects to the conduct of survey research in human populations. Practical requirements for research proposal development is covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 633 Epidemiology of Cancer 3.0 Credits

This course will provide students with training in the methods and topics specific to the epidemiology of cancer. Students will learn about cancer surveillance, etiologic studies, therapy trials, and prevention/screening studies of cancer.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 634 Epidemiology for Public Health Practice 3.0 Credits

This course is designed to enable the student to understand epidemiology as a health discipline and how epidemiology provides information for infectious/non-infectious disease prevention and control. Topics cover public health surveillance, outcomes research, health services research, principles of cancer registration, and a variety of practice-related exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 632 [Min Grade: B]

PBHL 635 Social Epidemiology and Psychiatric Epidemiology 3.0 Credits

This course focuses on the content and methods of social epidemiology and the clinical, methodologic, and epidemiologic aspects of psychiatric illness. In focusing on social and psychiatric/psychological issues, students are required to explore theoretical and empirical aspects of disease etiology and disease course that extends beyond a biomedical model.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

and PBHL 632 [Min Grade: C]

PBHL 635ES MPH Comm Based MP Part C 2.0 Credits

Independent Study.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 636 Infectious Disease Epidemiology 3.0 Credits

Course will provide training in the methods specific to infectious disease epidemiology within the context of the study of several major classes of infectious diseases with global impact on public health. Students will learn about population-level data sources and surveillance methods and techniques in outbreak investigations.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is PH. Prerequisites: PBHL 530 [Min Grade: C]

PBHL 636S MPH BLOCK VIII - CONCENTRATION 3.0 Credits

College/Department: School of Public Health

PBHL 637 Chronic Disease Epidemiology 3.0 Credits

Chronic Disease Epidemiology/Social Epidemiology is an elective course for the Master of Public Health (MPH) program of study, concentration in Epidemiology. This course addresses the general disciplines of chronic disease epidemiology and social epidemiology.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: B] and PBHL 530 [Min Grade: B]

PBHL 637S PUBLIC HEALTH CONCENTRATION 0.0 Credits

College/Department: School of Public Health

PBHL 638 Perinatal Epidemiology 3.0 Credits

Introduces topical issues and methodological approaches to studying maternal and child health outcomes during the perinatal period. Focus is on study designs and data sources most relevant to perinatal epidemiology and examples of epidemiology research on common perinatal health issues. Current research in perinatal epidemiology and directions for research are also presented.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 639 Cardiovascular Disease Epidemiology & Prevention 3.0 Credits

This course provides a forum for in-depth discussions of one of the main public health issues. Topics include the pathophysiology of atherosclerosis and cardiovascular disease (CVD), trends in coronary heart disease, stroke, hypertension and heart failure mortality/morbidity, well-established and emerging CVD risk factors, and major strategies for CVD prevention/control.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: C]

PBHL 640 Environmental Health 4.0 Credits

Introduces concepts, theories, and programmatic application within the field of environmental health.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit

PBHL 640ES Environmental & Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the fields of environmental and occupational health.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 641 Environmental Hazard Assessment 3.0 Credits

This course provides students with a general understanding of the recognition and evaluation of chemical, physical and biological hazards. Particular emphasis is placed on airborne hazard evaluation theory and methods. Students become familiar with commonly used industrial hygiene equipment through participation in laboratory and field exercise.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 642 Healthy Housing & Built Environment 3.0 Credits

Course provides students with understanding of connection between health and housing specifically the impact factors of both built environment and indoor environment has on the health status of residents, especially those at risk for allergic and respiratory diseases.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 643 Environmental and Occupational Toxicology 3.0 Credits

This course will provide students with a basic understanding of the recognition and evaluation of chemical, physical and biological hazards in the environment and workplace. The course addresses fundamentals of toxicology, legal implications of exposure and prevention strategies. Topics will include: general toxicology principles, metals, chemical and dust exposures and physical agents.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: B]

PBHL 644 Environmental Health for Public Health Practitioners 3.0 Credits

This course will provide students with an understanding of the fundamental knowledge and basic practices necessary for environmental health professionals who practice at the municipal and state levels.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 640 [Min Grade: C]

PBHL 646 Environmental Health in Vulnerable Populations 3.0 Credits

Policy instruments and tools in place to protect the health of vulnerable populations will be critically examined as well as issues related to equity and justice. A number of case studies will be examined to exemplify why certain populations are vulnerable to various environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 647 Occupational and Environmental Epidemiology 3.0 Credits

Occupational and Environmental Epidemiology for Public Health is a required course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. Students are familiarized with commonly used industrial hygiene equipment through participation in laboratory and field exercises.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 530 [Min Grade: B] and PBHL 640 [Min Grade: B]

and PBHL 660 [Min Grade: B]

PBHL 648 Public Health and Disaster Preparedness 3.0 Credits

Public Health Readiness and Disaster Preparedness is an elective course. This course provides students with an understanding of the recognition and evaluation of chemical, physical and biological hazards related to terror attacks, and other man-made/natural disasters.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 649 Occupational and Environmental Cancers 3.0 Credits

Occupational and Environmental Cancers is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics in courses of cancer, the prevention of cancer, and public policy regarding cancer.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 650 Public Policy and Advocacy 3.0 Credits

This course introduces students to a selected set of health policy issues facing the US today, and that will challenge the nation is the forseeable future. Emphasis is placed on effective problem definition and the identification of politically feasible solution to the policy issues being studied.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 650ES Health Policy & Advocacy 4.0 Credits

Introduces the fundamentals of public-health law and the concepts and theories of health-policy development, adoption, and evaluation. Also introduces the advocacy process and its importance to development of sound public health policy. Students complete the M.P.H. program by exploring major public health topics in some depth. Emphasizes systemic integration and the integration of the assessment, assurance, and policy development roles of public health in problem, population, and political context.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 651 Legal Aspects of Public Health 3.0 Credits

This course covers legal and policy issues in the implementation of public health programs. It emphasizes underlying themes that frame these efforts.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is LAW or major is PH or major is PHFT.

Prerequisites: PBHL 650 [Min Grade: C]

PBHL 660 Occupational Health 4.0 Credits

Introduces concepts, theories, and programmatic applications within the field of occupational health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 661 Occupational and Environmental Diseases 3.0 Credits

Occupational and Environmental Diseases is an elective course for the Master of Public Health (MPH) program of study, concentration in Environmental and Occupational Health. It covers topics related to lung diseases caused by occupational and or environmental exposures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 640 [Min Grade: B] and PBHL 660 [Min Grade: B]

PBHL 662 Environmental and Occupational Policy 3.0 Credits

This course provides an overview of the origines and development of environmental and occupational health policies in the United States. It utilizes an evidenced-based framework to assess the effectiveness of these policies within a context of a political climate towards public health.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 663 Injury Prevention and Control 3.0 Credits

A survey course examining the history, burden and cost of injury at the population level and its impact on health care systems. Lectures and readings will focus on critical analysis of incidence, risk, policy and prevention.

