



SCHOOL of
PUBLIC HEALTH



**Office of Student and
Academic Services**

UNT Health Science Center
School of Public Health, EAD-716
817-735-2401
sph@hsc.unt.edu

Course Descriptions

Department of Biostatistics

BIOS 5300 Biostatistics for Public Health 1

3 SCH. This course provides students with the basic knowledge and skills to effectively use biostatistics in research design and data analysis and to understand articles in related professional journals. Topics include choosing correct statistical methods and experimental designs in public health research and practice; descriptive statistics; probability and probability distributions; estimation and hypothesis testing; simple linear regression; introduction to analysis of variance and an introduction to the use of statistical software packages. Letter grade.

BIOS 5310 Biostatistics for Public Health 2

3 SCH. The student is introduced to more advanced statistical methods including multiple regression, logistic regression, factorial ANOVA, repeated measure designs, analysis of categorical data, and nonparametric statistics. Prerequisites: BIOS 5300 or equivalent. Letter grade.

BIOS 5312 Regression Analysis

3 SCH. This course presents the methods in regression beyond the introductory level, to include multiple and partial correlation and regression, residual analysis, logistic regression, polynomial regression, poisson regression, and selection of predictor variables. Prerequisites: BIOS 5300 and BIOS 5310. Letter grade.

BIOS 5314 Intro to Statistical Packages

3 SCH. Develops skills in the use of statistical packages in public health research. Emphasis is on data definition, verification, descriptive examination, and graphical presentation. Statistical packages will include SAS software. Prerequisites: BIOS 5300. Letter grade.

BIOS 5316 Nonparametric Statistical Methods

3 SCH. This course covers a wide selection of nonparametric statistical tests as alternatives to parametric tests. The strength and weakness of each test, as well as test efficiency, will be discussed and statistical software will be used throughout the course. Prerequisites: BIOS 5300 and BIOS 5310. Letter grade.

BIOS 5320 Analysis of Variance

3 SCH. This course presents the ANOVA model beyond the introductory level, to include various experimental designs, in-depth treatment of multiple comparison methods, factorial repeated measure ANOVA, analysis of covariance, power analysis, and determination of sample size. Prerequisites: BIOS 5300 and BIOS 5310. BIOS 5312 is recommended. Letter grade.

BIOS 5324 Data Management

3 SCH. The goal of this course is to provide an overview of data collection and management. The topics include study design, data form design and coding, defining a database and a database system, data collection and entry, quality control, and database management. Also, privacy, confidentiality and security concerns as well as ethical and legal issues will be discussed. Examples of databases may be illustrated by use of EPI Info. Prerequisites: BIOS 5300, BIOS 5314 is recommended. Letter grade.

BIOS 5395 Thesis

3 SCH. The thesis requires the student to conduct and prepare the written thesis under the supervision of a faculty committee. The thesis is written in traditional academic style or in journal article manuscript format. The student must complete an oral defense of the thesis. The student must maintain continuous enrollment in BIOS 5395 until the requirements are completed and the thesis is approved by the dean. This course may be repeated for credit. A minimum of 6 SCH is required to meet the MPH culminating experience requirement. Pass/Fail grade.

BIOS 5397 Practice Experience in Public Health

3 SCH. This course provides students with experience in public health practice through directed work in practice settings. Students are required to commit 200 hours to the practice experience, produce a written report of project(s) undertaken in the placement, and prepare a poster presentation of their practice experience. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience in the semester prior to registering in BIOS 5397. BIOS 5397 requirements may be completed over the period of more than one semester with approval of the practice coordinator and advisor. If the practice experience is not completed in two semesters then the student must re-register for the course each semester until it is complete. Prerequisites: Students must have completed 21 SCH of core and/or department required coursework. Letter grade.

BIOS 5399 Independent Study in Biostatistics

1-3 SCH. For students capable of independently completing topical studies or projects through conferences and activities directed by the instructor. Topical or project work is chosen by the student with the consent of the instructor. May be repeated for credit. Offered each semester. Letter grade.

BIOS 6300 Applied Statistical Methods for Data Analysis

3 SCH. The course emphasizes the design, implementation, analysis, and reporting of research investigations. Topics include two-sample inference using t-distributions, alternatives to t-test based analyses, comparisons among several samples, linear combinations, and multiple comparisons, simple and multiple linear regression methods, regression diagnostics, variable selection, and related methods, the repeated measures and other multivariate responses, exploratory tools for summarizing multivariate responses, logistics methods for binary response variables and binomial counts, log-linear regression for Poisson counts, hierarchical (multilevel) and structural equation modeling will be discussed and life tables, Kaplan-Meier and proportional hazards methods for analysis of time to event data. Prerequisites: BIOS 5300, BIOS 5310 or permission from course instructor. Letter grade.

BIOS 6310 Probability and Statistical Inference

3 SCH. The course provides a modern introduction to the theory of probability and statistical inference. Topics include basic concepts of probability, conditional probability, independence, random variables, distributions, expectations, moments, probability models, convergence concepts, sampling distributions, frequentist and Bayesian approaches to estimation, hypothesis testing, and interval estimation. Rigorous proofs are deemphasized and replaced with extended discussions of interpretation of results and simulations for illustration. Letter grade.

BIOS 6312 Applied Methods of Survey Sampling

3 SCH. The course covers the basic ideas of sampling from an applied perspective. Topics include simple random sampling, stratification, systematic selection, cluster sampling, multistage sampling, probability proportional to size sampling, cost models, sampling error estimation techniques, nonsampling errors, and compensating for missing data. Prerequisites: BIOS 5300 and BIOS 5310 or equivalent. Letter grade.

BIOS 6314 Applied Categorical Data Analysis

3 SCH. This course introduces descriptive and inferential statistics for univariate and multivariate categorical data with applications in public health and clinical field. Theory and application of contingency tables, measures of association and tests for homogeneity between populations and independence of variables will be covered. Log linear and logistic regression analyses methods will be investigated using public use public health data sets available. Letter grade.

BIOS 6316 Multivariate Analysis of Variance

3 SCH. This course covers advanced topics in the general MANOVA model, including inference about mean vectors and covariance matrices, canonical correlation, principal components, discriminate analysis, cluster analysis, and grouping techniques. Special emphasis will be on the use of major statistical package such as SAS. A background in matrix algebra is expected. Prerequisites: BIOS 5312 and BIOS 5320. BIOS 5314 is recommended. Letter grade.

BIOS 6318 Clinical Trials and Survival Analysis

3 SCH. This course covers the general concepts and methodologies in clinical trials and statistical techniques in survival analysis. Topics covered include: phase I, II and III clinical trials, basic study design, ethical considerations, organization, study population, patient recruitment, protocol adherence and compliance, adverse event, data management, closeout, issues in reporting results as well as statistical techniques such as designs for phase I, II and III clinical trials, randomization, blindness techniques, sample size determination, and interim analysis. In addition, survival analysis will cover survival distributions, censored data, Kaplan-Meier curve and life-table analysis, logrank test, hazard function, and the Cox regression. Letter grade.

BIOS 6320 Biostatistical Research and Consulting

3 SCH. This course provides students with the basic knowledge and skills to provide statistical consulting to persons and organizations in a wide variety of settings, including medical centers, hospitals, industry, and government. Students will be instructed in scientific writing, and will practice reading and writing about medical research. This course brings together the skills that students have learned in other core classes, such as BIOS 5300 and BIOS 5310: Biostatistics I and II, BIOS 5324: Data Management, and BIOS 5314: Introduction to Statistical Packages. Students will complete an original research project whereby they assess, analyze, write, and present findings from actual health care data. This course serves as part requirement for Clinical Research students who choose to opt out of writing a master's thesis. Prerequisites: BIOS 5300, BIOS 5310, and BIOS 5312. Letter grade.

BIOS 6391 Topics in Biostatistics

3 SCH. This course is designed to give exposure to students to a specialized modern biostatistical topic chosen by the instructor. Examples of such a topic include (but are not limited to) statistical methods in genetic epidemiology, longitudinal data analysis, Bayesian data analysis, generalized linear models, sequential analysis, etc. Prerequisites: BIOS 5300 and BIOS 5310. Letter grade.

