

# COLLEGE OF PUBLIC HEALTH

## College of Public Health

131 Moulton Hall  
Kent Campus  
330-672-6500  
publichealth@kent.edu  
www.kent.edu/publichealth

## Mission of the College

The mission of the College of Public Health is to advance public health by preparing leaders, scientists and practitioners to collaborate with community partners in conducting impactful research and practice to solve public health challenges.

Kent State University's College of Public Health was established in 2009 to educate and prepare students to meet the current and projected shortage of public health professionals in Ohio and the nation. It is one of only two schools of public health in Ohio and the first to offer a Bachelor of Science in Public Health degree. In addition to the bachelor's degree, the college also offers Master of Public Health degrees in Biostatistics, Epidemiology and Public Health; a Master of Science degree in Clinical Epidemiology; a Doctor of Philosophy degree; graduate certificates in Clinical Research, Healthcare Compliance and LGBTQ+ Public Health; and combined bachelor's/master's degree programs. The academic programs integrate theory and practice to equip graduates with the knowledge and skills to address and solve the health challenges of the 21st century. Faculty engage in innovative research that seeks answers to some of society's most challenging public health issues. Partners include local health departments, community organizations, health care institutions and businesses; those partnerships provide students with applied practical experiences in public health.

## Undergraduate Programs

### Majors

- Public Health - B.S.P.H.

### Minors

- Environmental Health Sciences for Natural Science Majors
- Environmental Health Sciences for Non-Natural Science Majors
- Health Services Administration
- Health Technologies and Informatics
- Public Health

### Certificates

- Public Health

## Graduate Programs

### Majors

- Biostatistics - M.P.H.
- Clinical Epidemiology - M.S.
- Epidemiology - M.P.H.
- Public Health - M.P.H.
- Public Health - Ph.D.

### Certificates

- Clinical Research
- Healthcare Compliance
- LGBTQ+ Public Health

## Accreditation Feedback Policy

The College of Public Health at Kent State University has been accredited by the Council on Education for Public Health (CEPH) as a school of public health. Being an accredited institution adds great value to degrees conferred and ensures a comprehensive student experience. A continual self-evaluation program is required by CEPH for accreditation. At the core of this program, it is required that the college solicit and respond to feedback from our students. Accordingly, it is an expectation of the college that students earnestly participate in providing accurate and timely feedback to the college in the form of Student Surveys of Instruction (SSI) as well as annual exit and alumni satisfaction surveys. Participation in the feedback process will assist in the College's accreditation process and will allow the administration and faculty to quickly identify and address any problems as they arise, thus enhancing the quality of the academic experience in the college.

Students who fail to complete the required surveys may be prevented from future term registration.

## College of Public Health Faculty

- Alemagno, Sonia A. (2009), Professor, Ph.D., Case Western Reserve University, 1990
- Beaird, Heather (2011), Associate Professor, Ph.D., Case Western Reserve University, 2005
- Benzigar, Sasikumar (2011), Associate Professor, Ed.D., University of Cincinnati, 2014
- Bhargava, Tina D. (2012), Professor, Ph.D., University of Pittsburgh, 2012
- Bhatta, Madhav P. (2009), Professor, Ph.D., University of Alabama, Birmingham, 2007
- Brewer, Thomas W. (2002), Professor, Ph.D., University at Albany-SUNY, 2003
- Chatfield, Sheryl L. (2015), Associate Professor, Ph.D., University of Mississippi, 2014
- Cheruvu, Vinay K. (2010), Associate Professor, Ph.D., Case Western Reserve University, 2012
- Eng, Abbey L. (2006), Professor, Ph.D., Bowling Green State University, 2007
- Guan, Tianyuan (2021), Assistant Professor, Ph.D., University of Cincinnati, 2021
- Hallam, Jeffrey S. (2013), Professor, Ph.D., The Ohio State University, 1995
- Hoornbeek, John A. (2006), Professor, Ph.D., University of Pittsburgh, 2004
- Jefferis, Eric S. (2002), Professor, Ph.D., University of Cincinnati, 2004
- Kenne, Deric (2011), Professor, Ph.D., University of Akron, 2010
- King, Jennifer A. (2008), Assistant Professor, Ph.D., Kent State University, 2017
- Kollin, Robert B. (2017), Lecturer, M.S., Case Western Reserve University, 2016
- Lanese, Bethany G. (2015), Associate Professor, Ph.D., Wayne State University, 2004

- Phillips, Lynette (2010), Professor, Ph.D., University of North Carolina-Chapel Hill, 2007
- Smith, Tara C. (2013), Professor, Ph.D., University of Toledo, 2012
- Stedman-Smith, Maggie M. (2009), Associate Professor, Ph.D., University of Minnesota-Twin Cities, 2008
- Step, Mary M. (2015), Associate Professor, Ph.D., Kent State University, 1998
- Stephens, Margaret C. (2012), Professor, Ph.D., University of Akron, 1999
- Tomi, Laurel A. (2015), Associate Lecturer, B.A., Kent State University, 1986
- VanGeest, Jonathan B. (2011), Professor, Ph.D., University of Illinois at Chicago, 1998
- Woolverton, Christopher J. (1995), Professor, Ph.D., West Virginia University, 1986
- Zullo, Melissa D. (2009), Professor, Ph.D., Case Western Reserve University, 2009

## Biostatistics (BST)

### **BST 50196 INDIVIDUAL INVESTIGATION IN BIOSTATISTICS 1-3 Credit Hours**

(Repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to biostatistics.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

### **BST 52019 BIOSTATISTICS IN PUBLIC HEALTH 3 Credit Hours**

Provides students with an understanding of basic statistical methods in public health research, as well as the skills to perform and interpret basic statistical procedures. Students learn how to use statistical analysis software to analyze real data from public health-related studies. They then learn how to interpret the analysis and present the results to public health professionals and educated lay audiences. Includes lab component that enhances student awareness and informed usage of the statistical software SAS for public health analysis. Students learn how to input, read, store, export and modify data in SAS and be able to use common SAS procedures to analyze public health data and conduct independent SAS programming.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

### **BST 60010 USING R IN PUBLIC HEALTH 1 Credit Hour**

(Slashed with BST 70010) Students learn the role of the computing software R for data analyses. The course covers the basics of R including how to organize and clean data and how to display data visually. Students understand how to perform descriptive and inferential statistics using R.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

### **BST 60011 USING SAS IN PUBLIC HEALTH 1 Credit Hour**

(Slashed with BST 70011) Students learn the role of the computing software SAS for data analyses. The course covers the basics of SAS, including importing data, organizing and cleaning the data and using different procedures. Students understand how to perform descriptive and inferential statistics using SAS.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

### **BST 60012 USING EXCEL IN PUBLIC HEALTH 1 Credit Hour**

(Slashed with BST 70012) An introduction to using Excel in the field of public health. Students learn the skills to analyze and present data, including using formulas, pivot tables, graphs and the data analysis toolpak.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

### **BST 60191 VARIABLE CONTENT SEMINAR IN BIOSTATISTICS 1-3 Credit Hours**

(Repeatable for credit) Seminar on current and important topics in biostatistics. Subject matter varies depending on the topic.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

### **BST 60192 APPLIED PRACTICE EXPERIENCE IN BIOSTATISTICS 3,6 Credit Hours**

(Repeatable for credit) Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 9-18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

### **BST 60195 SPECIAL TOPICS IN BIOSTATISTICS 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in biostatistics.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

### **BST 60292 APPLIED PRACTICE EXPERIENCE IN BIOSTATISTICS II 1 Credit Hour**

Continuing enrollment for students participating in public health activities of a public health agency, hospital or other approved organization. Students complete the field experience with joint supervision from the university and an approved organization or agency.

**Prerequisite:** BST 60192; and graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory

**BST 62020 DATA MANAGEMENT AND LOGIC USING SAS® SOFTWARE**  
**3 Credit Hours**

(Slashed with BST 82020) This course introduces graduate students to SAS® software, reading external data into SAS software, use of SAS data step, basic SAS functions, logical data steps for data management, and different SAS procedures for creating summary reports, graphical displays, and conducting basic statistical analysis using the SAS software. SAS Lab sessions are designed to mimic real time challenges working with different kinds of data and learn how to meet such challenges. By the end of the course, students will achieve competency in proper and efficient use of SAS software.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 63012 SURVIVAL ANALYSIS IN PUBLIC HEALTH 3 Credit Hours**

Introduction in survival analysis for graduate students in public health. Covers survival functions, hazard rates, types of censoring and truncation. Methods of focus include life tables, Kaplan-Meier plots, log-rank tests, Cox regression models and parametric survival models. Inference for recurrent event and competing risks models are also covered.

**Prerequisite:** BST 52019 and 63014; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 63013 EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH**  
**3 Credit Hours**

Introduces students to experimental research methods, in public health settings. First introduces a number of quasi-experimental and experimental study designs, then identifies a number of statistical methods that can be used to draw correct causal inferences from the study.

**Prerequisite:** BST 52019 and 63014; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 63014 APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA**  
**3 Credit Hours**

(Slashed with BST 83014) Focuses on developing student proficiency in building and evaluating various regression models for public health studies. Topics covered include exploratory and descriptive methods, simple and multiple linear regression models, predictor selection, binary and multinomial logistic regression models, survival analysis, repeated measures and generalized linear models.

**Prerequisite:** BST 52019; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 70010 USING R IN PUBLIC HEALTH 1 Credit Hour**

(Slashed with BST 60010) Students learn the role of the computing software R for data analyses. The course covers the basics of R including how to organize and clean data and how to display data visually. Students understand how to perform descriptive and inferential statistics using R.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**BST 70011 USING SAS IN PUBLIC HEALTH 1 Credit Hour**

(Slashed with BST 60011) Students learn the role of the computing software SAS for data analyses. The course covers the basics of SAS, including importing data, organizing and cleaning the data and using different procedures. Students understand how to perform descriptive and inferential statistics using SAS.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**BST 70012 USING EXCEL IN PUBLIC HEALTH 1 Credit Hour**

(Slashed with BST 60012) An introduction to using Excel in the field of public health. Students learn the skills to analyze and present data, including using formulas, pivot tables, graphs and the data analysis toolpak.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**BST 73011 MULTIVARIATE ANALYSIS IN PUBLIC HEALTH 3 Credit Hours**

Multivariate statistical methods are designed to evaluate more than one variable at a time. An application-oriented introduction to essential multivariate statistical methods used in public health. Topics covered include matrix theory, data screening and preliminary analyses, multivariate normal distributions, multivariate versions of the general linear model (MANOVA, multivariate multiple regression, MANCOVA), discrimination and classification, canonical correlation analysis, and methods of analyzing covariance and correlation structures (principal components and factor analysis). Also introduces and explores methods of handling missing data.

**Prerequisite:** BST 52019; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 82020 DATA MANAGEMENT AND LOGIC USING SAS® SOFTWARE**  
**3 Credit Hours**

(Slashed with BST 62020) This course introduces graduate students to SAS® software, reading external data into SAS software, use of SAS data step, basic SAS functions, logical data steps for data management, and different SAS procedures for creating summary reports, graphical displays, and conducting basic statistical analysis using the SAS software. SAS Lab sessions are designed to mimic real time challenges working with different kinds of data and learn how to meet such challenges. By the end of the course, students will achieve competency in proper and efficient use of SAS software.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 83012 SURVIVAL ANALYSIS IN PUBLIC HEALTH 3 Credit Hours**

Covers survival functions, hazard rates, types of censoring and truncation. Methods of focus include life tables, Kaplan-Meier plots, log-rank tests, Cox regression models and parametric survival models. Inference for recurrent event and competing risks models are also covered.

**Prerequisite:** BST 52019; and BST 63014 or 83014; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 83013 EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH**  
**3 Credit Hours**

Designed to introduce students to experimental research methods, in public health settings. First introduces a number of quasi-experimental and experimental study designs, then identifies a number of statistical methods that can be used to draw correct causal inferences from the study. Students are expected to develop two research proposals, first using quasi-experimental then an experimental design and develop a statistical analysis plan for each study.