PBHL 664 Safety in Healthcare 3.0 Credits

This course examines the history of healthcare safety as an emerging public health problem in the US. Topics such as patient safety, nurse injury and other outcomes will be studied. Effects of safety climate, organizaitonal culture, and clinical knowledge on partients, healthcare workers and the healthcare system are discussed.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 665 Environmental Risk Analysis 3.0 Credits

This course will provide an overview of the fundamentals of risk for environmental health. Students will develop a critical understanding of the key components of risk assessment (hazard identification, dose modeling, exposure assessment, and risk characterization) through a series of environmental health problem case studies. Quantitative methods for conducting risk assessment will be taught, including use of software tools. We will discuss how risk assessment can inform risk management approaches (such as regulatory options) and risk communication, and vice versa. The course will emphasize the potentials, limitations, and uncertainties of the risk analysis framework for protecting human health from environmental hazards.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 670 Multicultural Competence in Community Health and Prevention 3.0 Credits

The goal of this course is to equip students already versed in the fundamentals of public health principles with additional practice skills and knowledge in cultural competency. Implicit in the terms cultural competence is a set of congruent behaviors, attitudes, beliefs and values enabling people to work effectively across cultures.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 671 Theory and Practice of Community Health and Prevention 3.0 Credits

This course introduces public health students to the theoretical foundation of community and population-based health promotion. The course emphasizes theories and models for individual and planned social and community change designed to improve health; and the application and impact of theoretical constructs in designing intervention strategies.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 672 Theory and Practice in Health Communication 3.0 Credits

The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners in the steps required in developing, implementing and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 673 Outcomes Assessment of Community Health and Prevention 3.0 Credits

This course is designed to review the principles of identifying short-term, mid-term and long-term outcomes and how these are linked to program goals, objectives, mission and vision. Topics include selecting outcomes in conjunction with the community, and strategies for design, data collection, analysis and interpretation.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

Prerequisites: PBHL 540 [Min Grade: C] and PBHL 550 [Min Grade: C]

PBHL 674 Studying Rare or Hidden Groups 3.0 Credits

Target audience for this course is those intending to conduct research or evaluate programs designed for rare, stigmatized and/or hidden populations and for consumers of such programs. The course seeks to help students understand the ethics of research/evaluation in such programs, analyze health outcome measures and appropriately store data collected.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 675 LGBT Health Disparities 3.0 Credits

LGBT community ranging from HIV/AIDS to intimate partner violence.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 676 Intersectional Perspectives 3.0 Credits

This health focuses on health among gay, lesbian, bisexual and transgender (LGBT) populations from the perspective and theoretical framework of intersectionality. This course explores how the intersections of various identities such as race, ethnicity, socio-economic status result in different health outcomes.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 678 Drug Use in Public Health 3.0 Credits

In the past several decades drug use has emergered as a major public health issue. The course will focus on biological, psychological, social, and cultural aspects of key licit and illicit substances. Additionally, students will learn relevant public health aspects of drug use, including prevention, intervention, and policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 680 Community Based Master's Project I 4.0 Credits

This course is the first of 3 CBMP courses and will encompass the first stages of the year long process of producing a final master?s project. Activities will include selection of CBMP site, CBMP workshops, student logs, IRB and HIPAA training. A learning agreement, community site profile and project proposal will be expected as end-products of student?s first 10 weeks at site and aforementioned activities.

PBHL 681 Community Based Master's Project II 4.0 Credits

This course is the second of 3 CBMP courses and will encompass the intermediate stages of the CBMP process. Activities will include CBMP workshops, IRB submission (if applicable) and regular attendance at community site. Student?s progress at site and on final project will be assessed through Community Site Preceptor Mid-Year Report and assessment by Faculty Advisor.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 682 Community Based Master's Project III 4.0 Credits

This is the third of 3 CBMP courses and represents the final stage of the CBMP process. Draft of final project will be previewed through short presentation to SPH community. Final oral defense, presentation of CBMP Poster and submission of final project paper for binding are the major activities of this course.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 683 Advanced Clinical Trials & Experiment Design 3.0 Credits

Course prepares students to design & conduct clinical trials and other health related experiments. It will cover the development of a study protocol for a clinical trial, selection of the study population, sample size, and treatment assignment methods. Advanced experimental designs will also be covered.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 621 [Min Grade: C]

PBHL 684 Statistical Inference II 3.0 Credits

This course is a continuation of Statistical Inference I: focusing on concepts and methods of statistical inference. Topics include point/interval estimation, methods of moments, maximum likelihood estimation, Bayes estimates, hypothesis testing, Meyman-Pearson lemma, likelihood ration tests and large sample approximation, Bayesian analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: C]

PBHL 685 Data Analysis Project 6.0 Credits

Provides the student with experience completeing a substantive data analysis in either an academic or applied setting. The project will be performed over a full term under the supervision of the advisor. Projects based in seetings outside the Department are jointly-supervised by the advisor and a doctorally-prepared host organization researcher.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Restrictions: Can enroll if major is BIOS and program is MS.

PBHL 686 Advanced Statistical Computing 3.0 Credits

This course expands on computational methods used in biostatistics. It covers numerical techniques, programming, and simulations and will connect these to fundamental concepts in probability and statistics. The course will use the statistical software, R, to apply these concepts and enable the practical application of biostatistical models to real-world problems

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 687 Readings in Biostatistics 1.0 Credit

Guided readings course designed to introduce MS Biostatistics students (and other interested students) to classic papers in Biostatistics. Provides students with exposure to classic biostatistics papers and practice critically reading statistics literature. Also exposes students to some issues relevant to the practice of biostatistics that are not covered in coursework.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 688 Statistical Inference I Lab 1.0 Credit

This course is a continuation of Statistical Inference I: In the sense that statistical concepts and methods will be developed in a mathematical framework and also additional topics will developed in a mathematical framework and also additional topics will be discussed as time permits. Topics tentatively selected include distributions, conditional distributions and expectation, probability inequalities/identities, limit theorems, and Bayesian methods.

College/Department: School of Public Health **Repeat Status:** Can be repeated 1 times for 2 credits

Corequisite: PBHL 622

PBHL 689 Master of Science Epidemiology Project 1.0-12.0 Credit

This course is designed to provide guidance of the MS Epidemiology project. Working with a faculty advisor, students will design and conduct an epidemiologic study that poses and tests a research question using a sufficiently robust data set. Components of the project will include data collection as necessary, data management and analysis and the preparation of a manuscript for publication or a research report that is consistent with accepted thesis and publication standards in epidemiology.

College/Department: School of Public Health Repeat Status: Can be repeated 3 times for 48 credits

PBHL 690 Applied time Series Analysis 3.0 Credits

Introduces students to a variety of statistical methods for modeling and analysis of time series data, with emphasis on application. Topics include Theory of stationary random processes; Non-stationary time series models; Model identification, parameter estimation, diagnostics checking and model selection; spectral analysis; and Introduction to contemporary modeling topics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 622 [Min Grade: B]

PBHL 691 Pathophysiology Basis of Epidemiologic Research 3.0 Credits

This course will examine the causes of many human diseases at a molecular level, paying particular attention to the role of inflammation in disease processes and examining the role of cell cycle dysregulation in the etiology of many human cancers. In order to understand the pathologic basis for disease, the course will also cover the normal structure and function of many body systems, that when compromised lead to diseases of public health importance.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 530 [Min Grade: B]

PBHL 692 Public Health Obesity Prevention Research 3.0 Credits

This class will provide students with a foundation in obesity assessment, interpretation of obesity research and study designs used to examine population level obesity interventions. The substantive focus of this class is on environmental contexts (physical environment, economic and social environments) that influence obesity risk. The methodological focus of this class is on designing and evaluating population-level / macro level policies that may affect diet, physical activity, and obesity.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 693 Applied Bayesian Analysis 3.0 Credits

The course provides a practical introduction to Bayesian statistical inference, which is now at the core of many advanced methods. The course will compare traditional frequentist estimation, which relies on maximization methods, to Bayesian estimation of the posterior distribution. Students will learn numerical integration methods, such as Markov Chain Monte Carlo, to obtain these various distributions and ultimately make inference in a Bayesian framework. The course will also use the freely available statistical software, R (http://cran.r-project.org/).