BIOS 6392 Doctoral Capstone

3 SCH. This course will provide students with the necessary instruction to prepare dissertation proposals. Topics include scientific writing, preparation of manuscripts for publication, grant writing, proposal writing, and oral presentation skills. Prerequisites: Completion of most required coursework for DrPH curriculum (enrollment is permitted if a student is taking one final elective concurrently with this course). Pass/Fail grade.

BIOS 6395 Doctoral Dissertation

3 SCH. The doctoral dissertation must consist of original research or public health program development and testing that is focused on a particular health problem. The student's advisor is expected to provide guidance in the selection of a suitable project that provides for a clear direction for implementing the research or program. The student must complete an oral defense of the dissertation. The student must maintain continuous enrollment in BIOS 6395 until the requirements are completed. This course may be repeated for credit. A minimum of 9 SCH is required for the DrPH degree. Pass/Fail grade.

BIOS 6399 Doctoral Independent Study in Biostatistics

1-3 SCH. This academic activity includes research and other scholarly projects carried out by the student under the supervision of a School of Public Health faculty member (instructor). A brief proposal should be written and approved by the academic advisor and a final report should be submitted to the supervising instructor for credit. Topical or project work is chosen by the student with the consent of the supervising instructor and approval from the academic advisor. This course may be repeated for credit. Offered each semester. Letter grade.

BIOS 6497 Public Health Practice Residency

4 SCH. This academic activity provides doctoral students with experience in public health practice through directed work in practice settings. Students are required to commit a substantial number of hours to the practice experience, produce two written reports of project(s) undertaken in the placement. One of the written reports should be presented in the form of a publishable article to be submitted to a public health related peer-review journal. The other report is described in the Public Health Practice Residency Manual. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience plan prior to registering. Requirements may be completed over the period of more than one semester with approval of the academic advisor and the practice coordinator. The student must maintain continuous enrollment in BIOS 6497 until the requirements are complete. This course requirement may not be waived. Pass/Fail grade.

Department of Environmental and Occupational Health Sciences

EOHS 5300 Environmental Health

3 SCH. An introduction to the environmental (physical, chemical, biological) determinants that influence human health and means of controlling these determinants. This course will discuss municipal water supply and disposal, ambient and indoor air quality, solid and hazardous wastes, food protection, vector control, pesticides, occupational safety, toxicology, risk assessment/risk communication and genomics. Letter grade.

EOHS 5310 Evaluation and Control of Biological Agents and Infectious Diseases

3 SCH. This course addresses the nature of biological agents including the sources, pathways, routes of entry, and health effects of infectious and allergenic agents that are found in either workplaces or the general environment. Lectures and case studies will provide training on how to identify, measure, and control biological agents that are present in a variety of settings. Basic concepts from aerosol science, industrial hygiene, microbiology, infectious disease epidemiology, sanitation, behavioral science, and environmental engineering are applied to problems of infectious or allergic disease prevention and control. Letter grade.

EOHS 5312 Food Quality and Safety

3 SCH. This course will examine the quality and safety aspects of our food supply from the "Farm to the Table." It will provide students with information necessary to hygienic practices in food protection. It will thoroughly discuss the relationship of microorganism and sanitation, food contamination sources, personal hygiene and sanitary food handling, quality assurance, cleaning compounds, cleaning equipment, waste disposal, food processing and preparation, and pest control. Prerequisites: EOHS 5300 or concurrent enrollment in EOHS 5300. Letter grade.

EOHS 5314 Arthropods and Public Health

3 SCH. This course provides overview of arthropods and their impacts on human and public health. The course presents basic information on medically important arthropods, the related diseases, and the prevention and control. Detailed discussions of the important vector-borne diseases such as malaria, dengue, filariasis, Trypanosomiasis, equine encephalitis, Lyme and other tick-borne diseases are included. Letter grade.

EOHS 5320 TX-Mexico Border Health Issues

3 SCH. This experiential course focuses on issues surrounding public health on the Texas-Mexico border. Border health issues addressed include cultural diversity; water and waste water treatment; air and water pollution; and zoonotic, acute infectious and chronic disease control. Course includes on-site study in Laredo and/or other border communities. Enrollment limited. Prerequisites: EOHS 5300, SABS 5300 plus 6 hours of additional course work and approval of the instructor. All students must have a Passport prior to taking this course. International students must also have a U.S. multi-entry Visa and purchase a travel Visa for Mexico prior to taking this course. Letter grade.

EOHS 5322 Air Pollution and Health

3 SCH. The course is to introduce students to knowledge in air pollution and public health, especially in developing countries, and thereby to provide a firmer basis for improving public health in low and middle income countries. Studies from a wide range of less heavily researched Asian, African and Latin American countries are reviewed in the course. The course also examines issues of particular relevance to low and middle income countries for vehicular pollution. Letter grade.

EOHS 5324 Water and Public Health: Global to Regional Perspectives

3 SCH. This course covers how water quantity and quality affect population health from regional and global perspectives, and human efforts to reduce its impacts on public health. The course provides training on recognition, evaluation, and control of water contaminants and discussions on current issues related to water. The water contaminants include microbial organisms, chemicals, and radioactive materials both from natural and anthropogenic sources. Human efforts to reduce the impacts of water contamination and to conserve water include; water and wastewater treatment technologies and policy and regulations. In addition, climate efforts on water quality and quantity will be discussed both in regional and global perspectives. Letter grade.

EOHS 5330 Recognition, Evaluation, and Control of Environmental Hazards

3 SCH. Identification of hazards, and methodologies used, for the evaluation and control of physical and chemical hazards in the environment relative to potential adverse health effects and the etiology of related illnesses and diseases. Federal and state regulatory requirements will be discussed and other guidelines from professional organizations addressed. Letter grade.

EOHS 5331 Environmental and Occupational Sampling and Analysis Methods

3 SCH. Theory and application, through lecture and laboratory exercises, of sampling and analytical instruments and methodologies for environmental and occupational exposure measurement of chemical, physical, and biologic agents in the environment. Where feasible, labs will include walk-through surveys, field collection of samples, and sample preparation and analysis. Prerequisites: EOHS 5330 (can be taken simultaneously). Letter grade.

EOHS 5332 Industrial Hygiene

3 SCH. An introduction to the evaluation and control of the occupational environment with regard to minimizing toxic exposure in the workplace, including chemical agents, biological agents, dusts and fibers, noise, heat and radiation, methods of detection and control, development standards in the workplace, ventilation, engineering and other controls, personal protection, air monitoring, exposure-health effect, linkage and job-exposure matrices. Prerequisites: BIOS 5300, EOHS 5300, and EPID 5300. Letter grade.

EOHS 5334 Occupational Diseases and Health Practice

3 SCH. This course provides an overview of the principles of occupational health surveillance. The student will be able to identify key occupational hazards and exposures which are potential hazards to workers. A working knowledge of OSHA's standards that are in place in order to protect workers from hazardous exposures and deleterious health effects. Letter grade.

EOHS 5336 Work Surveillance, Safety, and Law

3 SCH. This course provides an overview of the principles of occupational diseases in the modern day global workplace, how they present and how they affect worker health and productivity. The student will be able to identify key occupational hazards and exposures, and corresponding occupational diseases which increase morbidity, mortality, absenteeism and decrease productivity in the workplace. A working knowledge of OSHA's standards that are in place in order to protect workers from hazardous exposures is desirable. Other countries where OSHA does not exist presents a modern laboratory for us to see what the workplace was like prior to the existence of OSHA. Letter grade.

EOHS 5340 Exposure and Risk Assessment

3 SCH. The goal of this course is to provide an excellent opportunity for students to learn both theories and application methodologies in exposure and risk assessment. The class involves techniques for estimating the exposure and corresponding risk to humans or ecosystems from exposure to chemicals, radiation, technology, or any other factors that can influence health and well-being. Prerequisites: BIOS 5310 and EOHS 5300. Letter grade.

EOHS 5342 Biomarkers in Environmental Epidemiology

3 SCH. The goal of this course is to introduce students to the application of molecular biology as exposure assessment tool in epidemiological research. This course covers both major theoretical concepts and practical applications using biological responses (biomarkers) to study and protect public health. Prerequisites: EOHS 5300 or permission of the course instructor. Letter grade.