**Prerequisite:** BST 52019; and BST 63014 or 83014; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**BST 83014 APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA**  
**3 Credit Hours**

(Slashed with BST 63014) Focuses on developing student proficiency in building and evaluating various regression models for public health studies. Topics covered include exploratory and descriptive methods, simple and multiple linear regression models, predictor selection, binary and multinomial logistic regression models, survival analysis, repeated measures and generalized linear models.

**Prerequisite:** BST 52019; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## Environmental Health Sciences (EHS)

**EHS 50060 PUBLIC HEALTH LABORATORY METHODS**  
**3 Credit Hours**

(Slashed with PH 40060) Course introduces the student to the fundamental theory and hands on use to track specimen collection and laboratory analysis. Environmental specimens are examined for their public health importance using classical and modern techniques. Students learn classical laboratory methods and their modern use in the laboratory environment. Examples include culture and microscopic identification of microorganisms, identification of disease vectors, detection of newborn disease and detection of terrorism agents.

**Prerequisite:** BSCI 30140 or CHEM 10062 or CHEM 10971 or PH 30006; and graduate standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 1 lab

**Grade Mode:** Standard Letter

**EHS 50109 LABORATORY SAFETY AND HYGIENE**  
**3 Credit Hours**

(Cross-listed with PH 40109) Basic introduction to laboratory safety, chemical hygiene, and biosafety. Includes the research compliance programs of institutions (IBC, IACUC, IRB, RSC) and the OSHA Chemical Hygiene Standard requirements and program responsibilities. General lab safety concepts are reviewed, along with chemical handling and storage, fumehoods and ventilation, hazardous waste disposal, radiation safety, and lab design. Basic principles of biosafety are covered, BSL 1-4 levels, biosafety cabinets, select agents, bloodborne pathogens, NIH Guidelines, biosecurity and animal use.

**Prerequisite:** Graduate standing.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**EHS 50196 INDIVIDUAL INVESTIGATION IN ENVIRONMENTAL HEALTH SCIENCES**  
**1-3 Credit Hours**

(Repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to environmental health sciences.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**EHS 52018 ENVIRONMENTAL HEALTH CONCEPTS IN PUBLIC HEALTH**  
**3 Credit Hours**

Provides a comprehensive overview of the core topics in environmental health as related to public health.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EHS 52100 CLIMATE CHANGE AND POPULATION HEALTH**  
**3 Credit Hours**

(Slashed with PH 42100) This course reviews evidence on the rigorous scientific consensus confirming global warming and the mechanisms underlying climate change, with a focus on adverse population health impacts. Increases in the frequency and intensity of extreme weather events including heatwaves, tropical cyclones and severe storms create hazardous conditions including flooding, drought, wildfires, increases in vector-borne diseases, food and nutrition shortages, human displacement and mental health issues. Populations at increased risk are identified along with a consideration of climate ethics, justice and public health approaches used to address the population health effects. Strategies for abatement through injury and disease prevention, climate risk communication and strategies for mitigation including green energy and energy conservation are examined.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EHS 53009 EMERGING ENVIRONMENTAL HEALTH ISSUES AND RESPONSE**  
**3 Credit Hours**

Provides an overview of emerging environmental health issues that will impact the public's health.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EHS 53012 OCCUPATIONAL SAFETY AND HEALTH**  
**3 Credit Hours**

Survey of major concepts and issues relating health and safety in the workplace. Emphasis is on the application of public health principles and decision-making practices used by various worker populations for the prevention of injury and disease on the job. This course will cover protective equipment, hazardous conditions, environmental toxins, risk assessment, prevention science approaches and workplace health promotion.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EHS 53014 BUILT ENVIRONMENT AND PUBLIC HEALTH 3 Credit Hours**

(Slashed with PH 43013) The impact of the built environment on human health is an issue of global importance. The focus of this course is on preventing disease and injury while improving the health of populations by looking “upstream” at the built environment or those settings designed, created and maintained by human efforts. Population health effects of community design are explored through scientific literature, and include transportation, land use, parks and green space in the context of physical activity, food environments, air and water quality, injury prevention, social capital and health equity. Students examine and use population health tools to assess the built environment and develop strategies for creating sustainable healthy places through multidisciplinary collaboration, research and policy that promotes the health of the public.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EHS 60191 VARIABLE CONTENT SEMINAR IN ENVIRONMENTAL HEALTH SCIENCES 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in environmental health sciences. Subject matter varies depending on the topic.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**EHS 60192 PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES 3,6 Credit Hours**

Observational and participation in public health activities of a public health agency, hospital or other approved organization. Students complete the field experience with joint supervision from the university and approved organization or agency.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 9-18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EHS 60195 SPECIAL TOPICS IN ENVIRONMENTAL HEALTH SCIENCES 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in environmental health sciences.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**EHS 60292 APPLIED PRACTICE EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES II 1 Credit Hour**

(Repeatable for credit) Continuing enrollment for students participating in public health activities of a public health agency, hospital or other approved organization. Students complete the field experience with joint supervision from the university and an approved organization or agency.

**Prerequisite:** EHS 60192; and graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory

**EHS 63010 APPLIED RISK ASSESSMENT 3 Credit Hours**

Introduces the student to environmental and occupational hazards, assessing the risks associated with hazard exposure. Standard principles of risk assessment are emphasized including methods of hazard identification and regulation, quantitative exposure measurement, dose and toxicity relationships and risk management. Analysis of public policy regulatory guidance and health advisory watchdog recommendations are evaluated.

**Prerequisite:** EPI 52017; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EHS 63011 APPLICATION OF RISK ANALYSIS IN ENVIRONMENTAL HEALTH 3 Credit Hours**

Students are introduced to methods in risk analysis that are applied by U.S. federal, state, and local agencies in their assessment of chemical toxicants. Linkages between risk assessment, risk management, and risk communication will be studied as components of this process, along with issues and controversies in the analysis of environmental health risks.

**Prerequisite:** EPI 52017; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## Epidemiology (EPI)

**EPI 50013 CLINICAL EPIDEMIOLOGY BASICS 3 Credit Hours**

(Slashed with PH 40013) Course develops an understanding of clinical research, good clinical practices, research environments and methods used in clinical research. Students gain an understanding of the use of clinical investigation, from the product development stage to the application of investigations in contract research organization. Ethical implications and regulatory issues are examined.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 50014 CLINICAL TRIALS MANAGEMENT 3 Credit Hours**

(Slashed with PH 40014) Course examines the good clinical practices guidelines. Students learn how to conduct and manage clinical trials; understand clinical trials data; develop instruments and protocols; recognize quality control and data issues; know approaches to recruitment, retention and participant assessment; identify adverse events and measurement of response variables; and acquire skill in study close-out procedures.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 50015 SCIENTIFIC WRITING FOR CLINICAL RESEARCH 3 Credit Hours**

(Cross-listed with PH 40015) Course provides students the tools to develop proficiency in scientific reading, to conduct presentations and to demonstrate skill in scientific writing, with the goal of preparing clinical researchers to be able to communicate findings to the science community and the general population. Course includes an examination of the science literature in clinical trials research.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 50017 PHARMACOEPIDEMIOLOGY 3 Credit Hours**

(Cross-listed with PH 40017) Introduction to the field of pharmacoepidemiology, which uses epidemiology methods to understand medication use and distribution at the population level. Course examines risk-benefit and epidemiology approaches to examining medication use and therapeutic trials. Drug and device manufacturing to market are explored.

**Prerequisite:** BST 52019 and EPI 52017; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 50018 REGULATORY AFFAIRS IN CLINICAL RESEARCH 3 Credit Hours**

(Slashed with PH 40018) Course provides the tools for students to develop an understanding of the researcher and organization responsibility in research and development of clinical trials products. Students understand regulations from the government and industry, privacy concerns, liability and ethical issues related to clinical trials research. Examples from the field are explored in detail.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 50196 INDIVIDUAL INVESTIGATION IN EPIDEMIOLOGY 1-3 Credit Hours**

(Repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to epidemiology.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**EPI 52010 UNDERSTANDING THE COVID-19 PANDEMIC 3 Credit Hours**

(Slashed with PH 42010) In this course, students examine the various aspects of the ongoing coronavirus pandemic. They learn foundational information in epidemiology, virology and immunology, and examine the emergence and spread of SARS-CoV-2. They learn about responses to the epidemic, including policies aimed at slowing spread, and examine aspects of diagnostics and vaccine development relevant to controlling the spread of the virus.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 52017 FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY 3 Credit Hours**

(Slashed with EPI 72017) Introduces principles, methods and application of epidemiology. Covers the history of epidemiology, concepts of disease causation and prevention, measures of disease frequency and excessive risk, epidemiologic study designs, causal inference, outbreak investigation and screening. Provides experience with calculation of rate standardization; measures of disease frequency, association and impact; and sensitivity and specificity of screening tests. Highlights applications of epidemiology to understanding of disease etiology, transmission, pathogenesis and prevention; evaluation and public policy development.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 52028 METHODS OF EVIDENCE BASED PUBLIC HEALTH 3 Credit Hours**

(Slashed with EPI 72028) Explores tools and techniques used to quantitatively determine the effectiveness of public health interventions in the social sciences.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 53089 PLAGUES THAT SHAPED THE WORLD 3 Credit Hours**

(Slashed with EPI 73089) (Cross-listed with PH 43089) Course examines the Bubonic plague, HIV/AIDS, Ebola and pandemic influenza outbreaks to introduce students to the fundamentals of public health, establishing epidemiological principles that explain how plagues erupt and propagate, decimate populations and alter cultures. Inherent in the course's discussion are the social determinants that fuel plague outbreaks and slow recovery. Examples of emerging infectious diseases and threats of bioterrorism are discussed as new plagues for which creative solutions are still required. Students take city excursions and a field trip to assess cultural changes resulting from historical plagues.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 60191 VARIABLE CONTENT SEMINAR IN EPIDEMIOLOGY 1-3 Credit Hours**

(Repeatable for credit) (Slashed with EPI 80191) Seminar on current and important topics in epidemiology. Subject matter varies depending on the topic.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**EPI 60192 APPLIED PRACTICE EXPERIENCE IN EPIDEMIOLOGY 3,6 Credit Hours**

(Repeatable for credit) Observational and participation in public health activities of a public health agency, hospital or other approved organization. Students complete a field experience with joint supervision from the university and approved organization or agency.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 60195 SPECIAL TOPICS IN EPIDEMIOLOGY 1-3 Credit Hours**

(Repeatable for a maximum 6 credit hours) (Slashed with EPI 80195) Special topics to sample new offerings on topics in epidemiology.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**EPI 60292 APPLIED PRACTICE EXPERIENCE IN EPIDEMIOLOGY II 1 Credit Hour**

(Repeatable for credit) Continuing enrollment for students participating in public health activities of a public health agency, hospital or other approved organization. Students complete the field experience with joint supervision from the university and an approved organization or agency.

**Prerequisite:** EPI 60192; and graduate standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory

**EPI 63014 EPIDEMIOLOGY OF CHRONIC DISEASES 3 Credit Hours**  
(Slashed with EPI 83014) With a life course approach to chronic disease epidemiology, this course focuses on cardiovascular, respiratory, cerebrovascular diseases and cancer. Health and disease are addressed from a multicausal perspective, which includes individual behaviors; psychosocial issues; and sociodemographic, biological and physiological factors. Time points for prevention and intervention are identified.  
**Prerequisite:** EPI 52017; and graduate standing.

**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63015 EPIDEMIOLOGY OF INFECTIOUS DISEASES 3 Credit Hours**

(Slashed with EPI 83015) Surveys the history, principles, methods and practice of infectious disease epidemiology, by (1) defining and understanding infectious disease epidemiology surveys, (2) collecting and measuring surveillance data, (3) interpreting epidemiology data and (4) predicting evidence-based outcomes. Primarily a course in epidemiology, students learn some infectious disease microbiology as well.