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 625 [Min Grade: B] and PBHL 684 [Min Grade: B]

and PBHL 686 [Min Grade: B]

PBHL 694 Biostatistical Literature Review 1.0 Credit

This course is designed to train students on how to conduct a systematic literature review. The final literature review produced will then be included in the student's data analysis project written report. The course will draw on the skills and experience of biostatistics faculty in the Department of Epidemiology & Biostatistics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 695 Statistical Consulting 2.0 Credits

The objective of this course is to introduce biostatistics graduate students to the fundamental aspects of statistical consulting and to provide training for being an effective statistical consultant. Topics tentatively selected include: Roles and responsibilities of biostatisticians in collaboration with scientists and other clients, oral and written communication skills, sample size and power calculations, study design, how to help researchers formulate their scientific questions in quantifiable terms, how to deal with missing data, how to write statistical analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B-]

PBHL 696 Nonparametric and Semiparametric Models 3.0 Credits

The objective of this course is to introduce students to the fundamental concepts and applicable techniques of non-parametric and semi-parametric models, in particular, nonlinear functional relationships in regression analyses. Topics tentatively selected include: Density estimation, smoothing, non-parametric regression, additive models, semi-parametric mixed models, and generalized additive models.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 686 [Min Grade: B-]

PBHL 697 Generalized Linear Model 3.0 Credits

The objective of this course is to introduce students to generalized linear regression models (theoretical properties, model interpretation and application). Topics include: 1) Review of categorical data and related sampling distributions; 2) Two/Three-way contingency tables; 3) logistic regression and poission regression;4) loglinear models for contingency tables; 5) generalized linear mixed models for categorical responses.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 698 [Min Grade: B]

PBHL 698 Linear Statistical Models 3.0 Credits

The objective of this course is to introduce students to linear regression models (computation, theoretical properties, model interpretation and application). Topics include: 1) Review of basic concepts of matrix algebra that are particularly useful in linear regression, and basic R programing features; 2) (weighted) least square estimation, inference and testing; 3) regression diagnostics, outlier influence; 4) variable selection and robust regression.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 620 [Min Grade: B]

PBHL 699 Biostatistical Computing with Stata 3.0 Credits

Public health research often involves the management, manipulation and analysis of complicated sets of data with standard statistical software packages. This course is designed to introduce the student to practical issues in the management and analysis of public health and biomedical data using the Stata programming language. This course is designed to give students a basic introduction to the Stata computing programming and is intended for students with limited or no previous experiences with Stata. The focuses on simple data analysis such as creating data sets, combining and modifying data, preparing data for analyses, working with Stata commands and do-files, and approaches data structure. The course will also present the conventions used for statistical analysis commends in Stata, and will illustrate these through review of limited set example commands. After taking this course, students will be comfortable using Stata to manage and manipulate data in classes and basic research projects.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 520 [Min Grade: B]

PBHL 699ES Special Topics in PH 1.0 Credit

Public health is a multi-disciplinary field, drawing from the disciplines of Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy Management and Social and Behavioral Sciences. Through the use of archived online presentations, this self-directed course allows students to draw from a library of lectures which focus on the five core disciplines of public health. After viewing online lectures, students will then analyze and synthesize newly learned concepts with their own understanding of public health and public health practice.

PBHL 701 Introduction to Descriptive Epidemiology and Biostatistics 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 701S Intro Descript Epidem/Biostats 3.0 Credits

Introduction to Descriptive Epidemiology and Biostatistics. Epidemiology and biostatistical concepts and methods to be covered include techniques for describing and summarizing observations, for assessing associations among variables, and for determining the extent to which chance may be explaining and or/or influencing the observed results.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 702 Introduction to Analytic Epidemiology and Biostatistics 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 701 [Min Grade: B]

PBHL 702S Intro Analytic Epidem/Biostats 3.0 Credits

Introduction to Analytic Epidemiology and Biostatistics. Key biostatistics methods and epidemiologic concepts covered during course include types of rates, rate calculations, rate adjustments, data display and interpretation, two-way ANOVA and Kaplan Meier survival curves.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701S [Min Grade: B] or PBHL 701S [Min Grade: S]

PBHL 703 Design and Analysis Epidemiological Studies 3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 701 [Min Grade: B] and PBHL 702 [Min Grade: B]

PBHL 703S Design/Analysis Epidem Studies 2.0-3.0 Credits

Design and Analysis of Epidemiological Studies. This course will demonstrate the applicability of the goals and approaches from descriptive and analytical methods in biostatistics and epidemiology courses to real world problems. The project will provide the student with the opportunity to use methods in an area of their choice.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: (PBHL 701S [Min Grade: B] and PBHL 702S [Min Grade: B]) or (PBHL 701S [Min Grade: S] and PBHL 702S [Min Grade: S])

PBHL 704 Proseminar in Global Health Ethics 1.0 Credit

The Proseminar in Global Health Ethics has been designed to afford maximum learning opportunities to: understand ethical concerns in global health; analyze social and cultural factors for better understanding of global health issues; tackle global health questions in relation to "hard to reach groups"; develop cross-cutting skills and competencies in global health. With this in mind, using global health case studies, the proseminar will also integrate student-directed problem based learning (PBL) in the review of health ethics. This focuses on providing structured learning activities to develop learner autonomy in a constructive and collaborative educational process.

College/Department: School of Public Health **Repeat Status:** Can be repeated 3 times for 3 credits

PBHL 705 Public Health in Developing Countries 3.0 Credits

This course is designed to provide students with an overview of public health issues specific to low and middle income countries and introduce students to the core concepts of public health. The course is divided into four parts: principles and goals of international health and health services in developing countries; cross-cutting global health issues; the burden of disease in developing countries; and cooperating to improve health and human rights in developing countries.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 706 Globalization, Development and Comparative Health Systems 3.0 Credits

This course presents a survey of comprehensive examinations of the structure of health systems in selected countries worldwide and provides an understanding of ways that health systems work in other countries (and thereby to better analyze policy issues affecting health and examine both global health issues and health systems from a comparative perspective). This course also explores country-level debates on issues such as access to care and funding and will note how a country's history has influenced the development of its health system. Specific attention is paid to the development of the national health system, financing, and delivery infrastructure, the impact of globalizations, development, and international relations is also examined.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 707 Monitoring and Evaluation in Global Health 3.0 Credits

This course is designed to provide students with a systematic approach to planning, implementing, monitoring, and evaluating global health programs. Students will learn the general principles of monitoring and evaluation (M&E) as well as criteria for selecting indicators and metrics, and various tools/models will be introduced to offer students an overview of the program planning and M&E process. Utilizing knowledge and skills from this course, students will be able to: apply scientific evidence throughout the program planning, implementation, and M&E process; design program work plans based on logic models; develop a proposal to secure donor and stakeholder support - and a plan implementing, monitoring, and evaluating a global health program or intervention; plan evidence based interventions to meet internationally established health targets; develop and M&E framework to assess organizations; utilize project management techniques throughout he program planning, implementation and M&E process; and develop context-specific implementation strategies foe scaling up best-practice interventions.