EOHS 5350 Environmental & Occupational Toxicology

3 SCH. This course will deal with some important topics in environmental toxicology. Some of the topics that will be covered include: dose-response curves and nature of threshold for carcinogens and non-carcinogens; determination of air concentrations within and outside the workplace; development of standards; mechanism(s) of carcinogenicity and promotion; latency periods; exposure assessment; risk assessment. Letter grade.

EOHS 5360 Environmental Data Analysis

3 SCH. The objective of the course is to introduce basic statistical knowledge that is useful for environmental studies. Through the course students are expected to learn how statistical principles and methods are applied to environmental studies. The course illustrates probabilistic theory and distributions, random variables and properties of a random sample, data reduction, estimation and hypothesis testing, analysis of variance, regression models. The course also introduces environmental monitoring and space-time environmental data analysis. Prerequisites: BIOS 5300. Letter grade.

EOHS 5370 Policy, Science, and Decisions

3 SCH. The purpose of this course is to provide students with analytical tools to think critically about policy, science, and decisions that affect occupational and environmental protection to public health. The focus of this course is on the interface between the fields of occupational and environmental, public health, policy and decision sciences. The course examines current approaches to occupational and environmental regulations such as command and control, comparative risk assessment, and market-based incentives. It also discusses environmental justice issues, sustainable development, and policies concerning particular environment problems in the United States and global community. Letter grade.

EOHS 5391 Special Topics in Environmental and Occupational Health Science

1-3 SCH. This course is to provide exposure to students to a specialized topics in Environmental and/or Occupational Health Science. The topics will be selected by the instructor in either specialized areas, innovative topics, timely issues or current methodologies. Topics may include such areas as: exposure methodologies; environment and disease; control and measurement issues for nanotechnology; ultra-fine particles; social justice and environmental exposures in developed and developing countries; probabilistic methods for risk analysis; gene-environment interactions; drinking water quality; etc. This course may be repeated for credit with advisor's permission. Letter grade.

EOHS 5395 Thesis

3 SCH. The thesis requires the student to conduct and prepare the written thesis under the supervision of a faculty committee. The thesis is written in traditional academic style or in journal article manuscript format. The student must complete an oral defense of the thesis. The student must maintain continuous enrollment in EOHS 5395 until the requirements are completed and the thesis is approved by the dean. This course may be repeated for credit. A minimum of 6 SCH is required to meet the MPH culminating experience requirement. Pass/Fail grade.

EOHS 5397 Practice Exp in Public Health

3 SCH. This course provides students with experience in public health practice through directed work in practice settings. Students are required to commit 200 hours to the practice experience, produce a written report of project(s) undertaken in the placement, and prepare a poster presentation of their practice experience. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience in the semester prior to registering in EOHS 5397. EOHS 5397 requirements may be completed over the period of more than one semester with approval of the practice coordinator and advisor. If the practice experience is not completed in two semesters then the student must re-register for the course each semester until it is complete. Prerequisites: Students must have completed 21 SCH of core and/or department required coursework. Letter grade.

EOHS 5399 Independent Study in Environmental Health

1-3 SCH. For students capable of independently completing topical studies or projects through conferences and activities directed by the instructor. Topical or project work is chosen by the student with the consent of the instructor. This course may be repeated for credit. Offered each semester. Letter grade.

EOHS 6300 Environmental Health Determinants

3 SCH. This course provides the students with knowledge and skills in the identification, effect on human health, risk assessment, and control of environmental health determinants. Course consists of three parts: biological, chemical, and physical determinants. Letter grade.

EOHS 6324 Genomics and Public Health

3 SCH. This course introduces what genomics is and how genomics are applied to public health. The first half of the course covers basic human genetics and genomics, basic analysis tools for genomics, and data and information sources. The second half discusses how genomics are currently being used in the research of public health science. Ethical and medical limitations to genetic testing and limitations of current public health genomic research are also discussed. In addition, laboratory practices and the project provide training to utilize databases, acquire appropriate information, and analyze the genetic data. Prerequisites: completion of all PhD core courses is strongly recommended. Instructor's consent is required for all MPH students. Letter grade.

EOHS 6348 Spatiotemporal Environmental Health Modeling

3 SCH. This course introduces fundamental concepts and knowledge involved in the space-time stochastic modeling of environmental health process. In the course students learn how to represent uncertainty and variability of environmental health process. Students also learn modeling methods for the prediction of unknown phenomenon of the natural process. Topics include scientific knowledge and the stochastic method of thinking; analysis and synthesis of environmental processes in the face of uncertainty; natural variability; scale of observation effects; space/time continuum laws; random field representations of physical and natural laws; the theory of generalized random fields for natural properties with complex spatial/temporal trends; practical variography and anisotropic structures; scales of observation and the upscaling problem. Prerequisites: EOHS 5360 or BIOS 5310 or permission of the course instructor. Letter grade.

EOHS 6391 Advanced Topics in Environmental and Occupational Health Science

1-3 SCH. This course is to provide exposure to students to a specialized topics in Environmental and/or Occupational Health Science. The topics will be selected by the instructor in either specialized areas, innovative topics, timely issues or current methodologies. Topics may include such areas as: exposure methodologies; environment and disease; control and measurement issues for nanotechnology; ultra-fine particles; social justice and environmental exposures in developed and developing countries; probabilistic methods for risk analysis; gene-environment interactions; drinking water quality; etc. This course may be repeated for credit with advisor's permission. Letter grade.

EOHS 6399 Doctoral Independent Study in Environmental and Occupational Health Science

1-3 SCH. This course is to provide research and other scholarly projects to be carried out by the student under the supervision of a School of Public Health faculty member. A brief proposal with objectives and/or hypothesis, method of accomplishing goals, and deliverable timelines will be prepared by the student and approved by both the academic advisor and supervising instructor. Course may be offered each semester. May be repeated for credit with advisor's permission. Letter grade.

Department of Epidemiology

EPID 5300 Principles of Epidemiology

3 SCH. The overall purpose of this course is to introduce public health students to epidemiology so that they understand how epidemiology contributes to (1) identifying factors that cause diseases, (2) assessing the public health importance of diseases, (3) describing the natural history of diseases, and (4) evaluating procedures for preventing diseases. Letter grade.

EPID 5310 Intermediate Epidemiology

3 SCH. This course illustrates concepts, methods, and strategies used in epidemiologic studies, beyond the principles discussed in EPID 5300. Topics include analysis of birth cohorts, measures of disease frequency and association, bias, confounding, effect modification, stratification and adjustment, quality control, and reporting of epidemiologic results. The primary objective of the course is to present the main issues in establishing causal relationships from observational data. Prerequisite: EPID 5300 and BIOS 5300. Letter grade.

EPID 5312 Survey Methodology

3 SCH. The purpose of this course is to prepare students to examine the unified concepts, principles and methodologies that govern survey research. The course stresses survey design, questionnaire design, and analysis of survey data. Prerequisite: EPID 5310 or permission of the course instructor. Letter grade.

EPID 5314 Applied Data Analysis in Epidemiology

3 SCH. The purpose of this course is to provide practical experience in analyzing epidemiologic data. This course teaches applying analytic methods to answer specific epidemiologic research questions and interpreting the results. Students will be provided with several data sets from epidemiologic (cross-sectional, case-control and cohort) studies and will be asked to conduct analysis of these data. Prerequisites: EPID 5310 or EPID 6300, BIOS 5300, and BIOS 5314. Letter grade.

EPID 5316 Epidemiology for Health Care Practice

3 SCH. The purpose of this course is to introduce students to clinical epidemiology and evidence-based health care. This course will provide students with the knowledge and skills to make competent health service decisions, to find and appraise evidence related to health services, and to implement these findings into practice and a health care system. Letter grade.

EPID 5318 Chronic Disease Epidemiology

3 SCH. This course provides a survey of common chronic diseases in the United States and epidemiologic methods used in the prevention and control of such diseases. Course content includes study of the multifactorial etiology of many chronic diseases and the methodologic problems posed in studying chronic diseases. Prerequisite: EPID 5300 or permission of the course instructor. Letter grade.

EPID 5320 Infectious Disease Epidemiology

3 SCH. Infectious diseases are a leading cause of death, accounting for a quarter to a third of the estimated 50+ million deaths worldwide. This course provides an introduction to the epidemiology of infectious diseases. This course focuses on the epidemiologic patterns of infectious diseases as well as new emerging infectious diseases, and their prevention and control. Prerequisite: EPID 5300 or permission of the course instructor. Letter grade.