**Prerequisite:** EPI 52017; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63016 PRINCIPLES OF EPIDEMIOLOGIC RESEARCH 3 Credit Hours**

(Slashed with EPI 83016) Course builds upon EPI 52017 to explore deeper the concepts and methods in epidemiologic research. Reviews the measures of disease frequency; association and impact; epidemiologic reasoning and causal inference; and methods and techniques for designing, implementing, analyzing and interpreting various epidemiologic study designs. Discusses advantages and limitations of various study designs. Explores threats to validity, precision and generalizability of epidemiologic studies.

**Prerequisite:** BST 52019 and EPI 52017; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63017 EPIDEMIOLOGICAL ANALYSIS 3 Credit Hours**

(Slashed with EPI 83017) Provides practical instruction in the analysis and interpretation of data from various epidemiologic study designs, including cross-sectional, case-control and cohort studies. Reviews statistical concepts and epidemiologic studies designs; outlines a strategy for data analysis; and reviews relevant methodologic issues and applies stratified analysis methods and multivariable regression models to the studies. Develops an understanding of the underlying principles and assumptions, practical application and correct interpretation of the epidemiologic results. Provides hands-on experience on the application of epidemiologic analysis methods and presentation of the results.

**Prerequisite:** BST 52019 and BST 63014 and EPI 52017 and EPI 63016; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63018 OBSERVATIONAL DESIGNS FOR CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 83018) Course provides students the skills to design, conduct and perform clinical epidemiology studies using an observational design. Students understand major concepts of clinical research, develop clinical research questions, and solve clinical research problems. Topics include study design, risk, causation, exposures, bias, measurement and validity and disease prognosis.

**Prerequisite:** BST 52019 and EPI 52017; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63019 EXPERIMENTAL DESIGNS FOR CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 83019) Principles of experimental designs as they apply to clinical research and clinical trials are presented at an intermediate level. Students understand randomized control trial designs and alternative designs. Study methodology, including randomization and blinding techniques, is covered. Topics include evidence-based medicine; risk prediction and risk scores; instruments and measurement; data issues; and recruitment, retention and adherence.

**Prerequisite:** EPI 63018; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63020 ADVANCED EPIDEMIOLOGY AND CLINICAL RESEARCH METHODS 3 Credit Hours**

(Slashed with EPI 83020) This advanced course focuses on why particular methods, study designs or approaches are used in particular investigative scenarios in clinical research. Students develop an advanced understanding and application of epidemiology methods in clinical research.

**Prerequisite:** EPI 63018 and EPI 63019; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63021 ETHICAL ISSUES IN PUBLIC HEALTH AND CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 83021) Introduces students to historical and contemporary ethical issues that arise during public health and clinical or biomedical research studies. Broadly covers human subjects research, the responsible conduct of research and the good clinical practice guidelines.

**Prerequisite:** EPI 52017; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63034 LONGITUDINAL DATA ANALYSIS 3 Credit Hours**

(Slashed with EPI 73034) Statistical techniques for analyzing longitudinal, or repeated measures, data. Focuses primarily on application of the various statistical models covered, with direct application illustrated using standard statistical software. Topics covered include univariate and multivariate analysis of variance for repeated measures, mixed-effects models (HLM or multilevel models), covariance pattern models, generalized estimating equations (GEE), mixed-effects logistic regression models and missing data in longitudinal studies.

**Prerequisite:** BST 52019 and BST 63014; and graduate standing.  
**Schedule Type:** Lecture  
**Contact Hours:** 3 lecture  
**Grade Mode:** Standard Letter

**EPI 63192 RESEARCH PRACTICUM IN CLINICAL EPIDEMIOLOGY 1-3 Credit Hours**

(Repeatable for credit) Research practicum allows students to gain hands-on experience conducting research in a clinical setting, such as a hospital or other approved organization. Students complete the experience under the supervision of a field preceptor and faculty member.

**Prerequisite:** Graduate standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 63199 THESIS I 2-6 Credit Hours**

Student must register for a total of 6 credit hours in the program. Student may register for 2 to 6 hours in a single semester

**Prerequisite:** Graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2-6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 63299 THESIS II 2 Credit Hours**

Thesis students must continue registration in Thesis II each semester until all degree requirements are met.

**Prerequisite:** EPI 63199; and graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 72017 FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY 3 Credit Hours**

(Slashed with EPI 52017) Introduces principles, methods and application of epidemiology. Covers the history of epidemiology, concepts of disease causation and prevention, measures of disease frequency and excessive risk, epidemiologic study designs, causal inference, outbreak investigation and screening. Provides experience with calculation of rate standardization; measures of disease frequency, association and impact; and sensitivity and specificity of screening tests. Highlights applications of epidemiology to understanding of disease etiology, transmission, pathogenesis and prevention; evaluation and public policy development.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 72028 METHODS OF EVIDENCE BASED PUBLIC HEALTH 3 Credit Hours**

(Slashed with EPI 52028) Explores tools and techniques used to quantitatively determine the effectiveness of public health interventions in the social sciences.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 73025 EMERGING ISSUES IN INFECTIOUS DISEASE EPIDEMIOLOGY 3 Credit Hours**

Investigates global emerging and reemerging infectious diseases. Students evaluate root causes of infectious disease emergence and predict outcomes. Data from primary literature is used to predict alternate outcomes. Specific disease models are used to evaluate and compare prevention, treatment and eradication strategies.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 73026 DESIGN AND IMPLEMENTATION OF HEALTH SURVEYS 3 Credit Hours**

Covers survey design, variable construction, survey administration and data collection methods, variable coding and manipulation and data analysis. Students understand sampling methods and sample size. Large health surveys are discussed. Students gain practical experience through design and implementation of a health survey, which can be used to facilitate dissertation research or a publication.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 73027 BIOLOGICAL BASIS OF PUBLIC HEALTH 3 Credit Hours**

Integrates the sciences of biology and molecular biology into the principles and practice of public health. Implicit in this course are learning objectives that establish the ecology of infectious disease, the impact of vaccines in disease prevention, and the role of environmental toxins on human health and disease. Additionally, students propose policy, regulations and legislation designed to protect human health within the realm of personalized medicine.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 73034 LONGITUDINAL DATA ANALYSIS 3 Credit Hours**

(Slashed with EPI 63034) Statistical techniques for analyzing longitudinal, or repeated measures, data. Focuses primarily on application of the various statistical models covered, with direct application illustrated using standard statistical software. Topics covered include univariate and multivariate analysis of variance for repeated measures, mixed-effects models (HLM or multilevel models), covariance pattern models, generalized estimating equations (GEE), mixed-effects logistic regression models and missing data in longitudinal studies.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 73089 PLAGUES THAT SHAPED THE WORLD 3 Credit Hours**

(Slashed with EPI 53089)(Cross-listed with PH 43089) Course examines the Bubonic plague, HIV/AIDS, Ebola and pandemic influenza outbreaks to introduce students to the fundamentals of public health, establishing epidemiological principles that explain how plagues erupt and propagate, decimate populations and alter cultures. Inherent in the course's discussion are the social determinants that fuel plague outbreaks and slow recovery. Examples of emerging infectious diseases and threats of bioterrorism are discussed as new plagues for which creative solutions are still required. Students take city excursions and a field trip to assess cultural changes resulting from historical plagues.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture, 3 lab

**Grade Mode:** Standard Letter



**EPI 80191 VARIABLE CONTENT SEMINAR IN EPIDEMIOLOGY 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) (Slashed with EPI 60191)  
Seminar on current and important topics in epidemiology. Subject matter varies depending on the topic.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**EPI 80195 SPECIAL TOPICS IN EPIDEMIOLOGY 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) (Slashed with EPI 60195)  
Special topics to sample new offerings on topics in epidemiology.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**EPI 80196 INDIVIDUAL INVESTIGATION IN EPIDEMIOLOGY 1-3 Credit Hours**

Individual graduate investigation or research in areas related to epidemiology.

**Prerequisite:** Doctoral Standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**EPI 80198 DIRECTED RESEARCH IN EPIDEMIOLOGY 1-15 Credit Hours**

(Repeatable for credit) Directed research or individual investigation in an area of interest and with the guidance of a Kent State faculty member.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Individual Investigation, Research

**Contact Hours:** 1-15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 80199 DISSERTATION I 15 Credit Hours**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of Dissertation II and 30 hours of total dissertation work.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 80299 DISSERTATION II 15 Credit Hours**

(Repeatable for credit) Second course of dissertation sequence completing requirement of with 30 total hours of dissertation work.

**Prerequisite:** EPI 80199; and doctoral standing; and special approval.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**EPI 83014 EPIDEMIOLOGY OF CHRONIC DISEASES 3 Credit Hours**

(Slashed with EPI 63014) With a life course approach to chronic disease epidemiology, this course focuses on cardiovascular, respiratory, cerebrovascular diseases and cancer. Health and disease are addressed from a multicausal perspective, which includes individual behaviors; psychosocial issues; and sociodemographic, biological and physiological factors. Time points for prevention and intervention are identified.

**Prerequisite:** EPI 72017; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83015 EPIDEMIOLOGY OF INFECTIOUS DISEASES 3 Credit Hours**

(Slashed with EPI 63015) Surveys the history, principles, methods and practice of infectious disease epidemiology, by (1) defining and understanding infectious disease epidemiology surveys, (2) collecting and measuring surveillance data, (3) interpreting epidemiology data and (4) predicting evidence-based outcomes. Primarily a course in epidemiology, students learn some infectious disease microbiology as well.

**Prerequisite:** EPI 72017; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83016 PRINCIPLES OF EPIDEMIOLOGIC RESEARCH 3 Credit Hours**

(Slashed with EPI 63016) Course builds upon EPI 52017 to explore deeper the concepts and methods in epidemiologic research. Reviews the measures of disease frequency; association and impact; epidemiologic reasoning and causal inference; and methods and techniques for designing, implementing, analyzing and interpreting various epidemiologic study designs. Discusses advantages and limitations of various study designs. Explores threats to validity, precision and generalizability of epidemiologic studies.

**Prerequisite:** BST 52019 and EPI 72017; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83017 EPIDEMIOLOGICAL ANALYSIS 3 Credit Hours**

(Slashed with EPI 63017) Provides practical instruction in the analysis and interpretation of data from various epidemiologic study designs, including cross-sectional, case-control and cohort studies. Reviews statistical concepts and epidemiologic studies designs; outlines a strategy for data analysis; and reviews relevant methodologic issues and applies stratified analysis methods and multivariable regression models to the studies. Develops an understanding of the underlying principles and assumptions, practical application and correct interpretation of the epidemiologic results. Provides hands-on experience on the application of epidemiologic analysis methods and presentation of the results.

**Prerequisite:** BST 83014 and EPI 63016; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83018 OBSERVATIONAL DESIGNS FOR CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 63018) Course provides students the skills to design, conduct and perform clinical epidemiology studies using an observational design. Students understand major concepts of clinical research, develop clinical research questions, and solve clinical research problems. Topics include study design, risk, causation, exposures, bias, measurement and validity and disease prognosis.

**Prerequisite:** BST 52019 and EPI 72017; and doctoral standing; and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83019 EXPERIMENTAL DESIGNS FOR CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 63019) Principles of experimental designs as they apply to clinical research and clinical trials are presented at an intermediate level. Students understand randomized control trial designs and alternative designs. Study methodology, including randomization and blinding techniques, is covered. Topics include evidence-based medicine; risk prediction and risk scores; instruments and measurement; data issues; and recruitment, retention and adherence.

**Prerequisite:** BST 52019 and EPI 72017; and doctoral standing; and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83020 ADVANCED EPIDEMIOLOGY AND CLINICAL RESEARCH METHODS 3 Credit Hours**

(Slashed with EPI 63020) This advanced course focuses on why particular methods, study designs or approaches are used in particular investigative scenarios in clinical research. Students develop an advanced understanding and application of epidemiology methods in clinical research.

**Prerequisite:** EPI 83018 and EPI 83019; and doctoral standing; and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**EPI 83021 ETHICAL ISSUES IN PUBLIC HEALTH AND CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 63021) Introduces students to historical and contemporary ethical issues that arise during public health and clinical or biomedical research studies. Broadly covers human subjects research, the responsible conduct of research and the good clinical practice guidelines.