PBHL 708 Global Health Integration Module and Field Practicum Experience 6.0 Credits

This course will provide students with a distributed and evaluated global health training experience that requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and apply theory and principles in a situation that approximates some aspect of professional practice in global health and international development. Students will be mentored through the experience by faculty members, and will complete online modules as well as a 2-3 week field practicum (80-120 hours as part of a "summer institute") working closely with preceptors from partnering NGOs, international agencies, Ministries of Health and foreign institutions in the global health practice setting. Geographic focus will rotate between the Americas, Middle East, Asia Pacific, Australia, Africa, and Europe - based on site availability, participating faculty, and collaborative institutions in the US and abroad. Potential themes include health equity and social justice, MCH, HIV/AIDS, disparities and vulnerable sub-population, rural and agricultural health, food security, WASH, non-communicable disease, disasters and complex emergencies, EPI, IMCI, etc. Site and theme specific cross-cultural training and formal pre-departure orientation will be required in the integration module.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 801 Theory & Practice of Community Health & Preventions I 3.0 Credits

This course introduces the student to the principles, scientific methods, and major research issues in community health and prevention. The history, concepts and methods of prevention science are presented and major theoretical contributions to prevention are discussed. Course concludes with a discussion about using theoretical-empirical frameworks to guide intervention design.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 802 Health and Human Rights 3.0 Credits

Health and wellbeing are intricately associated with fundamental human rights. This course will cover direct links between public health policies, political circumstances, and social and economic conditions and their affects on health of individuals and populations using the human rights framework.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 803 Theory & Practice of Community Health and Preventions II 3.0 Credits

Course focuses on public health interventions. Discusses individual and environmental theories of change, home, school, worksite, and community-based interventions, harm reduction, and multilevel intervention. Process and outcome of intervention research is investigated.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 804 Research Methods for Community Health and Prevention 3.0 Credits

Research Methods for Community Health and Prevention. Public health leaders must understand and use diverse research methods to make significant contributions to community health and prevention. This course integrates foundations of research methodology with use of appropriate statistical procedures to prepare students to apply rigorous scientific methods to understand and solve major public health problems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 805 Qualitative Research in Community Health 3.0 Credits

Qualitative Research in Community Health. Students will study and use a variety of qualitative methods suited for public health practice and research. Methods include case study analysis, individual interviews, focus groups, ethnography, and observation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 806 Community Health Research Methods 3.0 Credits

This course covers key principles and methods of community epidemiology. Topics include the epidemiologic perspective on health, epidemiologic study designs, surveillance databases, and survey design. Students will design and implement a community survey, analyze and interpret results, and discuss the contributions of epidemiology to prevention and policy formulation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 807 Analytic Methods for Community Health and Prevention 3.0 Credits

Analytical Methods for Community Health and Prevention. This will cover advanced design issues, methods for exploring data, traditional statistical techniques, and techniques for prevention research. This course integrates the foundations of research methodology with the use of computers and appropriate statistical procedures to prepare students to meet the increasing demands for conducting applied research.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 808 Community Program Evaluation 3.0 Credits

Much of public health is about developing programs for individual and behavioral change. Therefore, public health practitioners must be able to understand the importance of developing, implementing, and evaluating public health programs. This course highlights the natural interweaving of three program elements.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 809 Community Health Policy Development and Analysis 3.0 Credits

Community Health Policy Development Analysis. Health policy is integral to the prevention of death, illness, disability, and the promotion of health. Course participants will learn about federal, state, and local roles in policymaking, roles of public opinion and interest groups, and methods for policy development and analysis.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 901 [Min Grade: C]

PBHL 810 Practicum in Community Health and Prevention 3.0 Credits

Practicum in Community Health and Prevention. 480 hours of supervised experience applying concepts and methods to ongoing community health programs or policy development.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 813 Theory and Practice of Health Communication 3.0 Credits

Theory and Practice of Health Communication. The practice of public health is complete and competent with a strong set of communication skills and a working knowledge of communication theory. This course is designed to train public health practitioners the steps required in developing, implementing, and evaluating health communication interventions.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 814 Community Based Participatory Research 3.0 Credits

Community Based Participatory Research. Participatory Action Research acknowledges that every human being has the capacity to be a change agent. This is accomplished through an alternate view of the research world in which collaboration is emphasized. This course provides theory and skills necessary to plan, implement and evaluate community-based Participatory Action Research initiatives.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 815 Community Participation in Decision Making 3.0 Credits

Community Participation in Decision Making. This course examines how communities accomplish planned change. We will consider a number of models including community development, social planning, social action and public advocacy using historical and contemporary examples.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 817 Economic Evaluation Methods for Community Health and Prevention 3.0 Credits

Economic Evaluation Methods for Community Health and Prevention. Understanding and applying economic concepts and methods is critical for analyzing and solving health system problems. Topics include and overview of economic theory to healthcare, and major economic evaluation methods of cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 818 Community Nutrition and Food Politics 3.0 Credits

Community Nutrition and Food Politics. The purpose of this course is to allow students to learn about and discuss the social, economic, cultural and political influences of obesity and hunger involves understanding the multi-layered influences of food production, distribution and consumption.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 819 Understanding and Preventing Domestic Violence 3.0 Credits

Understanding and Preventing Domestic Violence. Domestic violence is endemic in the United States. This course is designed to define and describe the problem as well as critically evaluate programs designed to intervene and prevent. Major topics include systems, advocacy, policy, economic, socio-political, and psychological phenomena.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 820 Adolescent Risk Behavior in a Developmental Context 3.0 Credits

Adolescent Risk Behavior in a Developmental Context. This course uses a developmental perspective to focus on key problems and issues that affect the health of adolescents. The course highlights adolescents as protagonists in a life drama as puberty raises questions about relationships, questions about fairness, equality and justice, about connection and care and ultimately about their behaviors.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 821 Public Health Practice in and with Latino Communities 3.0 Credits

Public Health Practice in and with Latino Communities. The goal of this course is to prepare students for genuine engagement in a cultural diverse experience in Latino populations within the U.S. using an interdisciplinary approach in the context of public health practice. Attention will be given to various Latino subgroups, and ways to work within and across these.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 822 Independent Study in Community Health and Prevention 1.0-3.0 Credit

Independent Study in Community Health and Prevention. Independent study concerning concepts, methods, or specific health issues in community health and prevention. May be repeated six times for credit.

College/Department: School of Public Health Repeat Status: Can be repeated 6 times for 18 credits

PBHL 823 Faith, Religion, Spirituality, and Health 3.0 Credits

This course focuses on the roles that "faith", "religion", and "spirituality" play in individual and community health. The course will focus on understanding the multiplicity of definitions of these terms (particularly spirituality and religion) and how these terms relate to health across time and cultures.