EPID 5322 Epidemiology of Bioterrorism and Catastrophic Events

3 SCH. The objective of the course is to explore the pervasive relationship of public health and epidemiology in the contemporary emergency and disaster prevention, response and recovery environment. The purpose of this course is to also cultivate an understanding of the basic epidemiologic principles and methods related to intentional biological incidents and other natural or accidental catastrophic events. Discussions will examine the changing and unique role of public health in emergency management, paying special attention to epidemiology, integration with traditional emergency services, medical and first responders, public safety, bioterrorism preparedness and the need for planning, training, collaboration, cooperation and inter-operability between disciplines in both the private and public sectors. The class will promote insight into the necessary integration of public health in the development of effective emergency response contingencies specific to natural, accidental and intentional disaster events. Students will be expected to gain insight into the need for a reinforced and integrated public health system to augment traditional emergency response capabilities as well as to provide early detection and identification capabilities representative of intentional biological events in order to optimize response and recovery activities. The course is designed to construct a foundation of coherent epidemiological concepts and foster the understanding of the use of epidemiologic principles and methods in responding to catastrophic events. Certification in Radiological Awareness and the National Integrated Management System (NIMS) is included as part of the course curriculum. Letter grade.

EPID 5391 Special Topics in Epidemiology

1-3 SCH. This course is designed to give students exposure to cutting edge topics in epidemiology. Examples of such a topic include (but are not limited to) pharmacoepidemiology, perinatal epidemiology, structural equation modeling, meta-analysis in epidemiology, topical seminars, etc. Prerequisites: EPID 5300 and BIOS 5300. Letter grade.

EPID 5395 Thesis

3 SCH. The thesis requires the student to conduct and prepare the written thesis under the supervision of a faculty committee. The thesis is written in traditional academic style or in journal article manuscript format. The student must complete an oral defense of the thesis. The student must maintain continuous enrollment in EPID 5395 until the requirements are completed and the thesis is approved by the dean. This course may be repeated for credit. A minimum of 6 SCH is required to meet the MPH culminating experience requirement. Pass/Fail grade.

EPID 5397 Practice Exp in Public Health

3 SCH. This course provides students with experience in public health practice through directed work in practice settings. Students are required to commit 200 hours to the practice experience, produce a written report of project(s) undertaken in the placement, and prepare a poster presentation of their practice experience. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience in the semester prior to registering in EPID 5397. EPID 5397 requirements may be completed over the period of more than one semester with approval of the practice coordinator and advisor. If the practice experience is not completed in two semesters then the student must re-register for the course each semester until it is complete. Prerequisites: Students must have completed 21 SCH of core and/or department required coursework. Letter grade.

EPID 5399 Independent Study in Epidemiology

1-3 SCH. For students capable of independently completing topical studies or projects through conferences and activities directed by the instructor. Topical or project work is chosen by the student with the consent of the instructor. This course may be repeated for credit. Offered each semester. Letter grade.

EPID 6300 Intermediate Epidemiology for Non-Majors

3 SCH. This course illustrates methods, concepts, and strategies used in epidemiologic studies, beyond the principles discussed in EPID 5300. Topics include a review of basic study designs, analysis of birth cohorts, measures of disease frequency and association, bias, confounding, effect measure modification, stratification, adjustment, research ethics, causal inference, data analysis, and reporting of epidemiologic study results. Students are evaluated by exercises, class participation, a midterm and final exam, and a final research paper. Epidemiology students may NOT register for this course. Epidemiology students should register for EPID 5310. Prerequisites: EPID 5300 and BIOS 5300. Letter grade.

EPID 6310 Advanced Methods in Epidemiology 1

3 SCH. This is an advanced, doctoral level course for students who require extensive preparation in epidemiologic theory and methodology. Topics covered include causal inference; study design; the analysis of crude, stratified, and matched data; approaches to assessing effect modification and adjusting for confounding; estimating dose response associations; modeling data; bias and the critical evaluation of epidemiological studies. Prerequisites: EPID 5310, BIOS 5300, and BIOS 5310. Letter grade.

EPID 6312 Advanced Methods in Epidemiology 2

3 SCH. This course is designed to integrate methods introduced in Applied Data Analysis in Epidemiology and Advanced Methods in Epidemiology 1, along with new methods in data synthesis in order to prepare students to apply these methods as independent researchers in epidemiology. Students will have the opportunity to 1.) critically evaluate and interpret epidemiologic evidence, 2.) synthesize such evidence, 3.) analyze real data, and 4.) write manuscripts. Students will learn to interpret and synthesize information from ecologic, cross-sectional, case-control, cohort and clinical trial studies. Descriptive methods of synthesis as well as systematic meta-analysis methods will be covered. Classes will include both didactic instruction as well as hands-on practice interpreting, critically reviewing, synthesizing, analyzing and writing up results from epidemiologic studies. Course evaluations will be based on the students' performance in class participation, exercises, as well as written and oral projects demonstrating the students' ability to understand and apply epidemiologic methods, critically evaluate and synthesize information from the literature, analyze real data and write manuscripts. Prerequisites: EPID 5314 and EPID 6310. Letter grade.

EPID 6314 Experimental Methods in Epidemiology

3 SCH. This course is designed to introduce students to the methods involved in the design, conduct, analysis and evaluation of results from clinical trials. Topics include planning a trial, randomization, blinding, trial designs, ethics, analyses and writing a protocol. This course also provides examples of how these methods are applied in actual clinical trials. Course evaluations will be based on the students' performance in class participation, the mid-term examination, as well as a written project demonstrating the students' ability to apply these methods in planning for a clinical trial. Prerequisites: EPID 5300. Letter grade.

EPID 6316 Molecular Epidemiology

3 SCH. The focus of the course is on the basic concepts and methodology of molecular epidemiology, particularly in cancers. Designed for students who have a strong biology background and want to pursue doctoral study in the area of molecular epidemiology, we will explore how molecular biomarkers are integrated into population based studies to more accurately define and measure exposures and outcomes and how these measures in turn guide study development. Examples are discussed using current epidemiologic literature to emphasize methodologic issues relevant to molecular epidemiology. We also consider the ethical issues posed by this rapidly evolving field. Prerequisites: EPID 5310 or EPID 6300 or permission of course instructor. Letter grade.

EPID 6318 Epidemiologic Surveillance

3 SCH. This course includes the application of epidemiologic methods to two important professional areas of public health. The first one is devoted to the planning, management, and data analysis of public health surveillance systems. The steps for planning a surveillance system, criteria for identifying high priority health events for surveillance, types of surveillance systems, data collection, data processing, quality control, analysis and the interpretation of surveillance data are included. This part of the course also encompasses the basis for evaluation of surveillance systems and the methods used for screening of disease. A small-scale computerized surveillance system is developed as part of the course. The second part of the course, deals with the basic epidemiologic methodology used to assist in the planning and evaluation of health programs of disease control and prevention. It includes the methodology for the design of instruments for data collection, assessment of health care needs, and the epidemiologic evaluation of the impact of health interventions. Prerequisites: EPID 5300 and BIOS 5300. Letter grade.

EPID 6320 Social Epidemiology

3 SCH. This course will explore study design, measurement, and analytic issues applicable to epidemiologic research into the social determinants of health. The format of the course is a seminar offered to students with a basic knowledge of epidemiologic and biostatistical principles. The course is organized around key concepts in social epidemiology. Students will be expected to critically examine the scientific literature, form scientifically-based critiques, reach empirically and theoretically grounded conclusions and actively participate in class discussions. This course is intended for persons who have an interest in research and some background in epidemiology and/or behavioral sciences. Prerequisites: EPID 5300 and BIOS 5300 or permission of the course instructor. Letter grade.

EPID 6322 Nutritional Epidemiology

3 SCH. The overall purpose of this course is to introduce the methods and concepts involved in nutritional epidemiologic research. Topics that will be discussed in this course include the assessment on diet, physical activity and body composition, the reliability and validity of dietary assessment, advantage and disadvantage of different study designs in nutritional epidemiologic research, gene-nutrient interaction and the use of biomarkers, specific statistical issues involved in nutritional epidemiologic research, and the development of a research proposal on nutritional epidemiologic studies. Prerequisites: EPID 5300, EPID 5310 or EPID 6300, BIOS 5300, and BIOS 5310. Letter grade.