**Prerequisite:** EPI 72017; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture, 3 lab

**Grade Mode:** Standard Letter

## Health Policy and Management (HPM)

**HPM 50110 INTRODUCTION TO PUBLIC MENTAL HEALTH 3 Credit Hours**

(Slashed with PH 40110) This course provides a broad overview of mental health from a public health perspective. The course is an introduction to population-based (or population-level) approaches to addressing mental health and supporting wellness. More specifically, the course discusses mental health from a public health perspective, including discussion of non-clinical interventions and programs designed to improve mental health and wellness of populations.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 50196 INDIVIDUAL INVESTIGATION IN HEALTH POLICY AND MANAGEMENT 1-3 Credit Hours**

(Repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to health policy and management.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**HPM 52016 PUBLIC HEALTH ADMINISTRATION 3 Credit Hours**

Public health administration comprises efforts to improve the health of communities. Provides an overview for public health administration and practice, including organization, law, legislative relations, financing, workforce issues, leadership and surveillance.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 53010 COMMUNITY HEALTH NEEDS ASSESSMENT 3 Credit Hours**

This course covers concepts and methods relevant to community health needs assessment, such as systems thinking, the use of quantitative and qualitative methods, primary and secondary data, and the role of community assessment in current national policy, including the Affordable Care Act and on community health improvement. Students will draw from multiple disciplines to assess health status and its determinants (social, behavioral, and environmental), needs for health services, and the capacity and resources of the local community. Students will also learn to facilitate and evaluate the use of data for decision-making by partnerships, organizations and policy makers.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 60001 ESSENTIALS OF HEALTH INSURANCE I 3 Credit Hours**

This course introduces graduate students to the essentials of health insurance. Students develop a thorough understanding of the medical insurance industry. Students obtain industry knowledge resulting in their ability to interpret industry actions, reactions and transactions. In addition, they demonstrate their ability to interact with the industry as a public health professional, member of the industry or community member.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 60002 ESSENTIALS OF HEALTH INSURANCE II 3 Credit Hours**

This course focuses on health insurance from a business perspective with a focus on innovation and ways to improve current processes and plans. As health insurance is an industry that has many aspects, this course places an emphasis on workplace health promotion. Concepts looked at from the perspective of workplace health can apply to many other aspects of health insurance. Throughout this course, innovation, leadership and business concepts from other industries are applied to health insurance and public health.

**Prerequisite:** HPM 60001; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 60089 GLOBAL HEALTH IMMERSION: GENEVA, SWITZERLAND**  
**1-3 Credit Hours**

(Slashed with HPM 80089)(Repeatable for credit) Participants explore a number of health concerns, policies and challenges with global importance and implications. Students investigate current global health policies and themes, and become familiar with the major players in global health including governmental and nongovernmental organizations and multinational agencies. Presentations are given by experts currently working in various regions of the world to solve such pressing global problems as HIV/AIDS, postwar trauma, tuberculosis, refugee health, non-communicable disease prevention and environmental contamination.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** International Experience, Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter-IP

**HPM 60191 VARIABLE CONTENT SEMINAR IN HEALTH POLICY AND MANAGEMENT**  
**1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) (Slashed with HPM 80191) Seminar on current and important topics in health policy and management. Subject matter varies depending on the topic.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HPM 60192 APPLIED PRACTICE EXPERIENCE IN HEALTH POLICY AND MANAGEMENT**  
**3,6 Credit Hours**

Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 9-18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HPM 60195 SPECIAL TOPICS IN HEALTH POLICY AND MANAGEMENT**  
**1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) (Slashed with HPM 80195) Special topics to sample new offerings on topics in health policy and management.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HPM 60292 APPLIED PRACTICE EXPERIENCE IN HEALTH POLICY AND MANAGEMENT II**  
**1 Credit Hour**

Continuing enrollment for students participating in public health activities of a public health agency, hospital or other approved organization.

Students complete the field experience with joint supervision from the university and an approved organization or agency.

**Prerequisite:** HPM 60192 and graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory

**HPM 62015 EMERGING ISSUES IN PUBLIC HEALTH POLICY AND MANAGEMENT**  
**3 Credit Hours**

(Slashed with HPM 72015) An overview of emerging issues in the field of public health.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 62017 HEALTHCARE LAW AND REGULATION**  
**3 Credit Hours**

Healthcare is one of the most heavily regulated industries in the United States. In order to contain spiraling costs, the federal and state governments are focusing on individual provider conduct in the context of fraud, waste and abuse scrutiny. This course covers the underlying theories behind healthcare law and regulation as well as specific provisions affecting the organization, delivery and payment of primary health services. Administrators and clinicians gain a basic understanding of the regulatory environment and provisions impacting their practice.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63003 HEALTH CARE SYSTEMS**  
**3 Credit Hours**

Provides a systems approach to delivering health care and public health services in the US. Includes an overview of public health, outpatient, inpatient, managed care, long term care and health services for special populations.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63004 PUBLIC HEALTH POLICY, LAW AND ETHICS**  
**3 Credit Hours**

Provides a comprehensive review of health policymaking, public health law and ethical principles as applied to public health decision making.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63005 FINANCIAL MANAGEMENT FOR PUBLIC HEALTH ORGANIZATIONS**  
**3 Credit Hours**

Provides an overview of financial management of public health organizations. Topics include planning for public health program budgeting, understanding costs and short and long term financing, accountability and control, reporting results and financial statement and financial conditions analysis.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63006 COST BENEFIT ANALYSIS IN PUBLIC HEALTH PROGRAMS**  
**3 Credit Hours**

Provides an overview of cost-benefit analysis as applied to the evaluation of public health programs. Students apply principles of cost benefit analysis and related cost utility analysis to case studies in the public health sector.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63007 PUBLIC HEALTH PROGRAMS: PLANNING, IMPLEMENTATION AND EVALUATION 3 Credit Hours**

Overview of developing, implementing and evaluating public health programs. Examines how public health programs can target different levels within a population, different determinants of health and strategies and interventions.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63008 HEALTHCARE PRIVACY AND SECURITY 3 Credit Hours**

Introduces students to the fundamental concerns addressed by the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63009 HEALTHCARE COMPLIANCE I 3 Credit Hours**

This course provides an overview of the creation and composition of typical compliance programs as laid out in the Federal Sentencing Guidelines and other federal guidance. Students also learn about functions and roles in an organization that supports the compliance function such as senior leadership, the board of directors and compliance committee.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63010 HEALTHCARE COMPLIANCE II 3 Credit Hours**

This course focuses on the compliance functions within a healthcare operation that implements, operates and evaluates the existing compliance program.

**Prerequisite:** HPM 63009; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63011 PUBLIC HEALTH EVALUATION METHODS 3 Credit Hours**

This course provides an in-depth review of major concepts, methods and issues involved in evaluating public health programs and policy interventions. Students learn skills needed to conduct and use evaluations, with an emphasis on conceptual, methodological, organizational, political and ethical aspects associated with public health evaluation. Topics include development of evaluation questions, types of program evaluation (process, formative, impact, outcome), evaluation design (experimental, quasiexperimental and nonexperimental designs), collection of evaluation data and dissemination of evaluation results. Students gain practical experience through a series of exercises. Examples of effective methods and approaches are elaborated for multiple public health contexts.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63012 NATIONAL HEALTH REFORM 3 Credit Hours**

This course provides an overview of health reform in the United States, starting with the history of health reform, the passage of the ACA and the future of health reform. It includes political and policy discourse leading up to the Patient Protection and Affordable Care Act (ACA), its passage, analysis of the law's impact, Supreme Court rulings and other legal challenges affecting the legislation and the future of public health and health care in the context of health reform. The impact of health reform on health care financing, quality and public health is also covered. Students draw upon and apply an interdisciplinary literature base to analyze health reform.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63013 SEX: A WICKED PUBLIC HEALTH PROBLEM 3 Credit Hours**

Wicked problems is a term developed in the 1970s by systems thinkers and planners, Horst Rittel and Melvin Webber (1973), to describe complex social problems that are resistant to solution. The term has recently been applied to public health issues that have proven to be difficult to address and resistant to mitigation. Sexual and reproductive health behaviors, attitudes and cultural norms often produce problems at the individual and population levels that meet the criteria for designation as wicked problems. Effectively addressing these kinds of problems requires a correct understanding and application of public health principles and practices.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63018 FOUNDATIONS FOR EFFECTIVE PUBLIC HEALTH LEADERSHIP 3 Credit Hours**

Intended to provide students with an initial exploration of the leadership practices of public health leaders with an understanding of the basic skill set necessary for successful leadership on a continuing basis.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 63019 WHOLE SYSTEMS APPROACHES TO LEADING ORGANIZATIONAL CHANGE IN PUBLIC HEALTH 3 Credit Hours**

Intended to provide students with an initial exploration and overview of whole systems approaches to organizational change in public health settings, a more detailed working knowledge of key whole systems methodologies and a detailed working knowledge and practical experience with one of the most frequently used and favored whole systems approaches.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** HPM 63018.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 70199 PROFESSIONAL DEVELOPMENT EXPERIENCE 1 Credit Hour**

Students work with faculty advisor to identify and attend at least six professional development activities that strengthen the students' understanding of professional and substantive aspects of the academic and research professions.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Project or Capstone

**Contact Hours:** 1 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HPM 72015 EMERGING ISSUES IN PUBLIC HEALTH POLICY AND MANAGEMENT 3 Credit Hours**

(Slashed with HPM 62015) An overview of emerging issues in the field of public health.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 72030 GRANT WRITING IN PUBLIC HEALTH 3 Credit Hours**

Doctoral students should take this course at the end of the program of study. Students in this doctoral level course for Public Health learn the basics of grant writing for federal (NIH) and non-federal funding agencies with a particular emphasis on the components required of most grant proposal submitted for funding. This includes rationale for seeking funds, collaborations with community organizations, and working with consultants and subcontractors. Participants also learn about the basic sections of grant writing such as specific aims and hypotheses, developing your literature review, background and significance, research design and methodology, developing a budget, and conducting research with human subjects. Participants have the opportunity to write sample grant proposals, learn about the review and scoring process and post-award grant management.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 73021 HEALTH CARE FINANCE 3 Credit Hours**

Covers the financial environment of health services in the US, including accounting principles, financial statement analysis, delivery models, management control processes of budgeting and capital project analysis, managerial accounting, program development and financial plan.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 73022 STRATEGIC MANAGEMENT OF PUBLIC HEALTH ORGANIZATIONS 3 Credit Hours**

Covers basic and advanced principles of strategic management of public health organizations including service area analysis, internal environment analysis, developing and evaluating strategic alternatives and quality indicators.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 73031 PUBLIC HEALTH POLICY ANALYSIS 3 Credit Hours**

Provides a framework for conducting public health policy analysis.

Applies concepts to case studies of health policies at the local, state and Federal levels.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HPM 80089 GLOBAL HEALTH IMMERSION: GENEVA, SWITZERLAND 1-3 Credit Hours**

(Repeatable for credit) (Slashed with HPM 60089) Participants explore a number of health concerns, policies and challenges with global importance and implications. Students investigate current global health policies and themes, and become familiar with the major players in global health including governmental and nongovernmental organizations and multinational agencies. Presentations are given by experts currently working in various regions of the world to solve such pressing global problems as HIV/AIDS, postwar trauma, tuberculosis, refugee health, non-communicable disease prevention and environmental contamination.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** International Experience, Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter-IP

**HPM 80191 VARIABLE CONTENT SEMINAR IN HEALTH POLICY AND MANAGEMENT 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) (Slashed with HPM 60191) Seminar on current and important topics in health policy and management. Subject matter varies depending on the topic.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HPM 80195 SPECIAL TOPICS IN HEALTH POLICY AND MANAGEMENT 1-3 Credit Hours**

(Slashed with HPM 60195)(Repeatable for maximum of 6 credit hours) Special topics to sample new offerings on topics in health policy and management.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HPM 80196 INDIVIDUAL INVESTIGATION IN HEALTH POLICY AND MANAGEMENT 1-3 Credit Hours**

Individual graduate investigation or research in areas related to health policy and management.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**HPM 80198 DIRECTED RESEARCH IN HEALTH POLICY AND MANAGEMENT 1-15 Credit Hours**

(Repeatable for credit) Directed research or individual investigation for doctoral students in the Health Policy and Management concentration.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Research

**Contact Hours:** 1-15 other

**Grade Mode:** Standard Letter

**HPM 80199 DISSERTATION I 15 Credit Hours**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of Dissertation II and 30 hours of total dissertation work.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HPM 80299 DISSERTATION II 15 Credit Hours**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of 30 hours.