PBHL 824 Public Health Ethics 3.0 Credits

Course explores emergence, philosophical, historical, political development, relationship to human rights, and future of Public Health. Emphasis will be placed on developing a mastery of the current literature on the subject and on formulating novel approaches in public health ethics.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 801 [Min Grade: C]

PBHL 825 Measuring Health 3.0 Credits

Course for students using health measurement scales, and constructing measures of health for evaluation, research, population monitoring, or policy purposes. Methods will be xplored for measuring health in individuals and populations. Reviews fundamental theories of measurement including classical test theory, item response theory, and qualitative and quantitative approaches.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Prerequisites: PBHL 520 [Min Grade: C] and PBHL 530 [Min Grade: C]

PBHL 826 Causal Inference in Epidemiology 3.0 Credits

Provides an in-depth theoretical foundation on epistemology and models of disease causation in epidemiology. Students will be expected to answer the question how can we know that A causes B from diverse perspectives ranging from theoretical models, statistical conventions around identifying causation, and mitigating bias.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 630 [Min Grade: B]

PBHL 827 Advanced Topics in Qualitative Analysis 3.0 Credits

This course teaches students how to analyze an existing qualitative dataset. The course is structured in a seminar/workshop format. A key feature of the course involves students reviewing and critiquing each other's manuscripts. Students may be first author on their manuscript and will be expected to submit their manuscript to a peer-review journal.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Prerequisites: PBHL 805 [Min Grade: C]

PBHL 830 Advanced Epidemiology 4.0 Credits

This course covers more advanced methodologic issues in analytic epidemiology including: in-depth discussions of cohort, case-control, and case-cohort studies, missing data and methods of single/multiple imputation, theoretical basis of and analytic methods for using intermediate endpoints/surrogate markers, repeated measures analysis, the use of DAGS, and propensity socres to mitigate confounding.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 630 [Min Grade: B] and PBHL 620 [Min Grade: B]

PBHL 831 Epidemiology PhD Seminar I 1.0 Credit

This seminar provides the opportunity for entering epidemiology PhD students to review intermediate-to-advanced level concepts in Epidemiology. The weekly one-hour seminar will quickly review basic concepts of epidemiology and discuss conceptual underpinnings of core concepts in epidemiologic research in more detail.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if major is EPID.

PBHL 833 Epidemiology PhD Seminar II 3.0 Credits

This course is a doctoral level seminar designed to introduce students to epidemiologic methods and substantive courses not covered and offers

practical skills for funding and conducting their own research.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit
Restrictions: Can enroll if major is EPID.

PBHL 834 Methodological Challenges 3.0 Credits

This course is designed to provide a theoretical foundation and the practical tools necessary for addressing challenges to causal inference in epidemiological research.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 835 Proposal Writing Seminar 3.0 Credits

Designed to provide students with an understanding of the methodologic and logistic problems involved in designed and conducting epidemiologic studies. The course also offers students opportunities to critically evaluate the adequacy and scientific merit of research protocols.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

Prerequisites: PBHL 620 [Min Grade: C] and PBHL 630 [Min Grade: C]

PBHL 850 Practicum in Health Policy & Social Justice 10.0 Credits

The practicum is required, invovled supervised practical experience applying concepts and methods to new health policy development and/ or modification of exisiting policy. The student will identify a health policy and social justice problem and analyze the problem through using the appropriate complement of methods.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

Restrictions: Can enroll if major is HPSJ and classification is PhD.

PBHL 851 Health Systems Policy Analysis 3.0 Credits

This course examines alternative approaches to structuring a nation's health system and reforming existing systems. Development of an analytic framework to explore health systems of different nations and performance evaluation of those systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 852 Economics of Social Justice 3.0 Credits

The course provides an overview of the evolution of economic thought from Aristotle to the present with special emphasis on health and public health. 18th and 19th century moral philosophers a dn more recent work by economists is read and discussed. Unethical or unjust behaviors in contemporary markets are examined.

PBHL 853 Applied Health Economics: Technology Assessment and Economic Evaluation 3.0 Credits

This course reviews issues and methods of assessing health care technologies and programs, with an emphasis on economic evaluation and applications to clinical and public policy.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 854 The Politics of Food & Gender 3.0 Credits

This course will examine the global food crisis & community nutrition in context of maternal & child health. Using current events & news stories, students will be introduced to the complex & diverse nature of the politics of food and agriculture, & how these dynamics manifest in the health and wellbeing of young children & their families.

College/Department: School of Public Health
Repeat Status: Not repeatable for credit

PBHL 855 Health Services Research 3.0 Credits

Course provides an introduction to basic and "state of the art" methods for undertaking research and program evaluation within health services organizations and systems.

College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 856 Violence, Trauma and Adversity in Public Health 3.0 Credits

This course will focus on the public health policy and practice aspects of trauma violence and adversity. The course will begin by laying a foundation of trauma theory and then will examine the impact of emerging knowledge on individuals, communities and systems.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 899S REGISTERED FOR THESIS ONLY 1.0 Credit

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit

PBHL 900S Registered for Degree Only 1.0 Credit College/Department: School of Public Health

PBHL 901 Dissertation Seminar I 5.0 Credits

This is a required doctoral course to develop the dissertation proposal. Students will select and develop a research question, establish evidence of the significance, define assumptions and limitations, complete a critical analysis of literature, select and justify research methods.

College/Department: School of Public Health **Repeat Status:** Not repeatable for credit **Restrictions:** Can enroll if program is DRPH.

PBHL 902 Dissertation Seminar II 5.0 Credits

This is a required doctoral course to finalize the dissertation proposal. Students will complete the Drexel University Internal Review Board (IRB) protocol for their research. Students will prepare for the oral defense of the proposal including proposal presentation.

College/Department: School of Public Health Repeat Status: Not repeatable for credit Restrictions: Can enroll if program is DRPH. Prerequisites: PBHL 901 [Min Grade: C]

PBHL 990S THESIS DEFENSE 0.0 Credits College/Department: School of Public Health Repeat Status: Not repeatable for credit

PBHL 995 Ph.D. Dissertation Companion 1.0-9.0 Credit

College/Department: School of Public Health

Repeat Status: Can be repeated multiple times for credit

PBHL 998 Disseration Guidance 1.0-12.0 Credit

Directed guidance of dissertation research including base-building and consent, data collection and intervention, analysis and interpretation of data and implications for future research, policy and practice. Guidance will include preparation for presenting dissertation research and preparation for the final defense.

College/Department: School of Public Health **Repeat Status:** Can be repeated 8 times for 12 credits

Restrictions: Can enroll if program is DRPH.

Prerequisites: PBHL 901 [Min Grade: C] and PBHL 902 [Min Grade: C]

PBHL 999 Thesis Research: Dissertation Guidance and Epidemiology 1.0-12.0 Credit

Directed guidance of dissertation research, preparation for presenting dissertation research to colleagues at the dissertation seminar and preparation for the final defense.

College/Department: School of Public Health

Repeat Status: Not repeatable for credit
Restrictions: Can enroll if program is DRPH.