EPID 6324 Cancer Epidemiology

3 SCH. The course is designed to apply principles learned in the introductory and intermediate epidemiologic methods courses to the critical evaluation and interpretation of cancer epidemiology studies. Basic methodological concepts and problematic issues specific to cancer epidemiology studies and/or cancer sites will be emphasized, rather than descriptive epidemiology of specific cancers. The course is conducted in a participatory seminar format using assigned articles as a stimulus for discussion. Prerequisites: EPID 5300 and EPID 5310. Letter grade.

EPID 6326 Occupational Epidemiology

3 SCH. The purpose of this course is to prepare students to examine the unified set of concepts, principles and methodologies that govern occupational epidemiology. It is designed to build on a foundation of coherent epidemiological concepts and foster the understanding of the principles and methods of occupational epidemiologic study design, analysis, and interpretation. This course is designed specifically for the epidemiology concentration and other public health students requiring a more thorough knowledge of the concepts and methods used in occupational epidemiologic research. Building upon material covered in previous epidemiology courses, this course stresses etiologic study designs, methodological issues and analytic methods as they relate to occupational studies. Prerequisites: EPID 5300 and BIOS 5300 or permission of the course instructor. Letter grade.

EPID 6392 Doctoral Capstone

3 SCH. This course will provide students with the necessary instruction to prepare dissertation proposals. Topics include scientific writing, preparation of manuscripts for publication, grant writing, proposal writing, and oral presentation skills. Prerequisites: completion of most required coursework for DrPH curriculum (enrollment is permitted if a student is taken one final elective concurrently with this course). Letter grade.

EPID 6395 Doctoral Dissertation

3 SCH. The doctoral dissertation must consist of original research or public health program development and testing that is focused on a particular health problem. The student's advisor is expected to provide guidance in the selection of a suitable project that provides for a clear direction for implementing the research or program. The student must complete an oral defense of the dissertation. The student must maintain continuous enrollment in EPID 6395 until the requirements are completed. This course may be repeated for credit. A minimum of 9 SCH is required for the DrPH degree. Pass/Fail grade.

EPID 6399 Doctoral Independent Study in Epidemiology

1-3 SCH. This academic activity includes research and other scholarly projects carried out by the student under the supervision of a School of Public Health faculty member (instructor). A brief proposal should be written and approved by the academic advisor and a final report should be submitted to the supervising instructor for credit. Topical or project work is chosen by the student with the consent of the supervising instructor and approval from the academic advisor. This course may be repeated for credit. Offered each semester. Letter grade.

EPID 6497 Public Health Practice Residency

4 SCH. This academic activity provides doctoral students with experience in public health practice through directed work in practice settings. Students are required to commit a substantial number of hours to the practice experience, produce two written reports of project(s) undertaken in the placement. One of the written reports should be presented in the form of a publishable article to be submitted to a public health related peer-review journal. The other report is described in the Public Health Practice Residency Manual. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience plan prior to registering. Requirements may be completed over the period of more than one semester with approval of the academic advisor and the practice coordinator. The student must maintain continuous enrollment in EPID 6497 until the requirements are complete. This course requirement may not be waived. Pass/Fail grade.

Department of Health Management and Policy

HMAP 5160 Ethical, Legal and Social Issues for the Responsible Conduct of Clinical Research

1 SCH. Regulations involved with human subject research will be discussed, both from an historical and contemporary perspective. Case studies will be discussed, and students must complete the IRB Tutorial on line, and submit the Certificate of Completion for course credit. Letter grade.

HMAP 5262 Biomedical Aspects of Health Disparities

2 SCH. The course examines the disparities in health care among minority populations for several specific diseases. The course is offered as a lecture series divided into three sections for each health care problem: basic science, clinical and public health. It is the intention of the course to bring to light the behavioral and cultural characteristics of the minority populations that contribute to the disproportionate presence of the disease in that population, and the disparity in treatment available. Letter grade.

HMAP 5300 Introduction to Health Management and Policy

3 SCH. This course is a required core course for all MPH students intended to introduce the areas of Health Management and Health Policy. This is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and population. The course will have both a managerial and policy perspective with the structure, processes and outcomes of health services, financing, organization, outcomes and accessibility of care. Letter grade.

HMAP 5302 Master of Healthcare Administration Capstone

3 SCH. This capstone course is designed to allow students the opportunity to apply methods and techniques learned in the MHA program to a practical health administration problem. All students will participate as members of a team to conduct a project focused on a health administration problem and will present their results orally and in a written report. This course is designed to partially meet the culminating experience requirement for students in the Master of Health Administration program. Letter grade.

HMAP 5310 Introduction to Health Systems and Policy

3 SCH. This course will provide a basic understanding of the United States health care system. Components of the health care system will be examined in addition to their interactions. Problems which arise from this "unplanned system" will be analyzed and health policies which have been enacted or recommended will be explored. Key actors in health policy and their perspectives will be discussed. Letter grade.

HMAP 5312 Health Politics and Policy

3 SCH. This course emphasizes key concepts and knowledge regarding how health policy is formulated, enacted, and implemented. Policy analysis skills are developed and applied by the students. Current health policy issues are explored to exercise these conceptual and analytic skills. Letter grade.

HMAP 5320 Health Services Management

3 SCH. The course will integrate alternative disciplinary perspectives from management, social science, policy analysis, and health services literatures to provide an understanding of how health care organizations work. Students will become familiar with the internal and external environments confronting health care managers, as well as essential tools and skills for managing health care organizations. Letter grade.

HMAP 5321 Health Information Systems

3 SCH. This course will consist of three modules: technology, planning and management, and applications in health care and public health. The emphasis will be on conceptual frameworks as well as a deeper level of engagement on system applications. This is not a course in computer programming, rather the main focus will be on the management of technology, with a particular emphasis on the private/public sector for health management. This course is designed to familiarize students with core concepts and issues confronting managers in the health sector associated with planning, implementation and evaluation of information systems. Students will also learn how to access and use downloadable and extractable databases for research from the web, such as those from the CDC, AHRQ, TDH and NCHS. Letter grade.

HMAP 5322 Decision Analysis and Quantitative Modeling

3 SCH. This course will cover various quantitative techniques, such as regression and forecasting, that are used in health management and policy. Each topic will be covered in three stages: theory, example problem, and a real health care application. Students will use Microsoft Excel software to solve problems. Prerequisites: BIOS 5300. Letter grade.

HMAP 5324 Strategic Management and Marketing

3 SCH. This course focuses on issues in strategic management and marketing. It will concentrate on modern analytic approaches. The course is intended to provide a pragmatic approach to guide the formulation and implementation of corporate, business and functional strategies. This course explores the issues of defining corporate missions, objectives and goals. Students will focus on analysis of a firm's external and internal environment to identify and create competitive advantage. The course emphasizes the cultural, ethical, political, and regulatory issues faced in any global business environment and the need for leadership for a successful management of strategic change. Letter grade.

HMAP 5326 Public Health Program Planning and Evaluation

3 SCH. This course is an introduction to the concepts, methods, and applications of public health program planning and evaluation. The course will explore the role of planning and evaluation in improving program implementation and management and public policy. Design and application of evaluations will include both quantitative and qualitative research methods. Letter grade.

HMAP 5328 Human Resources Management

3 SCH. This course offers an introduction to human resource management for health administrators. It is designed for those with minimal background in the subject but provides a comprehensive survey appropriate for graduate students. The main objective of the course is to develop a familiarity with human resource management theory and its application to the health sector. Specific objectives include enabling students to develop familiarity with the theory of human resource management, assess the strength of human resource staffing plans, explain the legal rights and responsibilities of employees and employers, analyze the effectiveness of compensation plans and grievance procedures, and describe the practice of "managing diversity." Letter grade.

HMAP 5330 Health Finance 1

3 SCH. This course offers an introduction to financial theory and practice in health care settings. It is designed to familiarize students with important concepts and issues confronting managers in the health sector. A background in accounting and economics is helpful. Letter grade.

HMAP 5332 Health Finance 2

3 SCH. This course is the sequel to Health Finance 1. It is designed to provide additional material and more in-depth financial theory and practice for MPH and MHA students. Topics include: payment systems, management control, capital budgeting, capital structure, and special topics concerning health finance and public policy. Prerequisite: HMAP 5330. Letter grade.