**Prerequisite:** HPM 80199; and doctoral standing; and special approval.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HPM 81000 PUBLIC HEALTH LAW AND REGULATION 3 Credit Hours**

Enables participants to describe, apply, and explain key aspects and principles of law, regulation, and policy relating to public health issues and topics. Requires students to master the content material for the course, and apply it to particular (a) topics or issues relating public health. Students also are required to design and or conduct a research project and explain their hypotheses, methods, findings and or conclusions.

**Prerequisite:** HPM 52016; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

## Public Health (PH)

**PH 10000 EXPLORING CAREERS IN PUBLIC HEALTH 1 Credit Hour**

Provides an overview of the diverse career opportunities available in the field. Explores various public health issues from the perspectives of public health professionals from the core disciplines in public health: social behavioral sciences, environmental health, health policy and management, epidemiology and biostatistics. Students learn about how public health professionals approach issues and the types of professional roles and activities they bring to addressing each issue.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**PH 10001 INTRODUCTION TO PUBLIC HEALTH 3 Credit Hours**

An overview of the evolution and practices of the dynamic field of public health in the United States and globally. Students are introduced to the structure and functions of public health organizations and public health practice.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 10002 INTRODUCTION TO GLOBAL HEALTH (DIVG) 3 Credit Hours**

An overview of the biological, social and environmental contributors to health and diseases in populations around the world, including case studies of selected infectious diseases, nutritional deficiencies and health effects of environmental change.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Diversity Global

**PH 10003 EXPLORING CAREERS IN GLOBAL HEALTH 1 Credit Hour**

Course provides students with an introduction to global health and an overview of the diverse career opportunities available in the field. The global health sector is evolving as one of the primary career destinations and is moving beyond the traditional roles of science, pharmacy, medicine and nursing; additional areas also include communications, technology, data scientists, finance, management, legal, linguistics, international relations, and most important, cross functional skills are needed.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 15 lecture, 0 lab, 0 other

**Grade Mode:** Standard Letter

**PH 10195 SPECIAL TOPICS IN PUBLIC HEALTH 1-3 Credit Hours**

(Repeatable for credit) Subject varies depending on the emerging issue.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**PH 15092 PUBLIC HEALTH FIELD EXPERIENCE I (ELR) 1-3 Credit Hours**

(Repeatable for credit) Entry-level internship experience in a public health setting under the supervision of a site preceptor and university supervisor. Students gain experience in public health work.

**Prerequisite:** Special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-10 other

**Grade Mode:** Satisfactory/Unsatisfactory

**Attributes:** Experiential Learning Requirement

**PH 20000 PUBLIC HEALTH PROFESSIONAL PRACTICE I 1 Credit Hour**

Professional development course designed to expose future public health leaders to the diverse field of public health and develop attainable career goals. Student will begin the development of personal goals and a portfolio of work that will build during the entire program. The understanding of public health as a profession will be fostered.

**Prerequisite:** Sophomore standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**PH 20001 ESSENTIALS OF EPIDEMIOLOGY 3 Credit Hours**

Students are introduced to the strategies adopted by public health professionals to study distribution and identification of important biologic, social and environmental determinants of diseases and health-related states in specific populations.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 20010 INTRODUCTION TO PUBLIC HEALTH INFORMATICS 3 Credit Hours**

Provides an overview of informatics principles applied in public health settings. Issues addressed include definitions, approaches, competencies, applications and the national health information network. Topical areas are digital literacy, electronic communication, system development, information use, project management, procurement, accountability, research, data standards, databases, human resource management, and confidentiality and security.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 20015 ZOMBIE OUTBREAK 3 Credit Hours**

Teaches the basic survival skills necessary to protect you, your family, and the public from a variety of natural and manmade “apocalypses”. Students apply the basics of emergency Public Health management to a zombie outbreak.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 20195 SPECIAL TOPICS IN PUBLIC HEALTH 1-3 Credit Hours**

(Repeatable for credit) Subject varies depending on the emerging issue.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**PH 20392 COMMUNITY HEALTH WORKER CERTIFICATION II- INTERNSHIP (ELR) 3 Credit Hours**

Internship course providing necessary contact hours for the Ohio Community Health Worker Certification.

**Corequisite:** PH 23000.

**Schedule Type:** Practical Experience

**Contact Hours:** 9 other

**Grade Mode:** Standard Letter-IP

**Attributes:** Experiential Learning Requirement

**PH 22001 PLAGUES AND PANDEMICS: HOW INFECTION SHAPED CULTURE AND HISTORY 3 Credit Hours**

Infectious diseases continue to affect us all in the present, and plagues have shaped the course of history. From the Justinian plague in the 6th Century to the decimation of Native populations in the US by smallpox to the 1918 influenza pandemic, human history has been influenced by microbes—and our culture, in turn, can affect the generation of new plagues. This course is appropriate both for humanities majors looking for an introduction to infectious diseases as well as science majors looking to better understand infectious diseases in their historical and cultural context, and the way these diseases have (and continue to) shape history. Ultimately, students should be able to understand the basics of infectious disease epidemiology and disease control within a wide cultural and historical context. The course will encompass various topics in microbiology and infectious disease, using primarily popular non-fiction books on these subjects as sources.

**Prerequisite:** None.

**Schedule Type:** Lecture, Seminar

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 23000 COMMUNITY HEALTH WORKER CERTIFICATION I 3 Credit Hours**

Students are guided through the competencies of a Community Health Worker (CHW). Students are introduced to soft skills and culture including, but not limited to, basic health care, community resources, advocacy, communication and service skills related to working with communities. Lifespan development is also covered including, but not limited to, basic health information and education regarding prevention and treatment throughout the lifespan.

**Prerequisite:** None.

**Corequisite:** PH 20392.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 25092 PUBLIC HEALTH FIELD EXPERIENCE II (ELR) 1-3 Credit Hours**

(Repeatable for credit) Mid-level internship experience in a public health setting under the supervision of a site preceptor and university supervisor. Students gain experience in public health work.

**Prerequisite:** Special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-10 other

**Grade Mode:** Satisfactory/Unsatisfactory

**Attributes:** Experiential Learning Requirement

**PH 30000 PUBLIC HEALTH PROFESSIONAL PRACTICE II 1 Credit Hour**

Professional development course designed to further prepare future public health leaders to the diverse field of public health. The career portfolio will be further developed. Career goals will be re-evaluated and the strategies for goal attainment reassessed. The understanding of public health as a profession will be further developed. Graduate or professional education as an option will be discussed in greater detail.

**Prerequisite:** PH 20000; and junior standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**PH 30002 INTRODUCTORY BIOSTATISTICS 3 Credit Hours**

An introduction to statistical methodology in the field of public health. Students learn the statistical skills to read scientific articles, understand the statistical methods used and interpret the results on their own.

**Prerequisite:** Any kent core mathematics; and critical reasoning course.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30004 PUBLIC HEALTH RESEARCH 3 Credit Hours**

Approaches involved in defining public health problems and steps involved in conducting research about these problems. Students are introduced to how to evaluate published public health research.

**Prerequisite:** PH 30002; and ENG 21011 or HONR 10297.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30005 SOCIAL AND BEHAVIORAL SCIENCE THEORIES IN PUBLIC HEALTH 3 Credit Hours**

An overview of the contributions of the social and behavioral sciences to human health behavior, including application of studies in the area of health promotion, health protection and disease prevention in public health.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30006 INTRODUCTION TO ENVIRONMENTAL HEALTH AND SAFETY 3 Credit Hours**

Introduction: the environment at risk; environmental epidemiology, environmental toxicology, environmental policy and regulation, watershed management, safe drinking water, wastewater management, vector-borne and zoonotic disease, air quality, solid and hazardous waste, food protection, radiation safety and injury prevention, occupational health and safety, total worker health, the built environment.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30007 PREVENTION AND CONTROL OF DISEASES 3 Credit Hours**

Provides an overview of concepts involved in biological mechanisms of disease at cell, individual and community levels, provides insight into strategies used in preventing and controlling diseases at the population and/or community level within this framework.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30009 ENVIRONMENTAL HEALTH AND SAFETY REGULATIONS AND POLICY 3 Credit Hours**

Develops a framework for understanding the regulatory structure of environmental and occupational health and safety regulations and policy in the U.S. Federal, state, and local levels of government are reviewed as well as major agencies and regulations.

**Prerequisite:** PH 30006.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30012 COMMUNICABLE DISEASES 3 Credit Hours**

A survey of communicable diseases of global public health significance, including the epidemiology and forensics associated with disease transmission, vaccination strategies and practices, and human responses to infectious disease. Students are introduced to infectious disease pathogens and the practices and procedures for their surveillance, handling and control.

**Prerequisite:** PH 20001 and 30007.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30014 STRATEGIES FOR PREVENTION IN PUBLIC HEALTH 3 Credit Hours**

Provides a review of population strategies for health promotion and disease prevention from a social-ecological perspective, highlighting the importance of evidence-based, equitable, and ethical approaches.

**Prerequisite:** PH 30007.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30015 UNITED STATES HEALTH CARE SYSTEM 3 Credit Hours**

Provides an overview of the U.S. healthcare delivery system, including operations, stakeholders and the role of government with a particular emphasis on public health's role in health care. Students gain an understanding of inpatient and outpatient services, the various roles of healthcare professionals, private and public financing and the impact of managed care. The primary focus is the public health system.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 30020 FUNDAMENTALS OF HEALTH PRIVACY 1 Credit Hour**

This course will provide an overview of compliance in healthcare privacy and security within the context of the Health Insurance Portability and Accountability Act (HIPAA). Current topics such as electronic health records and the challenges posed by social media will be explored.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**PH 30025 FUNDAMENTALS OF HEALTHCARE COMPLIANCE 1 Credit Hour**

This course will provide an overview of fraud, waste, and abuse compliance in the healthcare industry. The practical and legal basis for compliance programs will be explored as well as their creation, implementation, and maintenance.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**PH 30033 PUBLIC HEALTH POLICY AND DECISION-MAKING 3 Credit Hours**

An introductory survey of the formulation to implementation of public health policies for various public health issues, and the use of practical administrative tools such as strategic planning, use of economic evaluation tools and decision analysis.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter



**PH 30101 SOLID AND HAZARDOUS WASTE MANAGEMENT 3 Credit Hours**

Solid and hazardous waste programs and practices are explored. Pollution prevention, safety, sanitation practices, sustainability concepts, management, and regulations pertinent to solid and hazardous waste such as RCRA, are discussed and studied. Consumption, garbage handling, landfill design and disposal, sustainability concepts, reuse, recycling, composting and other waste strategies are presented. Hazardous waste and materials issues in the environment are introduced; such as HW disposal, TSD Facilities, underground storage tanks, "Superfund", brownfields and related issues.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**PH 30102 AIR QUALITY AND POLLUTION CONTROL 3 Credit Hours**

Basic survey of air pollution and its control. The respiratory system and the bodies response to air pollutants of different types is reviewed and related illnesses such as asthma are studied. The Clean Air Act, NESHAPS and related regulations are surveyed. Ambient air quality standards, the effect of climate and other air pollution concepts are reviewed. Measurement and control methods for both particulate and gaseous contaminants are surveyed.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**PH 30103 FOOD PROTECTION 3 Credit Hours**

Topics in foodborne disease prevention and food sanitation relative to quality control, food service and processing systems are introduced. Foodborne disease agents, microbiology, epidemiology and outbreak investigation techniques are explored. The regulatory process and agencies at the wholesale, retail and food service levels are introduced. Ohio food regulations are covered, including the Ohio Uniform Food Code. Basic preparation of students to conduct food serve inspections and foodborne disease investigations as part of agency regulatory programs. The opportunity to earn the National Restaurant Association, ServSafe Manager Certification is also provided.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**PH 30105 WATER AND WASTEWATER MANAGEMENT 3 Credit Hours**

Explores the issues surrounding water pollution and human health, and the environmental treatment systems developed to provide safe water and sewage disposal. Private water and sewage systems and public water and sewage systems are studied. Federal and State regulations, including the Safe Drinking Water Act and Clean Water Act are reviewed. Field experiences are included.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**PH 30106 ENVIRONMENTAL TOXICOLOGY 3 Credit Hours**

Basic toxicological principles applied to studies of environmental health are surveyed. Basic concepts of toxicological testing, dose response, animal and other models, dose curves, LD50's, risk assessment, threshold theories, classifications of harmful effects, environmental pathways, metabolism and elimination are reviewed. Biological effects and the effect of select toxins on body systems are reviewed. Major groups of toxins and their effects are reviewed. Toxin behavior in air, water, wastewater, soil and environmental media are studied.