Master of Public Health

Master of Public Health (MPH): 64.0 quarter credits

About the Program

The Master of Public Health program is intended for individuals interested in careers as community educators; population health planners; policy analysts, evaluators, researchers; and managers of health service delivery organizations and systems, managed-care programs, and other population-based organizations.

The program is interdisciplinary and requires students to complete a community-based master's project. It prepares students to enter an array of fields related to public health or a range of doctoral programs.

Drexel University's Master of Public Health (MPH) program provides practical skills and experience, with a unique focus on relevant community issues, challenges, and priorities.

The 64.0 quarter-credit program is interdisciplinary and requires students to complete a comprehensive, community-based master's project. The program prepares students to enter an array of fields related to public health or a range of doctoral programs.

Program Highlights

The first year of the program covers the five core disciplines offered within the context of culture and community. These include environmental and occupational health; health care systems organization, management, and policy; social and behavioral sciences for population health; epidemiology; biostatistics. During the second year of the program, students select one of five following concentrations from the school's four academic departments:

- Biostatistics
- Epidemiology
- · Community Health and Prevention
- · Environmental and Occupational Health
- · Health Management and Policy

Throughout the program, group case discussion sessions, case-related activities and didactic sessions are integrated into the experience. These include:

- · Skill development labs and workshops (year two);
- Public health grand rounds (for all faculty, students, and community partners) provide access to scholars and their cutting-edge research and initiatives in public health.

Curriculum

The MPH full-time educational program is structured on a quarter-term basis, with a total 64.0 credit hours required. This is generally taken as a two-year program; all coursework must be completed within seven years of the date of matriculation for the full-time program.

The second-year curriculum is composed of four courses in the chosen area of concentration (Biostatistics; Epidemiology; Community Health and Prevention; Environmental and Occupational Health; Health Management and Policy), three elective courses, and the Community-Based Master's Project (CBMP), the culminating experience required of full-time Drexel MPH students.

Students spend approximately 12 hours each week working on a community-oriented, health-related project, often working as an integral part of a community-based organization. This can be in the areas of government, healthcare and social services, among others. In preparation for developing their final paper, students are required to identify an issue or problem of significance to the target community or agency, synthesize the literature, develop an approach or methodology to address the issue, and either implement and test the validity of a proposed approach or set out a detailed prescription for addressing the problem. Students may also work with faculty in specific research areas.

Joint Doctor of Medicine and Master of Public Health Degree (MD/MPH)

Students wishing to complete a course of study earning the joint MD/MPH degree can complete such a program in 5 years. They must apply for the joint program and be accepted by both the Drexel University School of Medicine and the School of Public Health.

Students in this program have enriched public health content in their first two years of medical school and spend their third year of study full time in the School of Public Health. Students are able to enter clinical rotations and residency selection having obtained the MPH degree.

Additional Information

For additional information about this program, contact:

Stephanie Johnson snj22@drexel.edu 267.359.6065

Admission Requirements

The School of Public Health seeks students with intellectual and interpersonal competencies as well as those with potential for leadership.

The school has set a high priority on establishing a student body that is representative of the nation's population. We strive to recruit and to admit applicants from underrepresented minority groups who can contribute to the richness of our student population and to that of the nation's public health professionals.

Admissions Process

- The Admissions Committee carefully reviews applications and gives personal essays and letters of recommendation particular attention.
- The selection process weighs prior academic and personal accomplishments, emphasizing demonstrated leadership.
- Diversity of background and outside interests, depth of self-appraisal, commitment to public heath, and working with individuals are highly valued
- Prior work experience in a field related to public health is highly recommended.

Applicants should have:

- Satisfactorily completed an undergraduate bachelor degree program in an accredited US college or university, or its equivalent in another country
- · A course in Statistics is highly recommended
- Six undergraduate or graduate credits in the social or behavioral sciences and three in the biological sciences are preferred, but not required
- Satisfactory results from one of the following taken within the past five years (the GRE or GMAT is preferred):
 - Graduate Record Examination (GRE)
 - Graduate Management Admission Test (GMAT)
 - Medical College Admission Test (MCAT)
 - · Law School Admission Test (LSAT)
- Test of English as a Foreign Language (TOEFL) for applicants whose first language is not English

Please note: Drexel University's School code for submitting GRE scores is 2194.

The Application Process also requires:

- Completion of the Schools of Public Health Common Application (http://www.sophas.org) .
- A personal essay describing what you perceive to be pressing public health issues, why a career in the field appeals to you, and how it will use your strengths and commitment
- Three letters of recommendation
- Resume or CV

Applicants to the joint MD/MPH program must be accepted to both the Drexel College of Medicine (http://www.drexelmed.edu) and the School of Public Health (http://publichealth.drexel.edu) .

Degree Requirements

The full-time educational program is structured on a quarter term basis, with a total credit hour requirement of 64.0 quarter credit hours. This is generally taken as a two-year program; all course work must be completed within four years of the date of matriculation for the full-time program.

Required core c	ourses	28.0
PBHL 516	Introduction to Public Health	
PBHL 520	Principles of Biostatistics	
PBHL 530	Principles of Epidemiology	
PBHL 540	Prevention Principles and Practices	
PBHL 550	Community Based Prevention Practices	
PBHL 600	Management, Leadership, Assurance and Health Services	
PBHL 640	Environmental Health	
PBHL 650	Public Policy and Advocacy	
Required comm	unity-based Master's project courses	12.0
PBHL 680	Community Based Master's Project I	
PBHL 681	Community Based Master's Project II	
PBHL 682	Community Based Master's Project III	
Required Course	es by Concentration	12.0
and complete fou	heir first year, students select a concentration area ir courses for a total of 12.0 credits.	
Biostatistics		
PBHL 620	Intermediate Biostatistics I	
PBHL 621	Intermediate Biostatistics II	
PBHL 622	Statistical Inference I	
PBHL 630	Intermediate Epidemiology	
-	Ith and Prevention	
PBHL 670	Multicultural Competence in Community Health and Prevention	
PBHL 671	Theory and Practice of Community Health and Prevention	
PBHL 672	Theory and Practice in Health Communication	
PBHL 673	Outcomes Assessment of Community Health and Prevention	
Environmental a	and Occupational Health	
PBHL 641	Environmental Hazard Assessment	
PBHL 643	Environmental and Occupational Toxicology	
PBHL 647	Occupational and Environmental Epidemiology	
PBHL 662	Environmental and Occupational Policy	
Epidemiology		
PBHL 620	Intermediate Biostatistics I	
PBHL 630	Intermediate Epidemiology	
PBHL 632	Applied Survey Research in Epidemiology	
PBHL 634	Epidemiology for Public Health Practice	
Health Managen		
	oncentration must choose two courses from each of categories of courses:	
Macro Theory	and Practice	
PBHL 609	Issues in United States Health Policy	
PBHL 611	Race, Ethnicity and Health	
PBHL 651	Legal Aspects of Public Health	
Micro Theory and	• •	
PBHL 601	Management of Healthcare Outcomes	
PBHL 603	Advanced Healthcare Financial Management	
PBHL 605	Change Management in Public Health	
Electives		12.0