HMAP 5340 Public Health Law

3 SCH. Introduction to the statutes and case law governing the practice public health professionals. Emphasis on the constitutional basis for public health issues and the role of administrative law in public health. Letter grade.

HMAP 5350 Health Economics

3 SCH. An overview of microeconomic theory, demand and supply of health services, hospital and physician service markets, role of public sector, comparative health systems and cost effectiveness analysis. A background in economics and statistics is helpful. Letter grade.

HMAP 5390 Professional Report

3 SCH. The student conducts an individual project that addresses a well-focused public health question or issue. Work is conducted under the supervision of a faculty committee. A written report of the project is required as well as an oral presentation by the student to the supervisory faculty committee. HMAP 5391 is designed to partially meet the culminating experience requirement for the MPH. The student must maintain continuous enrollment in HMAP 5391 until the requirements are completed. Pass/Fail grade.

HMAP 5391 Topics in Health Management and Policy

1-3 SCH. This course covers current topics in health management and policy. Topics vary by semester. Letter grade.

HMAP 5394 Master of Health Administration Internship

3 SCH. This internship is a 13 week field experience providing opportunities to employ skills and principles learned in the classroom while working in a healthcare setting. Prerequisites: students are eligible to enroll after completing 27 SCH. Students must confer with the MHA Program Director prior to enrolling in this course. Students are required to commit 500 contact hours in order to receive credit for this course. Letter grade.

HMAP 5395 Thesis

3 SCH. The thesis requires the student to conduct and prepare the written thesis under the supervision of a faculty committee. The thesis is written in traditional academic style or in journal article manuscript format. The student must complete an oral defense of the thesis. The student must maintain continuous enrollment in HMAP 5395 until the requirements are completed and the thesis is approved by the dean. This course may be repeated for credit. A minimum of 6 SCH is required to meet the MPH culminating experience requirement. Pass/Fail grade.

HMAP 5397 Practice Experience in Public Health

3 SCH. This course provides students with experience in public health practice through directed work in practice settings. Students are required to commit 200 hours to the practice experience, produce a written report of project(s) undertaken in the placement, and prepare a poster presentation of their practice experience. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience in the semester prior to registering in HMAP 5397. HMAP 5397 requirements may be completed over the period of more than one semester with approval of the practice coordinator and advisor. If the practice experience is not completed in two semesters then the student must re-register for the course each semester until it is complete. Prerequisites: students must have completed 21 SCH of core and/or department required coursework. Letter grade.

HMAP 5399 Independent Study in Health Management & Policy

1-3 SCH. For students capable of independently completing topical studies or projects through conferences and activities directed by the instructor. Topical or project work is chosen by the student with the consent of the instructor. This course may be repeated for credit. Offered each semester. Letter grade.

HMAP 6220 Leadership for Public Health

2 SCH. This course provides an examination of three fundamental areas of leadership in public health: 1) leadership theory distinguishing leaders from managers and strategies from tactics, 2) the role of the leader in the translation of public health findings into legislation and 3) developing the skills to mobilize the community and resources. Letter grade.

HMAP 6260 Ethical Issues in Public Health

2 SCH. The course provides an examination of fundamental and current ethical issues in public health. Through lectures, readings, case studies, and historical examples students will explore principles of ethics and theories of justice applicable to the public health profession. Students will develop skills of ethical analysis and apply them to major issues in public health practice, research, management and policy. Examples of such issues include professional ethics, community contexts, human subject research, social justice, healthcare resource allocation, the relationship between the individual and the state. Letter grade.

HMAP 6300 Health Care Systems

3 SCH. The purpose of this course is to provide a basic understanding of the U.S. Health Care System. This course describes how various health care components work individually and how they work (or fail to do so) together to create a "health care system." While the focus of the course is on the American health care system, comparisons to international health care systems will be included. Letter grade.

HMAP 6310 Advanced Health Policy

3 SCH. This course provides an in-depth review of the major health policy issues currently facing the United States policy community. The class will explore health policy analysis as a discipline and a profession. Critical analysis of the literature is emphasized to sharpen student's skills in understanding the nature of the debates, underlying assumptions, application of evidence, and the crafting and evaluation of policy options. Letter grade.

HMAP 6312 Public Health Long-Term Care Policy

3 SCH. The organization, financing, delivery and utilization of long-term care, comprehensively designed, are examined with emphasis on affordability, access and quality in a managed care environment for older adults. Note: the Health Resources and Services Administration (HRSA) and Managed Care Technical Assistance Program will support this course. Letter grade.

HMAP 6322 Organizational Management

3 SCH. This course will prepare students to function in managerial and leadership positions in either the public or private sectors. The course will use the "Balanced Scorecard" as the basis for learning the concepts and methods of strategic management, which seeks organizational alignment of organizational goals and objectives, financial measures, internal processes, customer relationships, and learning and growth. Letter grade.

HMAP 6324 Quality Management in Long-Term Care

3 SCH. The theoretical basis and diverse perspectives of quality management and regulation approaches for long-term care services will be presented. Will include relevant research and management methodologies that are currently being used in the long-term care system. Letter grade.

HMAP 6326 Performance Management in Public Health

3 SCH. This course is an introduction to the concepts, methods, and applications of performance/quality management in public health. The course provides students with a conceptual framework for analysis of health care utilization management and quality assurance systems. Focus will cover learning the variety of methods used by health care providers, payers, and review organizations to measure quality and appropriate use of health care resources. The course also prepares students to meet the challenge of designing, operating, and evaluating systems for effective management of health care quality, with special emphasis to the application of Total Quality Management/Continuous Quality Improvement (TQM/CQI) principles. Letter grade.

HMAP 6330 Health Insurance and Managed Care

3 SCH. A survey of the history of health insurance in the United States. Theoretical issues in health insurance, cost containment in public and private sectors, global finance of health services, long term care and the problem of the uninsured. Letter grade.

HMAP 6340 Health Care Law

3 SCH. This course is a study of the fundamental legal issues that should be understood by both a Public Health practitioner and a practicing health lawyer, including structural and operational issues affecting health care providers and payers. Discussions will cover federal and state fraud and abuse issues, self-referral laws, false claims issues, antitrust issues, confidentiality, and Medicare and Medicaid reimbursement issues. Letter grade.

HMAP 6350 Advanced Health Economics

3 SCH. The course considers a variety of special topics with a focus on managed care issues. Issues include: actuarial problems in managed care, rate setting for hospital and physician services, mergers and acquisitions, antitrust in the health sector, the role of equity markets in health services, cost benefit and cost effectiveness analysis. Letter grade.

HMAP 6380 Health Services Research 1

3 SCH. The course will provide an overview of current health services research of interest to public health and health management and policy. Methodologies related to health services research will be presented and critiqued. Students will gain experience in presenting and providing critiques of current research. The course will culminate in an original health services research project by each student. Prerequisites: BIOS 5300 and BIOS 5310. Letter grade.

HMAP 6382 Health Services Research 2

3 SCH. This course builds upon the concepts and skills presented in the Health Services Research 1 course. Students will continue to develop skills in use of the Stata analytic software which is becoming standard in health services research. Students will learn and apply more complex analytic methods than those covered in Health Services Research 1. Considerable emphasis is placed on applying these methods to existing data bases (national and state) in a computer lab setting. The course is intended to assist doctoral students in developing and implementing methods such as ordered logit and probit analyses, analysis of complex sample design data, fixed-effects and other methods. Prerequisite: HMAP 6380. Letter grade.

HMAP 6391 Advanced Topics in Health Management and Policy

1-3 SCH. This course covers current topics in health management and policy. Letter grade.

HMAP 6392 Doctoral Capstone

3 SCH. This course will provide students with the necessary instruction to prepare dissertation proposals. Topics include scientific writing, preparation of manuscripts for publication, grant writing, proposal writing, and oral presentation skills. Prerequisites: Completion of most required coursework for DrPH curriculum (enrollment is permitted if a student is taken one final elective concurrently with this course). Letter grade.

HMAP 6395 Doctoral Dissertation

3 SCH. The doctoral dissertation must consist of original research or public health program development and testing that is focused on a particular health problem. The student's advisor is expected to provide guidance in the selection of a suitable project that provides for a clear direction for implementing the research or program. The student must complete an oral defense of the dissertation. The student must maintain continuous enrollment in HMAP 6395 until the requirements are completed. This course may be repeated for credit. A minimum of 9 SCH is required for the DrPH degree. Pass/Fail grade.

HMAP 6399 Doctoral Independent Study in Health Management and Policy

1-3 SCH. This academic activity includes research and other scholarly projects carried out by the student under the supervision of a School of Public Health faculty member (instructor). A brief proposal should be written and approved by the academic advisor and a final report should be submitted to the supervising instructor for credit. Topical or project work is chosen by the student with the consent of the supervising instructor and approval from the academic advisor. This course may be repeated for credit. Offered each semester. Letter grade.

HMAP 6497 Public Health Practice Residency

4 SCH. This academic activity provides doctoral students with experience in public health practice through directed work in practice settings. Students are required to commit a substantial number of hours to the practice experience, produce two written reports of project(s) undertaken in the placement. One of the written reports should be presented in the form of a publishable article to be submitted to a public health related peer-review journal. The other report is described in the Public Health Practice Residency Manual. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience plan prior to registering. Requirements may be completed over the period of more than one semester with approval of the academic advisor and the practice coordinator. The student must maintain continuous enrollment in HMAP 6497 until the requirements are complete. This course requirement may not be waived. Pass/Fail grade.

Department of Social and Behavioral Sciences

SABS 5300 Theoretical Foundations of Individual and Community Health

3 SCH. This course provides an introduction to theoretical approaches used in developing and implementing behavioral, social and cultural change to improve health for populations in specific settings. In addition, this course provides an overview of the behavioral and social factors that determine the health and wellness of individuals and communities. Health promotion and prevention programs designed to change social conditions and/or health behaviors should be based on social and behavioral theories and research. Health professionals and practitioners in various fields also apply social and behavioral theories and research to evaluate effectiveness of policies and programs. Students learn the importance of integrating multidisciplinary social, cultural, and political/economical perspectives to address health disparities and assess impacts of health policy. Letter grade.

SABS 5310 Community Assessment

3 SCH. This course provides an introduction to community assessment as it pertains to the functions of public health. As one of the core functions of public health, community assessment facilitates problem solving and policy development. The course covers concepts relevant to community diagnosis such as statistics on health status, health resources, health needs and health problems as well as the systematic collection, assembly, analysis, and interpretation of data related to the characteristics, resources, and health of the community. Letter grade.

SABS 5312 Community Program Planning

3 SCH. This course is an overview of the concepts, theories, models and applications of program planning and interventions for the community. This course will use the intervention mapping model to plan, implement public health programs and design the program evaluation. This course is the second in a series of three courses to prepare the student to assess, implement, and evaluate community intervention programs. Prerequisites: SABS 5300. Letter grade.

SABS 5314 Social and Behavioral Research Methods and Evaluation

3 SCH. This course is an introduction to research methods and program evaluation that will provide students with instructions and hands-on experience in applying social and behavioral research methods, both quantitative and qualitative, to research problems associated with health promotion and disease prevention. This course will prepare students to write and critically evaluate proposed and published research and assist students in designing their own research project. Letter grade.

SABS 5316 Public Health Interventions

3 SCH. This practice-based course will explore the theoretical foundation, design, implementation, and effectiveness of specific public health interventions at the individual, interpersonal, organizational, and community levels for addressing particular chronic or infectious diseases. The specific focus of this course may vary by semester. Letter grade.

SABS 5320 TX-Mexico Border Health Issues

3 SCH. This experiential course focuses on issues surrounding public health on the Texas-Mexico border. Border health issues addressed include cultural diversity; water and waste water treatment; air and water pollution; and zoonotic, acute infectious and chronic disease control. Course includes onsite study in Laredo and/or other border communities. Enrollment limited. Prerequisites: EOHS 5300, SABS 5300, plus 6 hours of additional course work and approval of the instructor. All students must have a passport prior to enrolling in this course. International students must also have a U.S. multi-entry visa and purchase a travel visa for Mexico prior to enrolling in this course. Letter grade.

SABS 5322 Social Justice, Ethics and Human Rights in Public Health

3 SCH. This course examines contemporary social justice, ethical and human rights issues in public health. Health, mental health and quality of life as related to illness and disability in diverse and underserved populations are analyzed from social justice and human rights perspectives. Social and behavioral theories and research are applied to address ethical issues related to health inequality and to eliminate health disparities. Letter grade.

SABS 5324 Introduction to Health Disparities

3 SCH. The objective of this course is to provide students with an understanding about how to identify, reduce, and eliminate health disparities related to race/ethnicity in public health settings. Students will become familiar with the determinants and consequences of racial/ethnic disparities in health and health care. In addition, students will learn how to formulate testable hypotheses about reducing and/or eliminating existing racial and ethnic health disparities. The course is divided into five main topics: historical/conceptual/demographic issues of race/ethnicity and health, morbidity and mortality patterns, etiology of race/ethnic differences in health, race/ethnic group issues, and addressing health disparities. Letter grade.

SABS 5325 Maternal and Child Health

3 SCH. Maternal and Child Health (MCH) as a field historically has focused on children and their mothers. This course seeks to go beyond this approach and underscores the significance of women's own health and well-being beyond its impact on reproductive and parenting status. It also seeks to place these traditional MCH populations in the context of the larger families, communities, and societies in which they live and experience the public health issues being addressed. Letter grade.

SABS 5328 Introduction to Global Health

3 SCH. This introductory course provides the student with an overview of the conditions, practices and obstacles encountered in delivering primary health care in the international arena. The differences and commonality of the challenges facing the health care provider are explored. The history of international health and the roles of government and non-governmental agencies are presented along with specific models of intervention and evaluation of major international health problems. Letter grade.

SABS 5330 Health Communication Strategies in Public Health

3 SCH. This course is designed to provide a step-by-step approach to developing, implementing, and evaluating a health communication plan designed to influence voluntary behavior change of target audiences to improve their personal welfare and that of their society. The role of media and other channels will be evaluated as part of health communication strategies. National and international health communication campaigns will be analyzed. Letter grade.

SABS 5332 Stress and Coping

3 SCH. The purpose of this graduate level course is to provide public health professionals with a survey of stress and coping theories, research, and practice across a broad array of common (e.g., occupational, marital, mental and physical illness, aging, etc.) and extreme (e.g., natural disaster, interpersonal violence, etc.) stressors primarily in adulthood. Attention will also be directed towards issues of human diversity (minority status, acculturation, social stratification) including interventions at individual, group, and community-wide levels. Letter grade.

SABS 5334 Social and Cultural Determinants of Population Health

3 SCH. The goal of this course is to provide students with a broad overview and introduction to social and cultural determinants of population health in the United States and contemporary societies. Using theory and research in medical sociology and medical anthropology, students will examine bio-cultural, social, and political-economic bases of health, mental health and health care. Class discussions and course readings will familiarize students with relevant theoretical, historical, and global health issues. Letter grade.

SABS 5390 Professional Report

3 SCH. The student conducts an individual project that addresses a well-focused public health question or issue. Work is conducted under the supervision of a faculty committee. A written report of the project is required as well as an oral presentation by the student to the supervisory faculty committee. SABS 5390 is designed to partially meet the culminating experience requirement for the MPH. The student must maintain continuous enrollment in SABS 5390 until the requirements are completed. Pass/Fail grade.

SABS 5391 Topics in Community Health

1-3 SCH. This course is designed to give students exposure to cutting edge topics in community health. Examples of such topics include: health advocacy, social marketing, promoting health behaviors, topics seminars, etc. Letter grade.

SABS 5395 Thesis

3 SCH. The thesis requires the student to conduct and prepare the written thesis under the supervision of a faculty committee. The thesis is written in traditional academic style or in journal article manuscript format. The student must complete an oral defense of the thesis. The student must maintain continuous enrollment in SABS 5395 until the requirements are completed and the thesis is approved by the dean. This course may be repeated for credit. A minimum of 6 SCH is required to meet the MPH culminating experience requirement. Pass/Fail grade.

SABS 5397 Practice Experience in Public Health

3 SCH. This course provides students with experience in public health practice through directed work in practice settings. Students are required to commit 200 hours to the practice experience, produce a written report of project(s) undertaken in the placement, and prepare a poster presentation of their practice experience. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience in the semester prior to registering in SABS 5397. SABS 5397 requirements may be completed over the period of more than one semester with approval of the practice coordinator and advisor. If the practice experience is not completed in two semesters then the student must re-register for the course each semester until it is complete. Prerequisites: Students must have completed 21 SCH of core and/or department required coursework. Letter grade.

SABS 5399 Independent Study in Social & Behavioral Sciences

1-3 SCH. For students capable of independently completing topical studies or projects through conferences and activities directed by the instructor. Topical or project work is chosen by the student with the consent of the instructor. This course may be repeated for credit. Offered each semester. Letter grade.

SABS 6300 Social and Behavioral Theories and Health Applications

3 SCH. This course covers the principal theories in the social and behavioral sciences and health education as they are used to understand and influence the health status of populations. The development of theory in medical anthropology, medical sociology, health psychology, and health education are examined. Detailed examples of application in the fields of addictive behaviors and obesity research illustrate the theoretical approaches. Letter grade.

SABS 6310 Qualitative Research Methods

3 SCH. The course integrates qualitative research design with grounded theory, participatory research and evaluation, and ethical guidelines for community health and mental health research. Methods and techniques include ethnography, participant observation, interviews, narratives, oral and life histories, natural and group observation, focus groups, and qualitative data analysis. Letter grade.

SABS 6312 Research Methods in Social & Behavioral Sciences

3 SCH. An advanced methods seminar in research design and methodology. The course objective is to provide students with instruction and hands-on experience in applying methods of primarily quantitative analysis to research problems associated with social and behavioral aspects of public health. Letter grade.

SABS 6314 Anthropology of Health

3 SCH. This course is an advanced seminar on the comparative context of health and cross-cultural health research. The social production of health, mental health and quality of life is analyzed within and across societies. Cultural interpretations of health are contrasted with health assessments and indicators. Anthropological theory and ethnographic methods are applied in developing social research to address health disparities. Letter grade.

SABS 6316 Health Psychology

3 SCH. This course will provide a foundation in health psychology by examining the medical field, medical professionals, and patient perspectives in health care. This course will focus on behavioral factors that affect both diseases outcomes and public health promotion. Topics will include; cross cutting health risk factors and risk reduction(e.g., behavioral aspects of obesity, substance abuse, cigarette smoking), mediators of risk and risk reduction (e.g., stress, social support), and adaptation and coping with disease (e.g., the biopsychosocial perspective of pain). Letter grade.

SABS 6318 Health Promotion in Multicultural Populations

3 SCH. This course is designed to provide students a survey of experiences of health promotion professionals who do their work in various ethnically culturally diverse populations. The course will provide in-depth coverage of current theory, intervention models, and other consideration related to promoting health and preventing disease within and among a variety of special population groups. The course goal is to awaken and enlighten the cultural knowledge and enhance the cultural sensitivity of practitioners. Letter grade.

SABS 6322 Motivational Interviewing in Public Health Settings

3 SCH. Public health practitioners spend an enormous amount of time emphasizing the importance of healthy behaviors. Despite these efforts, many patients continue to engage in unhealthy or self-destructive patterns. This course covers an increasingly popular form of behavior change counseling known as Motivational Interviewing. This course will provide a foundation in Motivational Interviewing (MI) with an emphasis on evidence-based interventions such as motivational interviewing that have proven effective in counseling, healthcare, and other public health settings. Through a mixture of didactic presentation, role-play, and discussion, the course focuses on interventions for many of the leading health indicators as identified by Health People 2010-- such as smoking, alcohol and other drug use, physical activity, obesity, and responsible sexual behavior. MPH students will be eligible to take this course with the prior permission of the instructor. Letter grade.

SABS 6324 Public Health and Aging

3 SCH. The goal of this course is to provide an overview of special health problems associated with aging with special focus on demographic, socioeconomic, historical, and cultural factors influencing these health problems and challenges in studying aging in the field of public health. Special emphasis is given to demographic trends, mortality and life expectancy, theories of aging, special methodological issues in studying aging and health, chronic diseases and disability, the interface between physical and mental health, the influence of social and psychological factors, mental health and dementia, and long-term care and institutionalization. Letter grade.

SABS 6326 Society and Health

3 SCH. This course is based on the premise that social structure (norms, status, institutions, culture) is a fundamental cause of health and illness. Disparities in health and health care can be reduced by focusing on macro-level forces that produce an unequal distribution and access to resources. Therefore, this course analyzes social determinants of population health such as social class, gender, race/ethnicity, family, neighborhoods, and social institutions. Then, we will discuss the consequences and explanations of these patterns which will include reviewing the empirical and theoretical literature on mechanisms and processes that mediate between social factors and their health effects. This course concludes with strategies to promote public health through social action and social research. Prerequisites: SABS 6300, BIOS 6300 and SABS 6312. Letter grade.

SABS 6391 Advanced Topics in Social and Behavioral Sciences

1-3 SCH. This course is designed to give students exposure to cutting edge topics in social and behavioral sciences. Examples of such topics include; community based participatory research, global economic development and health, program design and evaluation, chronic disease prevention, topical seminars, etc. Letter grade.

SABS 6392 Doctoral Capstone

3 SCH. This course will provide students with the necessary instruction to prepare dissertation proposals. Topics include scientific writing, preparation of manuscripts for publication, grant writing, proposal writing, and oral presentation skills. Prerequisites: Completion of most required coursework for DrPH curriculum (enrollment is permitted if a student is taken one final elective concurrently with this course). Pass/Fail grade.

SABS 6394 Advanced Topics in Culture, Race, Ethnicity, and Health

3 SCH. The course will examine how culture affects health, health care and access to care. This course is designed to provide the student with a foundation of culture, race/ethnicity, and how these relate to health status, health care, attitude towards health, disease treatments and the values associated with these factors. This course will increase the student awareness and sensitivity to the dimensions and complexities of the determinants of health status, health needs, and the implications for health services delivery to various cultural and ethnic groups within the context of the society at large. The course will explore the public health implications of cultural traits such as ethnicity, race, age, gender, socioeconomic characteristics that define different groups in the United States and that interact with health. The role of public policy to address health needs and disparities will be addressed. The impact of environment (e.g., social, economics, physical) and lifestyle will be emphasized. Letter grade.

SABS 6395 Doctoral Dissertation

3 SCH. The doctoral dissertation must consist of original research or public health program development and testing that is focused on a particular health problem. The student's advisor is expected to provide guidance in the selection of a suitable project that provides for a clear direction for implementing the research or program. The student must complete an oral defense of the dissertation. The student must maintain continuous enrollment in SABS 6395 until the requirements are completed. This course may be repeated for credit. A minimum of 9 SCH is required for the DrPH degree. Pass/Fail grade.

SABS 6399 Doctoral Independent Study in Social and Behavioral Sciences

1-3 SCH. This academic activity includes research and other scholarly projects carried out by the student under the supervision of a School of Public Health faculty member (instructor). A brief proposal should be written and approved by the academic advisor, and a final report should be submitted to the supervising instructor for credit. Topical or project work is chosen by the student with the consent of the supervising instructor and approval from the academic advisor. This course may be repeated for credit. Offered each semester. Letter grade.

SABS 6497 Public Health Practice Residency

4 SCH. This academic activity provides doctoral students with experience in public health practice through directed work in practice settings. Students are required to commit a substantial number of hours to the practice experience, produce two written reports of project(s) undertaken in the placement. One of the written reports should be presented in the form of a publishable article to be submitted to a public health related peer-review journal. The other report is described in the Public Health Practice Residency Manual. Placements and practice activities are selected to complement the student's academic and professional plans. Students must obtain approval of their choice of practice placement and plan for the practice experience plan prior to registering. Requirements may be completed over the period of more than one semester with approval of the academic advisor and the practice coordinator. The student must maintain continuous enrollment in SABS 6497 until the requirements are complete. This course requirement may not be waived. Pass/Fail grade.

All Other Courses

SOPH 5310 Seminar in Public Health

3 SCH. Topics in public health practice examined. Topics vary. This course may be repeated for credit. Letter grade.

SOPH 6310 Doctoral Seminar in Public Health

3 SCH. Topics in public health practice examined. Topics vary. This course may be repeated for credit. Letter grade.