**Prerequisite:** PH 30006.

**Schedule Type:** Laboratory, Lecture

**Contact Hours:** 2.8 lecture, .2 lab

**Grade Mode:** Standard Letter

**PH 30110 HAZARDOUS MATERIALS MANAGEMENT 3 Credit Hours**

Covers the use of hazardous materials. Emphasis is on the safe management of hazardous materials in the workplace and community, their procurement, storage, regulation, pollution problems, use, release, clean up, disposal, and their control, to prevent workplace and community health and safety problems.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 lab

**Grade Mode:** Standard Letter

**PH 30195 SPECIAL TOPICS IN PUBLIC HEALTH 1-3 Credit Hours**

(Repeatable for credit) Subject varies depending on the emerging issue.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**PH 32005 EMERGING ISSUES IN COMMUNITY HEALTH 3 Credit Hours**

Provides students with exposure to touchstone issues in public health programming that have social and behavioral science implications. Topics reflect emergent priority areas and are expected to vary from semester to semester. Examples of current, emerging issues that may be covered include the Healthy People 2020 initiative, leading health indicators, role of CDC, state and local health departments and NGOs in promoting health behaviors, program recruitment, retention, evaluation and generalization challenges, ethical issues including informed consent and voluntary change, funding challenges for prevention programs, grant writing exposure, role of politics in public health programming, evidenced-based practices and practice-based evidence.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 34001 PUBLIC HEALTH INTERVENTIONS I 3 Credit Hours**

Provides an overview of the planning and development of public health interventions including environmental, social, and behavioral public health issues from a social-ecological perspective, with attention to evidence-based, theoretical, and ethical approaches.

**Prerequisite:** PH 30005.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 34002 PUBLIC HEALTH INTERVENTIONS II 3 Credit Hours**

Provides an overview of public health intervention implementation, evaluation, and sustainability, with examples of public health interventions in practice and exploration into the future of public health interventions.

**Prerequisite:** PH 34001.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 35001 COMMUNITY-BASED PUBLIC HEALTH PRACTICE (ELR) 3 Credit Hours**

Course focuses on the fundamentals of applying community engagement, organization, and development principles to create successful community public health interventions. Addresses work in at-risk and diverse communities using methods optimal for public health practice, including public health ethics, faith-based initiatives in community health, community health assessment and measurement methods, coalition building, and frameworks for developing health policy. Will also review the basic principles of health-related non-profit organization management and support.

**Prerequisite:** None.

**Schedule Type:** Lecture, Practical Experience

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**PH 35005 ADVOCACY AND ACTIVISM IN PUBLIC HEALTH 3 Credit Hours**

Public health advocacy and activism are areas of increasing importance for those in public health at both national and international levels because they offer more direct approaches to achieve lasting social and political change. This course provides a foundation to the theory, evidence-base and strategies that can be harnessed to bring about change to improve the lives and health of populations, and explains how activism has an essential role in public health policy and practice.

**Prerequisite:** Junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 35010 RACISM: A PUBLIC HEALTH CRISIS 3 Credit Hours**

Across the US, an increasing number of communities have declared racism as a public health crisis. This declaration is not based on an isolated incident, rather, it is the acknowledgement that racism is structural and has been embedded within the institutional policies and societal norms that are present in our everyday lives. This course will: Recognize racism in the US as a significant cause of poor health, disease, and persistent dis-ease among Black Americans; Explore the relationship between racism and health through a historic accounting of social, political, economic, and environmental conditions post-slavery through current events; and, identify how, research, and advocacy can address anti-Black racism and promote health equity.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture, 0 lab, 0 other

**Grade Mode:** Standard Letter

**PH 40000 PUBLIC HEALTH PROFESSIONAL PRACTICE III 1 Credit Hour**

Professional development course designed to launch graduates into the workforce or graduate school. The career portfolio, resume, and cover letters will be finalized. Interviewing and application skills will be developed. Working with a College of Public Health career counselor students will develop job search strategies and begin the application process. Students continuing their education in a graduate program will work on application materials.

**Prerequisite:** PH 30000; and senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**PH 40013 CLINICAL EPIDEMIOLOGY BASICS 3 Credit Hours**

(Slashed with EPI 50013) Course develops an understanding of clinical research, good clinical practices, research environments and methods used in clinical research. Students gain an understanding of the use of clinical investigation, from the product development stage to the application of investigations in contract research organization. Ethical implications and regulatory issues are examined.

**Prerequisite:** PH 20001.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 40014 CLINICAL TRIALS MANAGEMENT 3 Credit Hours**

(Slashed with EPI 50014) Course examines the good clinical practices guidelines. Students learn how to conduct and manage clinical trials; understand clinical trials data; develop instruments and protocols; recognize quality control and data issues; know approaches to recruitment, retention and participant assessment; identify adverse events and measurement of response variables; and acquire skill in study close-out procedures.

**Prerequisite:** PH 40013.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 40015 SCIENTIFIC WRITING FOR CLINICAL RESEARCH 3 Credit Hours**

(Cross-listed with EPI 50015) Course provides students the tools to develop proficiency in scientific reading, to conduct presentations and to demonstrate skill in scientific writing, with the goal of preparing clinical researchers to be able to communicate findings to the science community and the general population. Course includes an examination of the science literature in clinical trials research.

**Prerequisite:** ENG 21011 or HONR 10297.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 40017 PHARMACOEPIDEMIOLOGY 3 Credit Hours**

(Cross-listed with EPI 50017) Introduction to the field of pharmacoepidemiology, which uses epidemiology methods to understand medication use and distribution at the population level. Course examines risk-benefit and epidemiology approaches to examining medication use and therapeutic trials. Drug and device manufacturing to market are explored.

**Prerequisite:** PH 40013 and PH 40014.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 40018 REGULATORY AFFAIRS IN CLINICAL RESEARCH 3 Credit Hours**

(Slashed with EPI 50018) Course provides the tools for students to develop an understanding of the researcher and organization responsibility in research and development of clinical trials products. Students understand regulations from the government and industry, privacy concerns, liability and ethical issues related to clinical trials research. Examples from the field are explored in detail.

**Prerequisite:** PH 40013 and PH 40014.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 40060 PUBLIC HEALTH LABORATORY METHODS 3 Credit Hours**

(Slashed with EHS 50060) Course introduces the student to the fundamental theory and hands on use to track specimen collection and laboratory analysis. Environmental specimens are examined for their public health importance using classical and modern techniques. Students learn classical laboratory methods and their modern use in the laboratory environment. Examples include culture and microscopic identification of microorganisms, identification of disease vectors, detection of newborn disease and detection of terrorism agents.

**Prerequisite:** BSCI 30140 or CHEM 10062 or CHEM 10971 or PH 30006.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 1 lab

**Grade Mode:** Standard Letter

**PH 40089 GLOBAL HEALTH IMMERSION: GENEVA, SWITZERLAND (DIVG) (ELR) 1-3 Credit Hours**

(Repeatable for credit) Participants explore a number of health concerns, policies and challenges with global importance and implications.

Students investigate current global health policies and themes, and become familiar with the major players in global health including governmental and nongovernmental organizations and multinational agencies. Presentations are given by experts currently working in various regions of the world to solve such pressing global problems as HIV/AIDS, post-war trauma, tuberculosis, refugee health, non-communicable disease prevention and environmental contamination.

**Prerequisite:** PH 10001 and PH 10002; and junior standing; and special approval.

**Schedule Type:** International Experience, Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter-IP

**Attributes:** Diversity Global, Experiential Learning Requirement

**PH 40092 INTERNATIONAL HEALTH PRACTICUM (ELR) 3-6 Credit Hours**

(Repeatable for credit) A supervised internship in global/international health.

**Prerequisite:** PH 10002; and junior or senior standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 10-20 other

**Grade Mode:** Satisfactory/Unsatisfactory

**Attributes:** Experiential Learning Requirement

**PH 40100 VECTOR-BORNE AND ZOO NOTIC DISEASES 3 Credit Hours**

Presents a broad overview of major considerations related to human health and the vector-borne diseases transmitted by rodents and arthropods (insects and arachnids). Control measures, including rodent control, local mosquito control programs, and integrated pest management (IPM) concepts with safe pesticide use are reviewed. Application of FIFRA regulations are presented. An overview of issues associated with zoonotic diseases transmitted by animals, such as rabies, and their control are also included. Vector and reservoir relationships are explored.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**PH 40109 LABORATORY SAFETY AND HYGIENE 3 Credit Hours**

(Crosslisted with EHS 50109) Basic introduction to laboratory safety, chemical hygiene, and biosafety. Includes the research compliance programs of institutions (IBC, IACUC, IRB, RSC) and the OSHA Chemical Hygiene Standard requirements and program responsibilities. General lab safety concepts are reviewed, along with chemical handling and storage, fumehoods and ventilation, hazardous waste disposal, radiation safety, and lab design. Basic principles of biosafety are covered, BSL 1-4 levels, biosafety cabinets, select agents, bloodborne pathogens, NIH Guidelines, biosecurity and animal use.

**Prerequisite:** PH 30006.

**Schedule Type:** Field Experience, Lecture

**Contact Hours:** 2.67 lecture, .33 other

**Grade Mode:** Standard Letter

**PH 40110 INTRODUCTION TO PUBLIC MENTAL HEALTH 3 Credit Hours**

(Slashed with HPM 50110) This course provides a broad overview of mental health from a public health perspective. The course is an introduction to population-based (or population-level) approaches to addressing mental health and supporting wellness. More specifically, the course discusses mental health from a public health perspective, including discussion of non-clinical interventions and programs designed to improve mental health and wellness of populations.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 40191 SEMINAR IN PUBLIC HEALTH 1-3 Credit Hours**

(Repeatable for credit) Seminar on current and important topics in public health. Subject matter varies depending on topic.

**Prerequisite:** None.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**PH 40195 SPECIAL TOPICS IN PUBLIC HEALTH 1-3 Credit Hours**

(Repeatable for credit) Subject varies depending on the emerging issue.

**Prerequisite:** Junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**PH 40196 INDIVIDUAL INVESTIGATION IN PUBLIC HEALTH 1-3 Credit Hours**

(Repeatable for maximum 6 credits) Individual undergraduate investigation or research on specific public health issues.

**Prerequisite:** Junior or senior standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**PH 41000 ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT 3 Credit Hours**

Entails leadership and management principles in environmental and occupational health and safety (EOHS), and helps students develop skills needed to become an effective supervisor. Issues such as regulatory structure, program and community planning, policy development, budgeting, staffing and staff development, strategic planning, training, professionalism and assessment are reviewed. Board development, dealing with difficult people and situations, legal, social, political, and economic effects on EOHS programs are dealt with. Related issues such as ethics, human resources, workers comp, court appearances, media relations and communications are reviewed.

**Prerequisite:** PH 30006 and 30102 and 30105 and 30106; and senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 41092 FIELD EXPERIENCE IN MEETING THE BASIC HEALTH AND HUMAN NEEDS (ELR) 3 Credit Hours**

(Repeatable for credit) Provides practical skills in simple, affordable appropriate technologies that can offer solutions for meeting basic health and human needs in the developing world at the household and community levels. Technologies are organized into five modules: 1) food, agriculture, and nutrition; 2) water and sanitation; 3) alternative household energy; 4) primary health care; and 5) community development needs and resource assessment. All five modules cover appropriate technologies that while meeting the basic needs have significant impact on health of the individuals and communities. Principles of participatory community development and sensitivity to cross-cultural, gender, and ecological issues are emphasized throughout the training.