Students are required to successfully complete four electives (12.0 credits). These courses may be within the School of Public Health, or from other academic units within the University. Students must meet with their Academic Advisor in selecting their electives. It is the responsibility of the student to determine course restrictions and the registration process for campus electives taken at the Main Campus. The following is a sample of some of the School of Public Health electives offered by department:

electives offered	by department.
Biostatistics El	ectives
PBHL 623	Introduction to Statistical Computing
PBHL 628	Survival Data Analysis
PBHL 629	Design & Analysis of Clinical Trials
PBHL 684	Statistical Inference II
PBHL 686	Advanced Statistical Computing
Community Hea	Ith and Prevention Electives
PBHL 805	Qualitative Research in Community Health
PBHL 809	Community Health Policy Development and Analysis
Environmental	and Occupational Health Electives
PBHL 648	Public Health and Disaster Preparedness
PBHL 649	Occupational and Environmental Cancers
PBHL 661	Occupational and Environmental Diseases
Epidemiology I	Electives
PBHL 633	Epidemiology of Cancer
PBHL 636	Infectious Disease Epidemiology
PBHL 638	Perinatal Epidemiology
PBHL 639	Cardiovascular Disease Epidemiology & Prevention
Health Manager	nent and Policy Electives
COM 675	Grant Writing for the Arts and Humanities
PBHL 602	Public Health Practice
PBHL 604	Public Health Advocacy and Activism
PBHL 606	Vaccines and Public Health Policy
PBHL 607	Evolution of United States Health Policy
PBHL 615	Perspectives on Gender, Race, Ethnicity, and Social Class
PBHL 617	Health Disparities: Systemic, Structural, Environmental & Economic
PBHL 618	Historical and Contemporary Developments in Social Justice
PBHL 802	Health and Human Rights
PBHL 817	Economic Evaluation Methods for Community Health and Prevention
PBHL 851	Health Systems Policy Analysis
PBHL 852	Economics of Health Policy & Social Justice
PBHL 854	The Politics of Food & Gender
PBHL 856	Violence, Trauma and Adversity in Public Health
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School of Public Health Faculty

Total Credits

Amy Auchincloss, PhD (University of Michigan) Department of Biostatistics and Epidemiology. Assistant Professor. Environmental determinants of health and the health effects of air pollution; contribution of resources in residential environments to health behaviors, obesity,

64.0

diabetes and cardiovascular disease; the use of spatial analysis methods and agent-based mode

Zekarias Berhane, PhD (University of Pittsburgh) Department of Epidemiology and Biostatistics. Assistant Research Professor. Modeling time-to-event data with single and multiple outcomes, mixed effect models and regression diagnostics.

Sandra Bloom, MD (Temple University School of Medicine) Department of Health Management and Policy. Associate Professor. Psychological trauma and organizational stress.

Jennifer Breaux, DrPh, MPH (Drexel School of Public Health) Department of Community Health and Prevention; Office of Academic Affairs, Director of Undergraduate Public Health Education. Assistant Teaching Professor. Maternal and child health, community health, human rights.

Darryl R. Brown, PhD (Johns Hopkins Bloomberg School of Public Health) Department of Health Management and Policy. Assistant Professor. Health care research and planning; patient outcomes and applied health economic methods.

James W. Buehler, MD (University of California, San Francisco) Department of Health Management and Policy. Professor. Public health systems and services research, methods and uses of population health monitoring, health care and public health interactions, public health impact of health information automation.

Igor Burstyn, PhD (Utrecht University) Department of of Environmental and Occupational Health. Associate Professor. Occupational and environmental epidemiology, industrial hygiene.

Carla Campbell, MD, MS (Kentucky College of Medicine; Mount Sinai School of Medicine) Department of Environmental and Occupational Health. Associate Professor. Community and environmental medicine, pediatrics, lead poisoning.

Amy Carroll-Scott, PhD, MPH (University of California, Los Angeles; University of California, Berkeley) Department of Community Health and Prevention. Assistant Professor. Social determinants of community-level health disparities, underserved and vulnerable populations, build environment, community-based participatory research, community health assessments, community capacity and social capital, program planning and evaluation, multilevel and longitudinal studies, mixed methods, chronic disease and obesity prevention.

Esther Chernak, MD, MPH, FACP (UMDNJ-Robert Wood Johnson Medical School) Department of of Environmental and Occupational Health. Associate Research Professor. Public health emergency preparedness, infectious diseases, public health practice, global health.

Mariana Chilton, PhD, MPH (University of Pennsylvania) Department of Health Management and Policy. Associate Professor. Human rights and health; race, ethnicity and poverty; nutrition and chronic disease; ethnography and participatory research; complementary and alternative medicine.

Curtis E. Cummings, MD, MPH (Jefferson Medical College) Department of Environmental and Occupational Health. Associate Teaching Professor. Occupational medicine, radiology, chemical and radiation toxicity, Medical Corps, US Navy (Ret.).

Anneclaire De Roos, MPH, PhD (University of North Carolina, Chapel Hill). Associate Professor. Environmental and occupational determinants of disease, including cancer, autoimmune disease and other chronic

conditions; thyroid and immune function; air pollution, persistent pollutants, pesticides; risk assessment.

Nancy Epstein, MPH, MAHL (University of North Carolina, Reconstructionist Rabbinical College) Department of Community Health and Prevention. Associate Professor. Healthcare for under-served communities, health education and coalition building, health and disability policy, oral health, faith and health.

Alison A. Evans, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Epidemiology studies of hepatitis B infection and its complications; prevention of liver cancer in East Asian populations in the Delaware Valley.

Robert I. Field, PhD, JD, MPH (Boston University; Columbia University School of Law; Harvard University School of Public Health) Director of JD/Master of Public Health Program. Professor. Health law and public health; ethical issues in managed care, public policy and legal facets of health care reform and genetic screening.

Janet Fleetwood, PhD (University of Southern California, School of Philosophy) Department of Community Health and Prevention; Vice Provost for Strategic Development & Initiatives. Professor. Higher education strategy planning, faculty development and equity, bioethics.

Arthur L. Frank, MD, PhD (Mount Sinai School Medicine City University of New York) Chair, Department of Environmental and Occupational Health. Professor. Environmental and occupational health, agricultural safety and health, pneumoconiosis, occupational toxicology, environmental pollution.

Dennis Gallagher, MA, MPA (University of Pittsburgh) Department of Health Management and Policy. Associate Professor. Health policy, Medicare/Medicaid/SCHIP, health care access for the uninsured, health system transformation.

Marla Gold, MD (University of Medicine and Dentistry-New Jersey Medical School) Department of Health Management and Policy. Professor. Design of HIV/AIDS care systems, treatment protocols, resource utilization, and epidemiology; CQI, managed care and systems of health care, health administration, behavioral health care and substance abuse treatment systems.

Edward J. Gracely, PhD (*Temple University*) Department of Epidemiology and Biostatistics. Associate Professor. Statistics, experimental design/research methods and statistical analysis, clinical trials.

William J. Hickey, PhD (Northwestern University) Department of Health Management and Policy. Associate Teaching Professor. Organization behavior, health care administration.

Mary E. Hovinga, PhD, MPH (University of Michigan) Associate Dean of Academic Affairs; Department of Epidemiology and Biostatistics. Associate Professor. Surveillance and etiology of mental retardation, environmental epidemiology, and the human health effects of heavy metals, PCBs and DDT.

Ann Klassen, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Community Health and Prevention, Chair; Associate Dean for Research. Professor. Social and geographical determinants of chronic disease disparities, cancer prevention and control, behavioral science.

Jennifer Kolker, MPH (University of Michigan) Department of Health Management and Policy. Associate Teaching Professor. Planning and policy development for health and welfare, early childhood education, epidemiological data collection and analysis, disease controls.

Stephen E. Lankenau, PhD (*University of Maryland*) Department of Community Health and Prevention. Associate Professor. Substance misuse, overdose prevention, high-risk youth, and mixed methods.

Brian K. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Professor. Neuroepidemiology, autism, dementia, environmental risk factors, gene-environmental interaction, propensity score methods, machine learning, stress.

Nora L. Lee, PhD (Johns Hopkins, Bloomberg School of Public Health) Department of Epidemiology and Biostatistics. Assistant Research Professor. Perinatal epidemiology; low birth weight; preterm birth; macrosomia; maternal and child health; second-hand smoke; environmental exposures; autism spectrum disorders; China.

Longjian Liu, MD, MSC, PhD (University of Hong Kong) Department of Epidemiology and Biostatistics. Associate Professor. Nutrition, aging, cross-cultural and racial/ethnic variation and health.

Raymond K. Lum, MPhil, MS (University of Pennsylvania) Department of Health Management and Policy. Associate Teaching Professor. Organizational learning theory, change management, systems thinking, innovation diffusion, technology transition, e-health.

Shannon Marquez, MEng, PhD (University of North Carolina Gillings School of Global Public Health) Associate Vice Provost for Global Health and International Development, Director of Global Public Health Initiatives. Associate Professor. Agricultural safety, health disparities, environmental health, international health.

Philip M. Massey, PhD, MPH (UCLA Fielding School of Public Health) Department of Community Health and Prevention. Assistant Professor. Health communication, health literacy, global health, adolescent health, and mixed methods.

Yvonne Michael, ScD (Harvard School of Public Health) Department of Epidemiology and Biostatistics. Associate Professor. Epidemiology of aging, social epidemiology, women's health, community-based participatory research.

Jana M. Mossey, PhD, MPH, MSN (University of North Carolina) Department of Epidemiology and Biostatistics. Professor. Epidemiological methods; research design and methods including observational and clinical trials research; psychosocial aspects of health; epidemiology of aging; depression and chronic pain; sub-threshold and minor depression; pain in the elderly.

Craig J. Newschaffer, PhD (Johns Hopkins University) Department of Epidemiology and Biostatistics; Director of the A.J. Drexel Autism Institute. Professor. Development of methods for monitoring autism spectrum disorders prevalence; participation in the National CADDRE Study of Autism and Child Development.

Marcia Polansky, MS, ScD, MSW (Harvard University) Department of Epidemiology and Biostatistics. Associate Professor. Biostatistics; experimental design/research methods and statistical analysis, clinical trials; asthma epidemiology and interventions; attachment theory and mothers with drug and alcohol addictions.

John A. Rich, MD, MPH (*Duke University Medical School*) Department of Health Management and Policy. Professor. Inner-city health problems, urban violence, male health and racial disparities.

Lucy Robinson, PhD (Columbia University) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; statistical analysis; spatial statistics/epidemiology; application of statistics to behavioral, biological and medical sciences; environmental health; neurological disorders.

John Rossi, VMD, M.Bioethics (*University of Pennsylvania*) Department of Community Health and Prevention. Assistant Professor. Bioethics and public health ethics, including moral theory, research ethics, ethics of risk & health communication, pediatric ethics, animal ethics.

Alexis M. Roth, PhD (Indiana University) Department of Community Health and Prevention. Assistant Professor. HIV/AIDS; Sexually transmitted infections; Individual, dyadic, and structural determinants of health; Technology and health; Mixed methods research; Community-engagement and participatory research.

Randall L. Sell, ScD (Harvard University) Department of Community Health and Prevention. Associate Professor. Demographic variables, defining and measuring sexual orientations, sampling sexual minorities for public health research.

Paul Shattuck, PhD (University of Wisconsin-Madison) Department of Health Management and Policy; Leader of the A.J. Drexel Autism Institute's Research Program Area on Life Course Outcomes. Associate Professor. Understanding services and related outcomes among youth with autism spectrum disorders as they leave high school and transition to young adulthood.

David Barton Smith, PhD (The University of Michigan School of Public Health) Department of Health Management and Policy. Research Professor. Racial disparities in healthcare, long term care policy, health services research and program evaluation.

Suruchi Sood, PhD (University of New Mexico) Department of Community Health and Prevention. Associate Professor. Global health; health communication; program monitoring and evaluation and participatory methods.

Loni Philip Tabb, PhD (Harvard School of Public Health) Department of Community Health and Prevention. Assistant Professor. Methods for categorical, missing and hierarchical data, spatial epidemiology/statistics.

Jennifer A. Taylor, PhD, MPH (Johns Hopkins University) Department of Environmental and Occupational Health. Associate Professor. Injury prevention and control, quality improvement, and occupational safety.

Renee M. Turchi, MD, MPH (Johns Hopkins University) Department of Community Health and Prevention. Associate Professor. Medical Home; children and youth with special health care needs; care coordination; cultural competency and access to care.

Nicole A. Vaughn, PhD (Uniformed Services University of the Health Sciences) Department of Health Management and Policy. Assistant Professor. Community-based approaches to eliminating health disparities, health care access and utilization among insured and uninsured minority groups, obesity, women's health and the influence of culture on health behaviors particularly for chronic conditions.

Augusta M. Villanueva, PhD (University of Texas at Austin) Department of Community Health and Prevention. Associate Professor. Role of

race, culture, and ethnicity on health status/outcomes; community-based participatory research; immigrant communities; academic service-learning.

Seth Welles, PhD, ScD (Boston University) Department of Epidemiology and Biostatistics. Professor. Impact of HIV phenotypic and genotypic antiretroviral drug resistance on HIV disease progression and transmission; psychosocial risk for HIV infection and STDs among sexual minority adults and adolescents, and surveys of sexual minority adults at community festivals and at health-clinics to assess demographic and psychosocial determinants of sexual risk-taking and HIV/STD infections.

Yunwen Yang, PhD (University of Illinois at Urbana-Champaign) Department of Epidemiology and Biostatistics. Assistant Professor. Statistics; bayesian methods; application of statistics to behavioral, biological and medical sciences; mixed methods.

Michael Yudell, MPH, MPhil, PhD (Columbia University, City University of New York) Department of Community Health and Prevention. Associate Professor. Public health genomics, bioethics, history of public health, and addiction.

Issa Zakeri, PhD (University of Illinois and Urbana-Champaign)
Department of Epidemiology and Biostatistics. Professor. Machine
learning; Statistics; Statistical analysis; Time series analysis; Longitudinal data analysis; Obesity; Mutlivariate analysis.

Interdepartmental Faculty

Alan T. Murray, PhD (University of California at Santa Barbara) Co-Director, Center for Spatia I Analytics and GeoComputation. Professor. Geographic information science; Spatial optimization and public health.