**Prerequisite:** Special approval.

**Schedule Type:** Field Experience

**Contact Hours:** 8 other

**Grade Mode:** Satisfactory/Unsatisfactory

**Attributes:** Experiential Learning Requirement

**PH 42010 UNDERSTANDING THE COVID-19 PANDEMIC 3 Credit Hours**

(Slashed with EPI 52010) In this course, students examine the various aspects of the ongoing coronavirus pandemic. They learn foundational information in epidemiology, virology and immunology, and examine the emergence and spread of SARS-CoV-2. They learn about responses to the epidemic, including policies aimed at slowing spread, and examine aspects of diagnostics and vaccine development relevant to controlling the spread of the virus.

**Prerequisite:** Junior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 42092 ENVIRONMENTAL, OCCUPATIONAL, HEALTH AND SAFETY INTERNSHIP (ELR) 4-6 Credit Hours**

The purpose of the environmental and occupational health and safety internship is to supplement the student in-class learning experiences with practical hand-on skills and work practice experiences that helps them develop the environmental competencies required for success in the field.

**Prerequisite:** Junior or senior standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 13.33-20 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**Attributes:** Experiential Learning Requirement

**PH 42100 CLIMATE CHANGE AND POPULATION HEALTH 3 Credit Hours**

(Slashed with EHS 52100) This course reviews evidence on the rigorous scientific consensus confirming global warming and the mechanisms underlying climate change, with a focus on adverse population health impacts. Increases in the frequency and intensity of extreme weather events including heatwaves, tropical cyclones and severe storms create hazardous conditions including flooding, drought, wildfires, increases in vector-borne diseases, food and nutrition shortages, human displacement and mental health issues. Populations at increased risk are identified along with a consideration of climate ethics, justice and public health approaches used to address the population health effects. Strategies for abatement through injury and disease prevention, climate risk communication and strategies for mitigation including green energy and energy conservation are examined.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 43013 BUILT ENVIRONMENT AND PUBLIC HEALTH 3 Credit Hours**

(Slashed with EHS 53014) The impact of the built environment on human health is an issue of global importance. The focus of this course is on preventing disease and injury while improving the health of populations by looking "upstream" at the built environment or those settings designed, created and maintained by human efforts. Population health effects of community design are explored through scientific literature, and include transportation, land use, parks and green space in the context of physical activity, food environments, air and water quality, injury prevention, social capital and health equity. Students examine and use population health tools to assess the built environment and develop strategies for creating sustainable healthy places through multidisciplinary collaboration, research and policy that promotes the health of the public.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 43014 PUBLIC HEALTH AND MASS INCARCERATION 3 Credit Hours**

This course will examine incarceration using a public health lens. Students will examine the epidemiology of mass incarceration in the U.S., infectious and chronic diseases of those incarcerated, incarceration as a self-sustaining epidemic with generations of imprisonment, access to health care of those behind bars and on release, and the contagion of punishment including collateral damage to children, families and neighborhoods. The course will conclude with a public health model for ending mass incarceration.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 43089 PLAGUES THAT SHAPED THE WORLD (DIVG) (ELR) 3 Credit Hours**

(Slashed with EPI 53089 and and EPI 73089) Course examines the Bubonic plague, HIV/AIDS, Ebola and pandemic influenza outbreaks to introduce students to the fundamentals of public health, establishing epidemiological principles that explain how plagues erupt and propagate, decimate populations and alter cultures. Inherent in the course's discussion are the social determinants that fuel plague outbreaks and slow recovery. Examples of emerging infectious diseases and threats of bioterrorism are discussed as new plagues for which creative solutions are still required. Students take city excursions and a field trip to assess cultural changes resulting from historical plagues.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Diversity Global, Experiential Learning Requirement

**PH 43092 INTERNSHIP IN CLINICAL TRIALS RESEARCH (ELR) 3-6 Credit Hours**

The internship will place students in a clinical trials setting (e.g., contract research organization, hospital, or academic setting) where they can gain hands on experience conducting clinical trials and clinical research. The internship is 300 hours and can be taken in the last one to two semesters. The purpose of the internship is to provide the student with practical experiences that will make them marketable for a position in clinical research upon graduation.

**Prerequisite:** PH 40013 and PH 40014.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-6 other

**Grade Mode:** Satisfactory/Unsatisfactory

**Attributes:** Experiential Learning Requirement

**PH 44000 HEALTH DISPARITIES (DIVD) (WIC) 3 Credit Hours**

Understanding the factors involved in health disparities at the national and global level, and the impact of health disparities on public health.

**Prerequisite:** ENG 21011 or HONR 10297; and 15 credit hours of public health courses; and junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Diversity Domestic, Writing Intensive Course

**PH 44003 ENVIRONMENTAL HEALTH ISSUES IN LOW- AND MIDDLE-INCOME COUNTRIES 3 Credit Hours**

Covers the important environmental health issues of concerns in low- and middle-income countries and appropriate intervention strategies. Topics include clean drinking water and sanitation, indoor air pollution, outdoor air pollution, environmental management, sustainability and health.

**Prerequisite:** Public health or anthropology major; and junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44004 GLOBAL HEALTH IMMERSION: LATIN AMERICA 3 Credit Hours**

The principal objective of this summer intersession course is to immerse students into the history, culture and public health systems of Latin American countries Colombia Ecuador. Students will have the opportunity to visit major cities, i.e., Cali, Colombia, and Quito, Ecuador, rural areas, and well-known tourist destinations (Cartagena, Colombia, Otavalo, Ecuador). Students will gain an understanding of current scientific research on tropical diseases of local public health relevance, such as malaria. The course will focus on the basic biology of disease, mechanisms of transmission (epidemiology), and efforts to develop vaccines against malaria. The course is designed primarily for sophomores, juniors and seniors who are public health, nursing, or biological science majors. Master's level students will also be accepted. Knowledge of basic Spanish language is useful but not necessary.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44005 LEGAL ASPECTS OF HEALTH SERVICES MANAGEMENT 3 Credit Hours**

Provides an overview of legal and regulatory essentials in health services management. Provides a historical perspective on legal aspects of health care as well as an introduction to law, tort law, criminal aspects, contracts, civil procedure and trial practice as related to health care. Students examine how liability impacts corporate structures, health departments and health care professionals and examine issues related to patient consent, legal reporting requirements, labor relations and patient rights.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44010 PUBLIC HEALTH PLANNING AND FINANCE 3 Credit Hours**

Introduces students to business planning of health services. Students obtain skills in public health financial decision-making, including general principles of public health accounting, budgeting and financial planning.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44015 PUBLIC HEALTH MANAGEMENT 3 Credit Hours**

Provides an overview of management and leadership concepts, principles and practice as applied to public health management. Students learn basic skills in team-building, developing board relationships, strategic planning, fiscal management, marketing, conflict resolution and negotiation in healthcare management. Coursework integrates principles of ethics and professionalism, effective communication, managing complex and culturally diverse workplaces and the changing role of public health managers.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44020 PUBLIC HEALTH ETHICS IN PRACTICE, POLICY AND RESEARCH 3 Credit Hours**

Provides an introduction to public health ethics, including the key foundations, concepts and frameworks for evaluating ethical issues in the public health setting.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44025 PRINCIPLES OF PUBLIC HEALTH LEADERSHIP 3 Credit Hours**

Designed to introduce students to skill-sets and leadership practices necessary for successful public health leadership, with an emphasis on leading positive and sustainable change in real world situations. It also familiarizes students with key aspects of partnership building and advocacy for the purposes of improving health. Particular skills include coalition/partnership development, health advocacy, team building, mentoring and leadership.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**PH 44092 INTERNSHIP IN PUBLIC HEALTH (ELR) 3-6 Credit Hours**

(Repeatable for credit) Capstone internship experience in a public health setting under the supervision of a site preceptor and university supervisor. Students gain experience in public health work.

**Prerequisite:** Senior standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-6 other

**Grade Mode:** Satisfactory/Unsatisfactory

**Attributes:** Experiential Learning Requirement

**PH 45092 SERVICE LEARNING PRACTICUM IN COMMUNITY-BASED PUBLIC HEALTH (ELR) 3 Credit Hours**

This course is designed to provide an opportunity for students to engage in a variety of public health settings under the supervision of faculty. The practicum experience is focused on developing skills needed to implement change to improve population health, providing a setting in which students may integrate and apply the skills and knowledge acquired through their coursework. Students will be exposed to some of the benefits and challenges encountered by public health professionals on a routine basis.

**Prerequisite:** Junior or senior standing.

**Corequisite:** PH 35001.

**Schedule Type:** Lecture, Practical Experience

**Contact Hours:** 1 lecture, 6 other

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**PH 49000 CAPSTONE EXPERIENCE IN PUBLIC HEALTH (ELR) 3 Credit Hours**

Case studies of various strategies used in addressing various public health issues are discussed within an evaluative framework.

**Prerequisite:** 21 credit hours of public health courses; and junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**PH 60172 PRACTICUM SEMINAR IN PUBLIC HEALTH 1 Credit Hour**

(Repeatable 6 times for credit) Seminar component of the Practicum Experience; course must be taken at the same time as the Practicum Experience; students prepare a final portfolio and seminar presentation integrating theory and practice.

**Prerequisite:** Graduate standing.

**Corequisite:** PH 60192.

**Schedule Type:** Lecture

**Contact Hours:** 1 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**PH 60192 PRACTICUM EXPERIENCE 5 Credit Hours**

(Repeatable for credit) Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency.

**Prerequisite:** Graduate standing.

**Corequisite:** PH 60172.

**Schedule Type:** Practical Experience

**Contact Hours:** 20 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**PH 61199 INTEGRATIVE LEARNING EXPERIENCE 1 Credit Hour**

Students complete an integrative learning experience that demonstrates a synthesis of foundational and concentration competencies. Students, in consultation with faculty, select foundational and concentration-specific competencies appropriate to the student's educational and professional goals.

**Prerequisite:** 30 credit hours of Biostatistics (BST) or Environmental Health Sciences (EHS) or Epidemiology (EPI) or Health Policy and Management (HPM) or Social and Behavioral Sciences (SBS) courses; and graduate standing.

**Schedule Type:** Project or Capstone

**Contact Hours:** 1 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**PH 80199 DISSERTATION I 15 Credit Hours**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of 30 hours.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**PH 80299 DISSERTATION II 15 Credit Hours**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until degree requirements are met.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

## Social and Behavioral Sciences (SBS)

### SBS 50196 INDIVIDUAL INVESTIGATION IN SOCIAL AND BEHAVIORAL SCIENCES 1-3 Credit Hours

(Repeatable for credit) Individual graduate investigation or research in areas related to social and behavioral sciences.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

### SBS 54634 SOCIAL DETERMINANTS OF HEALTH BEHAVIORS 3 Credit Hours

Overviews the social determinants of health and the dynamic interplay between individual behaviors and community structures (systems orientation) including public policy, social and built environments, commercial messages, access to services, cultural norms, psychosocial hazards, and poverty both as causal effects that either provide opportunity or constraints to health. Also examines systems approaches to preventing public health threats from issues including substance use (alcohol, tobacco and other drugs), physical inactivity, poor dietary practices, unsafe sexual behaviors, violence and injury, and mental health.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

### SBS 60002 QUANTITATIVE METHODS IN SOCIAL AND BEHAVIORAL SCIENCES 3 Credit Hours

Introduces basic quantitative methods used in social and behavioral scientific research. First we focus on the measurement of socio-behavioral phenomena and the relationship between measurement and statistics. Next, we examine the interrelated roles of scientific theory and the design of socio-behavioral research studies. Last, we focus on building appropriate multiple linear regression and or analysis of variance statistical models to provide valid analysis of data collected in socio-behavioral research.

**Prerequisite:** BST 52019; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

### SBS 60020 PROGRAM EVALUATION II: APPLICATION IN THE REAL WORLD 3 Credit Hours

(Slashed with SBS 80020) This course provides students with a more in-depth examination of program evaluation for public health professionals and the opportunity to apply their evaluation knowledge and skills to an existing health intervention. The content will delve deeply into formative and summative evaluation—including theoretical underpinnings, professional standards, research design and data collection and analysis. Students will be required to apply this knowledge to a selected program and produce an evaluation proposal acceptable for submission to a funding agency.

**Prerequisite:** HPM 63011; and graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

### SBS 60021 SOCIAL AND BEHAVIORAL SCIENCE THEORIES 3 Credit Hours

Examines fundamental social and behavioral science theoretical frameworks that explain health behaviors with an emphasis on application through universal prevention approaches to inform both research and program evaluation designs.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

### SBS 60030 CODING FOR QUALITATIVE RESEARCH 1 Credit Hour

(Slashed with SBS 80030) The purpose of this course is to provide students with a brief but thorough overview of the basic process of coding text-based, unstructured data for qualitative research projects. Focus is on coding for descriptive or basic qualitative research.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 15 lecture

**Grade Mode:** Standard Letter

### SBS 60040 TRANSCRIBING INDIVIDUAL AND GROUP INTERVIEWS FOR QUALITATIVE RESEARCH 1 Credit Hour

(Slashed with SBS 80040) The purpose of this course is to provide students an overview of, and applied practice in transcribing audio-recorded interview data as preparation for qualitative analysis techniques.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 15 lecture

**Grade Mode:** Standard Letter

### SBS 60191 VARIABLE CONTENT SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES 1-3 Credit Hours

(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in social and behavioral sciences. Subject matter varies depending on the topic.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

### SBS 60192 APPLIED PRACTICE EXPERIENCE IN SOCIAL AND BEHAVIORAL SCIENCES 3,6 Credit Hours

(Repeatable for credit) Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency.

**Prerequisite:** Graduate standing; and special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 9-18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

### SBS 60195 SPECIAL TOPICS IN SOCIAL AND BEHAVIORAL SCIENCES 1-3 Credit Hours

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in social and behavioral sciences.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**SBS 60292 APPLIED PRACTICE EXPERIENCE IN SOCIAL AND BEHAVIORAL SCIENCES II 1 Credit Hour**

(Repeatable for credit) Continuing enrollment for students participating in public health activities of a public health agency, hospital or other approved organization. Students complete the field experience with joint supervision from the university and an approved organization or agency.

**Prerequisite:** SBS 60192 and graduate standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory

**SBS 63008 GRANT WRITING IN SOCIAL AND BEHAVIORAL SCIENCES 3 Credit Hours**

Students learn the basics of grant writing for federal and non-federal funding agencies with a particular emphasis on the components of most proposals for funding. This includes rationale for seeking funds, collaborations with community organizations, and working with consultants and subcontractors. Participants also learn about the basic sections of grant writing such as specific aims and hypotheses, developing a literature review, background and significance, research design and methodology, developing a budget and conducting research with human subjects. Participants have an opportunity to write sample grant proposals, learn about the review and scoring process and post-award grant management.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 63010 QUALITATIVE METHODS FOR PUBLIC HEALTH RESEARCH 3 Credit Hours**

(Slashed with SBS 83010) In this course, students will be guided through exploration of the uses and value of qualitative approaches to research with humans through a combination of resource review and guided applied practice. Students will be provided with information about various methodologies that comprise qualitative inquiry, and will engage in practice efforts to analyze provided data, and to assess the quality of research reports.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 63011 QUALITATIVE DATA ANALYSIS 3 Credit Hours**

(Slashed with SBS 83011) Students will be introduced to the process and goals of qualitative data analysis relevant to research design and study purpose, and will be provided opportunities to conduct coding and other types of analysis of qualitative data using both computer assisted and manual processes. Students will focus on descriptive or generic approaches for both qualitative and mixed methods research. Students will additionally learn about and be provided opportunities for guided practice in quality control measures that include creation of an audit trail, "member checking," composition of analytic memos, and other forms of researcher initiated documentation.

**Prerequisite:** SBS 63010 or special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 63030 SEMINAR IN SOCIAL AND BEHAVIOR SCIENCES 3 Credit Hours**

Explores case studies in the social and behavioral sciences on topics that address the leading health indicators including substance use (alcohol, tobacco and other drugs), obesity (physical activity and nutrition), HIV and STIs, mental health, injury, immunization and access to health care, and social determinants of health.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**SBS 64600 EMERGING ISSUES IN LGBTQ+ PUBLIC HEALTH PRACTICE 3 Credit Hours**

This course is an overview of emerging issues and their related challenges in the field of LGBTQ+ public health practice. In particular, this course focuses on emerging LGBTQ+ public health issues, with special emphasis on several current public health topics. Lectures, reading assignments, videos, assignments and individual projects are used to introduce students to the diversity and complexity of emerging public health issues and challenges associated with addressing emerging public health issues.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 64630 SEXUAL ORIENTATION AND GENDER IDENTITY IN PUBLIC HEALTH PRACTICE 3 Credit Hours**

This course introduces students to the diverse concepts of sexual orientation and gender identity through the lens of public health practice. The course prepares public health leaders and clinical practitioners to think critically about the unique health concerns and inherent systems of homophobia and heterosexism that negatively impact the health of the LGBTQ+ community and how to navigate LGBTQ+ public health practice to make positive community health change. Lectures, reading assignments, videos, assignments and individual projects are used to introduce students to the diversity and complexity of emerging public health issues and the challenges associated with addressing emerging public health issues.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 64700 COMMUNITY-BASED SUBSTANCE ABUSE PREVENTION FOR PUBLIC HEALTH PROFESSIONALS 3 Credit Hours**

This course provides foundational knowledge for substance abuse prevention. In addition, this course enhances the knowledge and skills of public health professionals to enable them to implement evidence-based substance use prevention interventions and policies. The primary emphasis is on evidence-based interventions, policies and implementation quality and sustainability.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter



**SBS 64701 COMMUNITY-BASED PUBLIC HEALTH IMPLEMENTATION SYSTEMS 3 Credit Hours**

This course focuses on public health prevention science and its application to the implementation of substance use interventions. The content focuses on community systems for addressing substance use problems that affect whole communities. These community systems incorporate evidence-based prevention interventions at various levels of influence within a socio-ecological perspective. Students will examine the development of community organizations that come together to address specific problems, and how they network and integrate with existing organizations that provide community services. The content draws from the International Standards on Drug Use Prevention that were published by the United Nations Office on Drugs and Crime (2013; 2015) and the European Drug Prevention Quality Standards published by the European Monitoring Centre on Drugs and Drug Addiction (2011). Primary emphasis is on evidence-based interventions and policies and on implementation quality and sustainability.

**Prerequisite:** SBS 64700; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 65010 RACISM: A PUBLIC HEALTH CRISIS 3 Credit Hours**

Across the US, an increasing number of communities have declared racism as a public health crisis. This declaration is not based on an isolated incident, rather, it is the acknowledgement that racism is structural and has been embedded within the institutional policies and societal norms that are present in our everyday lives. This course will: Recognize racism in the US as a significant cause of poor health, disease, and persistent dis-ease among Black Americans; Explore the relationship between racism and health through a historic accounting of social, political, economic, and environmental conditions post-slavery through the current events of 2020; and, identify how, research, and advocacy can address anti-Black racism and promote health equity.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 73018 THEORIES OF PREVENTION SCIENCE 3 Credit Hours**

Provides a background and theoretical review of prevention science as a multi-disciplinary field focusing on systematic inquiry on health behaviors including substance use (alcohol, tobacco and other drugs), physical activity, dietary practices, mental health, violence and injury and sexual behaviors.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 73019 EVALUATION RESEARCH METHODS IN PREVENTION SCIENCE 3 Credit Hours**

This course examines the methods used by prevention science researchers to determine the effectiveness of public health programs. Focus is on advanced formative, process, impact and outcome evaluation methods. Qualitative and quantitative analysis techniques used for assessing program process and effects are discussed in the context of research evaluation.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 73020 ADVANCED RESEARCH METHODS IN PREVENTION SCIENCE 3 Credit Hours**

Focuses primarily on advanced quantitative methods in the application of prevention science.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 80020 PROGRAM EVALUATION II: APPLICATION IN THE REAL WORLD 3 Credit Hours**

(Slashed with SBS 60020) This course provides students with a more in-depth examination of program evaluation for public health professionals and the opportunity to apply their evaluation knowledge and skills to an existing health intervention. The content will delve deeply into formative and summative evaluation—including theoretical underpinnings, professional standards, measurement, research design and data collection and analysis. Students will be required to apply this knowledge to a selected program and produce an evaluation proposal acceptable for submission to a funding agency.

**Prerequisite:** HPM 63011; and doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 80030 CODING FOR QUALITATIVE RESEARCH 1 Credit Hour**

(Slashed with SBS 60030) The purpose of this course is to provide students with a brief but thorough overview of the basic process of coding text-based, unstructured data for qualitative research projects. Focus is on coding for descriptive or basic qualitative research; other methodologies are reviewed based on student needs.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 15 lecture

**Grade Mode:** Standard Letter

**SBS 80040 TRANSCRIBING INDIVIDUAL AND GROUP INTERVIEWS FOR QUALITATIVE RESEARCH 1 Credit Hour**

(Slashed with SBS 60040) The purpose of this course is to provide students an overview of, and applied practice in transcribing audio-recorded interview data as preparation for qualitative analysis techniques, using both content-focused and conversation-analytic approaches.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 15 lecture

**Grade Mode:** Standard Letter

**SBS 80100 EMERGING ISSUES IN PREVENTION SCIENCE 3 Credit Hours**

Survey of relevant challenges and issues facing prevention science researchers.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 80191 VARIABLE CONTENT SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in social and behavioral sciences. Subject matter varies depending on the topic.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**SBS 80195 SPECIAL TOPICS IN SOCIAL AND BEHAVIORAL SCIENCES 1-3 Credit Hours**

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in social and behavioral sciences.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**SBS 80196 INDIVIDUAL INVESTIGATION IN SOCIAL AND BEHAVIORAL SCIENCES 1-3 Credit Hours**

Individual graduate investigation or research in areas related to social and behavioral sciences.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**SBS 80198 DIRECTED RESEARCH IN PREVENTION SCIENCE 1-15 Credit Hours**

(Repeatable for credit) Directed research or individual investigation for doctoral students.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Research

**Contact Hours:** 1-15 other

**Grade Mode:** Standard Letter

**SBS 80199 DISSERTATION I 15 Credit Hours**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of Dissertation II and 30 hours of total dissertation work.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**SBS 80299 DISSERTATION II 15 Credit Hours**

(Repeatable for credit) Second course of dissertation sequence completing requirement of with 30 total hours of dissertation work.

**Prerequisite:** SBS 80199; and special approval.

**Schedule Type:** Dissertation

**Contact Hours:** 15 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**SBS 83010 QUALITATIVE METHODS FOR PUBLIC HEALTH RESEARCH 3 Credit Hours**

(Slashed with SBS 63010) In this course, students will be guided through exploration of the uses and value of qualitative approaches to research with humans through a combination of resource review and applied practice. Students will be provided with information about various methodologies that comprise qualitative inquiry, and will engage in practice efforts to gather, process, and analyze data, and to assess the quality of research reports.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**SBS 83011 QUALITATIVE DATA ANALYSIS 3 Credit Hours**

(Slashed with SBS 63011) Students will be introduced to the process and goals of qualitative data analysis relevant to research design and study purpose, and will be provided opportunities to conduct coding and other types of analysis of qualitative data using both computer assisted and manual processes. Qualitative approaches potentially considered in this course include grounded theory, phenomenology, descriptive or generic approaches, content analysis, mixed methods, and others depending on needs and interests of students in the class. Students will additionally learn about and practice quality control measures that include creation of an audit trail, "member checking," composition of analytic memos, and other forms of researcher initiated documentation.

**Prerequisite:** SBS 83010; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter