ADDENDUM TO
THE UNIVERSITY OF TEXAS
SCHOOL OF PUBLIC HEALTH AT HOUSTON
2009-2011 CATALOG
ADDENDUM

SECTION - Courses, Biostatistics

Change from:

PH 1600 Biostatistics I (previously PH 1610, offered from Fall 2009-Summer 2010)
The Faculty in Biostatistics, 4 credits, a, b, cd

This course is designed as the first biostatistics course for students who have not previously taken a course in Biostatistics; this course is a designated core course for M.P.H. students. This course introduces the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health. Computer applications are included.

Change to:

PH 1690 Foundations of Biostatistics (previously PH 1610, offered from Fall 2009-Summer 2010)
The Faculty in Biostatistics, 4 credits, a

This course is designed as the first biostatistics course for students who have not previously taken a course in Biostatistics; this course is a designated core course for M.P.H. students. This course introduces the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health. Computer applications are included.

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Change from:

PH 1700 Biostatistics II (previously PH 1725 and PH 1726, offered from Fall 2009-Summer 2010)
The Faculty in Biostatistics, 4 credits, a, b, cd

This course is required for a Biostatistics minor and for students in Biostatistics who have not previously taken courses in Biostatistics. This course extends the topics covered in Biostatistics I to provide a deeper foundation for data analysis, particularly focusing on its application on research problems of public health and the biological sciences. Computer applications are included.

Prerequisites: PH 1600 (beginning Fall 2010-Summer 2011) or consent of instructor.

Change to:

PH 1700 Intermediate Biostatistics (previously PH 1725 and PH 1726, offered from Fall 2009-Summer 2010)
The Faculty in Biostatistics, 4 credits, b

This course is required for a Biostatistics minor and for students in Biostatistics who have not previously taken courses in Biostatistics. This course extends the topics covered in Foundations of Biostatistics to provide a deeper foundation for data analysis, particularly focusing on its application on research problems of public health and the biological sciences. Computer applications are included.

Prerequisites: PH 1690, (or 1725), or have had equivalent knowledge/training. PH1610 is not sufficient.
This course introduces basic concepts, statistical methods and computational algorithms and tools for the creation and maintenance of databases of biological information, DNA sequence analysis, modeling of evolution, genetic studies of complex diseases including linkage analysis, linkage disequilibrium and association studies, gene expression data analysis, and identification of biological networks. Students will be introduced to the basic concepts behind Bioinformatics and Computational Biology tools. Hands-on sessions will familiarize students with the details and use of the most commonly used online tools and resources.

Prerequisites: Calculus, statistics, and consent of instructor

Cross-listed with UTHSC-H GSBS GS110032

Change from:

**PH 1830 Logistic Regression**
Baraniuk, 4 credits, a

This course presents the theory and applications of logistic regression. Topics include the logistic regression model, sampling methods, model building strategies, assessing model fit, conditional logistic regression for matched analyses, polychotomous logistic regression, and Poisson regression.

Prerequisites: PH 1726 (not offered after Summer 2010) or consent of instructor
PH 1830 *Categorical Data Analysis*
Baraniuk, 4 credits, a

This course presents the theory and applications of categorical data analysis. Topics include contingency tables, applied generalized linear models, logistic regression model, sampling methods, model building strategies, assessing model fit, conditional logistic regression for matched analyses, polychotomous logistic regression, and Poisson regression.

Prerequisites: PH 1700 and calculus or consent of instructor

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SECTION - Courses, Epidemiology and Disease Control

Change from:

PHD 2105 *EOHS Doctoral Seminar*
Gimeno, Delclos, 1 credit, a

This is a seminar course for doctoral students and post-doctoral fellows in EOHS. Doctoral students in other divisions may enroll with the consent of the instructor. The course combines research seminar presentations with specific assignments to provide students an opportunity to improve their knowledge of the latest EOHS topics, their presentation skills and their scientific productivity in the formulation of research proposals and journal publications and presentations at scientific meetings. The seminar provides opportunities to involve mentors (advisors, dissertation supervisors, committee members) and to practice mentoring and teaching with other class members.

Change to:

PHD 2105 *Environmental and Occupational Health Sciences Doctoral Seminar*
Gimeno, Delclos, 1 credit, a, b

This is a seminar course for doctoral students and post-doctoral fellows in EOHS. Doctoral students in other divisions may enroll with the consent of the instructor. The course combines research seminar presentations with specific assignments to provide students an opportunity to improve their knowledge of the latest EOHS topics, their presentation skills and their scientific productivity in the formulation of research proposals and journal publications and presentations at scientific meetings. The seminar provides opportunities to involve mentors (advisors, dissertation supervisors, committee members) and to practice mentoring and teaching with other class members.

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Change from:

PHDW 2106 *Doctoral Research Methods in Environmental and Occupational Health Sciences*
Gimeno, Delclos, 3 credits, b
This course provides doctoral students with a background in the perspectives, the key concepts as well as the methods involved in conducting research and evaluating scientific claims in the EOHS context, part of the necessary training to undertake a future research project. The course considers basic aspects and challenges of the philosophy of science and the inference of causality, ethical issues on conducting research, study design and sampling methods, the role of statistics and the appropriateness of the measures of association, including hypothesis formulation and testing, and presentation of findings. Students will also be introduced to the scientific production process.

Change to:

PHDW 2106 *Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences*
Gimeno, Delclos, 2 credits, b

This course provides doctoral students with a background in the perspectives, the key concepts as well as the methods involved in conducting research and evaluating scientific claims in the EOHS context, part of the necessary training to undertake a future research project. The course considers basic aspects and challenges of the philosophy of science and the inference of causality, ethical issues on conducting research, study design and sampling methods, the role of statistics and the appropriateness of the measures of association, including hypothesis formulation and testing, and presentation of findings. Students will also be introduced to the scientific production process.

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Change from:

PH 2615 *Epidemiology II*
Day, Selwyn, and the Faculty in Epidemiology and Disease Control, 4 credits, a, b

This course focuses on the principles and activities necessary to carry out information collection, data implemented and managed in an ethical manner consistent with the principles of the scientific method. This course addresses practical aspects of epidemiologic research, that is, how you get it done. Systems theory, epidemiologic methods, principles of survey research, operations research methods, and computer uses in research are covered. The final product from the class is the development of an epidemiologic field Manual of Procedures for a study.

Prerequisites: PHM 2610 (or PHM 2612) or equivalent and PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) or PH 1725 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses, PH 1725 and PH 1726 combine into PH 1700 Biostatistics II.)

Change to:

PH 2615 *Epidemiology II*
Day, Selwyn, and the Faculty in Epidemiology and Disease Control, 4 credits, a, b

This course focuses on the principles and activities necessary to carry out information collection, data implemented and managed in an ethical manner consistent with the principles of the scientific method. This course addresses practical aspects of epidemiologic research, that is, how you get it done. Systems theory, epidemiologic methods, principles of survey research, operations research methods, and computer uses in
research are covered. The final product from the class is the development of an epidemiologic field Manual of Procedures for a study.

**Prerequisites: PHM 2612 (or PHM 2610) or equivalent and PH 1700 (or PH 1690)**

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**Change from:**

**PH 2710 Epidemiology III**  
Symanski, Hallman, and the Faculty in Epidemiology and Disease Control, 4 credits, a, b

This course covers advanced concepts in epidemiologic methods with an emphasis on observational studies. Topics include causal inference, measures of disease frequency, measures of association, study design, precision and validity in epidemiologic studies, introduction to stratified and logistic regression analysis, concepts assessing effect modification and confounding, interpretation of epidemiologic study results and manuscript development.

**Prerequisites:** PHM 2610 (or PHM 2612), PH 2615, PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) or equivalent

**Change to:**

**PH 2710 Epidemiology III**  
Symanski, Hallman, and the Faculty in Epidemiology and Disease Control, 4 credits, a, b

This course covers advanced concepts in epidemiologic methods with an emphasis on observational studies. Topics include causal inference, measures of disease frequency, measures of association, study design, precision and validity in epidemiologic studies, introduction to stratified and logistic regression analysis, concepts assessing effect modification and confounding, interpretation of epidemiologic study results and manuscript development.

**Prerequisites:** PHM 2612 (or PHM 2610), PH 2615, PH 1690 and PH 1700 or equivalent

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**Change from:**

**PHD 2712 Experimental Methods in Epidemiology**  
Hwang, Moyé, and the Faculty in Epidemiology and Disease Control, 3 credits, a

The central objective of this course is to enable students to evaluate and interpret evidence concerning preventive or therapeutic measures, especially those recommended for public health application. It concerns principles and methods of experimental studies in epidemiology and public health, from simple clinical trials to prevention trials in multiple communities. Applications span diverse areas, including cardiovascular diseases, cancer, and infectious diseases. A standard text and selected readings concerning specific experimental studies and related topics are used. Students participate actively in a seminar format, critique published reports, and undertake a collaborative project to develop a research protocol for an experimental study.
Prerequisites: PH 2710 or consent of instructor

Change to:

**PHD 2712 Experimental Methods in Epidemiology**
Hwang, Moyé, and the Faculty in Epidemiology and Disease Control, 4 credits

The central objective of this course is to enable students to evaluate and interpret evidence concerning preventive or therapeutic measures, especially those recommended for public health application. It concerns principles and methods of experimental studies in epidemiology and public health, from simple clinical trials to prevention trials in multiple communities. Applications span diverse areas, including cardiovascular diseases, cancer, and infectious diseases. A standard text and selected readings concerning specific experimental studies and related topics are used. Students participate actively in a seminar format, critique published reports, and undertake a collaborative project to develop a research protocol for an experimental study.

Prerequisites: PH 2710 or consent of instructor

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Change from:

**PHM 2720 Epidemiologic Proposal Development**
Cardenas, and the Faculty in Epidemiology and Disease Control, 3 credits, b, cd (Available Online)

The course defines the components of a scientific proposal, utilizing the National Institutes of Health’s (NIH) guidelines for the development of research grant applications. Proposals must be for an epidemiologic study. Students have the opportunity to learn how to develop each section of a proposal through lecture materials, reviewing and discussing examples of successful and unsuccessful proposals and finally the preparation of their own research proposal. The course concludes with a mock NIH study section, in which students serve as reviewers for their colleague’s proposals.

This course is intended for M.P.H. and M.S. students.

Prerequisites: PH 2710 or consent of instructor

Change to:

**PHM 2720 Epidemiologic Proposal Development**
Cardenas, and the Faculty in Epidemiology and Disease Control, 3 credits, b, (Available Online)

The course defines the components of a scientific proposal, utilizing the National Institutes of Health’s (NIH) guidelines for the development of research grant applications. Proposals must be for an epidemiologic study. Students have the opportunity to learn how to develop each section of a proposal through lecture materials, reviewing and discussing examples of successful and unsuccessful proposals and finally the preparation of their own research proposal. The course concludes with a mock NIH study section, in which students serve as reviewers for their colleague’s proposals.
This course is intended for M.P.H. and M.S. students.

Prerequisites: PH 2710 or consent of instructor

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Change from:

PH 2730 Epidemiology and Control of Infectious Disease
Hwang, Murray and the Faculty in Epidemiology and Disease Control, 4 credits, b

This course is designed as an introduction to the epidemiologic aspects of infectious diseases and provides information regarding prevention and control of these diseases. At the end of the course, students have an understanding of the epidemiologic aspects of infectious diseases including incidence, distribution, and pattern of disease occurrence as well as different modes of transmission and associated risk factors. They should understand the importance of surveillance systems in detecting epidemics, the application of epidemiological methods to determine the risk and associated factors, and the significance of prevention and control programs for infectious diseases. Students gain knowledge and skills in carrying out epidemic investigations through a series of case study assignments.

Prerequisites: PHM 2610 (or PHM 2612) or consent of instructor

Change to:

PH 2730 Epidemiology and Control of Infectious Disease
Hwang, Murray and the Faculty in Epidemiology and Disease Control, 4 credits, b

This course is designed as an introduction to the epidemiologic aspects of infectious diseases and provides information regarding prevention and control of these diseases. At the end of the course, students have an understanding of the epidemiologic aspects of infectious diseases including incidence, distribution, and pattern of disease occurrence as well as different modes of transmission and associated risk factors. They should understand the importance of surveillance systems in detecting epidemics, the application of epidemiological methods to determine the risk and associated factors, and the significance of prevention and control programs for infectious diseases. Students gain knowledge and skills in carrying out epidemic investigations through a series of case study assignments.

Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

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Change from:

PH 2731 Genetics and Infectious Diseases
Jiang, Hwang, Brown, and the Faculty in Epidemiology and Disease Control, 2 credits, a

This course is intended for students who have not had significant training in genetics. It will cover basic genetics, medical genetic terminology and the associated scientific and medical literature. At the end of the course, students will have an understanding of the genetic aspects of infectious diseases. They will under-
stand the importance of environment, host and pathogens genetic factors and their mutual interactions influence the ratio between clinical and subclinical disease. Evaluations will be based on examination given in the class and attendance.

Change to:

**PH 2731 Genetics and Infectious Diseases**

Jiang, Hwang, Brown, and the Faculty in Epidemiology and Disease Control, 2 credits, a

This course is intended for students who have not had significant training in genetics. It will cover basic genetics, medical genetic terminology, and the associated scientific and medical literature. At the end of the course, students will have an understanding of the genetic aspects of infectious diseases, including the contribution of host genetics and genes influencing susceptibility to infectious diseases. They will understand the importance of environment, host and pathogens genetic factors and their mutual interactions influence the ratio between clinical and subclinical disease. Evaluations will be based on examination given in the class and attendance.

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Change from:

**PHM 2740 Cardiovascular Disease Epidemiology and Prevention**

Morrison and the Faculty in Epidemiology and Disease Control, 3 credits, a

The purpose of this course is to provide an introductory overview to the field of cardiovascular disease (CVD) epidemiology. Topics for this course include the pathophysiology of CVD, CVD survey methods, trends in CVD mortality and morbidity, CVD risk factors, major strategies for CVD prevention and a summary of major CVD clinical trials. Students will gain an understanding of the impact of CVD on public health.

Prerequisites: PHM 2610 (or PHM 2612) or consent of instructor

Change to:

**PHM 2740 Cardiovascular Disease Epidemiology and Prevention**

Morrison and the Faculty in Epidemiology and Disease Control, 3 credits, a

The purpose of this course is to provide an introductory overview to the field of cardiovascular disease (CVD) epidemiology. Topics for this course include the pathophysiology of CVD, CVD survey methods, trends in CVD mortality and morbidity, CVD risk factors, major strategies for CVD prevention and a summary of major CVD clinical trials. Students will gain an understanding of the impact of CVD on public health.

Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

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Add:
**PHD 2740 Cardiovascular Disease Epidemiology and Prevention**  
Morrison and the Faculty in Epidemiology and Disease Control, 3 credits, a

The purpose of this course is to provide an overview to the field of cardiovascular disease (CVD) epidemiology. Topics for this course include the pathophysiology of CVD, CVD survey methods, trends in CVD mortality and morbidity, CVD risk factors, major strategies for CVD prevention and a summary of major CVD clinical trials. In addition to understanding the impact of CVD on public health, PhD level students will comprehensively evaluate a novel aspect of CVD epidemiology.

Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

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**Change from:**

**PHM 2760 Occupational Epidemiology**  
Cooper and the Faculty in Epidemiology and Disease Control, 3 credits, cd (Online only)

There are approximately 150 million people in the U.S. workforce who are exposed to a wide range of health and safety hazards. Workplace injuries and illnesses exact a large human and economic toll on adult and child workers in the U.S. and worldwide. Many, if not most, of these adverse health outcomes are preventable.

This course will describe the types and magnitude of workplace injuries and illnesses, examine the epidemiologic methods used to identify risk factors for these events and examine the role of academia, industry and public health practice in understanding and controlling these conditions from an epidemiologic perspective.

The course is especially targeted as a special topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science and other interested students.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) and PHM 2610 (or PHM 2612)

**Change to:**

**PHM 2760 Occupational Epidemiology**  
Cooper and the Faculty in Epidemiology and Disease Control, 3 credits, cd (Online only)

There are approximately 150 million people in the U.S. workforce who are exposed to a wide range of health and safety hazards. Workplace injuries and illnesses exact a large human and economic toll on adult and child workers in the U.S. and worldwide. Many, if not most, of these adverse health outcomes are preventable.

This course will describe the types and magnitude of workplace injuries and illnesses, examine the epidemiologic methods used to identify risk factors for these events and examine the role of academia, industry and public health practice in understanding and controlling these conditions from an epidemiologic perspective.

The course is especially targeted as a special topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science and other interested students.

Prerequisites: PH 1700 (or PH 1690) and PHM 2612 (or PHM 2610)

Change to page 91
Add:

PHD 2760 Occupational Epidemiology
Cooper and the Faculty in Epidemiology and Disease Control, 3 credits, cd (Online only)

There are approximately 150 million people in the U.S. workforce who are exposed to a wide range of health and safety hazards. Workplace injuries and illnesses exact a large human and economic toll to adult and child workers in the U.S. and worldwide. Many, if not most, of these adverse health outcomes are preventable. This course will describe the types and magnitude of workplace injuries and illnesses, examine the epidemiologic methods used to identify risk factors for these events, and examine the role of academia, industry, and public health practice in understanding and controlling these conditions from an epidemiologic perspective. The course is especially targeted as a special topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science, and other interested students. PhD students will have additional projects.

Prerequisites: PH 1700 (or PH 1690) and PHM 2612 (or PHM 2610)

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Change from:

PH 2770 NIH Proposal Development
Kelder, Caetano and the Faculty in Epidemiology and Disease Control, 3 credits, b

The goals of this course are to introduce students to the process of submission, review and funding at the NIH, and to guide students in developing grant writing skills through preparing an NIH-style application. Knowledge of how the NIH works is an important part of academic life in the U.S. While there are many other funding sources for public health and medical research, the NIH is the largest, most competitive and the most prestigious. Developing grant writing skills is essential for academic success in today’s competitive environment and shifting federal priorities. In academic life, without grant preparation skills your chances for promotion and tenure are reduced.

After completing this course, students should be able to understand the NIH grant review process at its various levels. Students should also be able to understand the process of developing an idea into a research project, and will be familiar with the various sections of a grant application, their format and content. If a research topic of interest has not been identified, students are encouraged to think about one as soon as possible. Course assignments will assist in making this selection.

This course is intended for Ph.D. and Dr.P.H. students.

Prerequisites: PH 2710

Change to:

PHD 2770 NIH Proposal Development
Kelder, Caetano and the Faculty in Epidemiology and Disease Control, 3 credits, a

The goals of this course are to introduce students to the process of submission, review and funding at the NIH, and to guide students in developing grant writing skills through preparing an NIH-style application. Knowledge
of how the NIH works is an important part of academic life in the U.S. While there are many other funding sources for public health and medical research, the NIH is the largest, most competitive and the most prestigious. Developing grant writing skills is essential for academic success in today's competitive environment and shifting federal priorities. In academic life, without grant preparation skills your chances for promotion and tenure are reduced.

After completing this course, students should be able to understand the NIH grant review process at its various levels. Students should also be able to understand the process of developing an idea into a research project, and will be familiar with the various sections of a grant application, their format and content. If a research topic of interest has not been identified, students are encouraged to think about one as soon as possible. Course assignments will assist in making this selection.

This course is intended for Ph.D. and Dr.P.H. students.

Prerequisites: PH 2710

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Change from:

PH 2830 Introduction to Medical Genetics in Public Health
Daiger and the Faculty in Epidemiology and Disease Control, 2 credits, cd

The intent of this course is for students to understand the role clinical genetics plays in the practice of epidemiology, and the relationship between epidemiology and medical genetics. Emphasis will be on the practice of medical genetics as it may be encountered by professionals in public health. Instructors include faculty in the Human Genetics Center, School of Public Health, and in the Division of Medical Genetics of the UT Medical School. Teaching will be by didactic classroom instruction. The subject material covers basic biology of clinical genetics, genetic diseases and birth defects as seen in a medical genetics clinic, the provision of medical genetics services in the State of Texas, and public policy issues relating to the practice of medical genetics.

Prerequisites: Recent college biology or equivalent

Change to:

PH 2830 Clinical Genetics in Epidemiology
Daiger, Morrison, and the Faculty in Epidemiology and Disease Control, 3 credits, a

The intent of this course is for SPH students to understand the role clinical genetics plays in the practice of epidemiology, and the relationship between epidemiology and medical genetics. Emphasis will be on the practice of medical genetics as it may be encountered by professionals in public health. Instructors include faculty in the Human Genetics Center, School of Public Health, and in the Division of Medical Genetics, UT Medical School. Teaching will be by didactic classroom instruction. The subject material covers basic biology of clinical genetics, genetic diseases and birth defects as seen in a medical genetics clinic, the provision of genetic services in Texas, and public policy issues relating to the practice of medical genetics.

Prerequisites: Recent college biology or equivalent
PHD 2860  *Advanced Design Analysis Methods in Epidemiology*
Rahbar, Hossain, Rodin and the Faculty in Epidemiology and Disease Control, 3 credits, b

This course primarily covers topics related to study design and appropriate data analysis using advanced techniques. At the core, the faculty will discuss basic and generalized regression models for binary (logistic) and continuous (linear) and count (Poisson) outcomes; multivariate data reduction techniques such as factors analysis and Principal Component Analysis; longitudinal models; analysis of clustered data; and select data mining methods. Whenever possible, the faculty will illustrate how to carry out data analyses in SAS or STATA or other suitable statistical packages.

Prerequisites: PHD 2711 and PHD 1830 (or PH 1615 and PH 1616)
This course will comprise an overview of demographic methods commonly sued by professionals in public health practice and research. The course is an interactive graduate level electronic seminar. Participants will be introduced to age, sex, ethnicity, and cause specific death rates; period rates and cohort rates; methods of standardization of rates and proportions and selection of standards; the life table and some of its uses; common fertility and reproductivity rates; uses of data from the birth certificate; mobility data and measures; and population estimates and projections.

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SECTION - Courses, Health Promotion and Behavioral Sciences

Change from:

PH 1350 Multicultural Populations and Public Health Research
Fernandez-Esquer, 3 credits, a

This course explores social identities critical to contemporary U.S. society. The course emphasizes the intersection of public health and social sciences research and how they inform an understanding of social identity and/or culture of groups who have sub-optimal access to health care. Commonalities and differences among these groups are discussed throughout the semester.

Change to:

PH 1350 Ethnicity, Race, Class & Gender: A Multicultural Public Health Perspective
Fernandez-Esquer, 3 credits, c

This seminar-style course will explore contemporary perspectives on ethnicity, race, social class and gender, and the way these social identities are portrayed in the public health literature, particularly in health disparities. The course will also review basic social science definitions of culture, multiculturalism, and social identity. Students are expected to demonstrate in an oral presentation and in two take-home examinations how concepts learned in class may be used to understand, review, and critique public health research conducted in the U.S. and around the world.

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Change from:

PHD 1420 Research Design and Analysis in Behavioral Sciences I
Diamond, Williams, Amick, Vernon, 4 credits, a (odd-numbered years)

This course focuses on linking research questions common in behavioral sciences research to appropriate analytic methods. It focuses on the philosophy of science, paradigms of inquiry, analytic methods that are
appropriate for assessing group differences and those that are used for assessing relationships and making predictions. There is an emphasis on the ability to understand the benefits and limitations of particular research designs to answer specific questions, read and understand scientific journal articles that make use of these methods, appropriate use of statistical software for conducting these analyses, interpret output from this software, and professionally present the results from analyses in oral and written form.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.), PH 1725 and 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.), or the equivalent

Change to:

PHD 1420 Research Design and Analysis in Behavioral Sciences I
Diamond, Williams, Amick, Vernon, 4 credits, b (odd-numbered years)

This course focuses on linking research questions common in behavioral sciences research to appropriate analytic methods. It focuses on the philosophy of science, paradigms of inquiry, analytic methods that are appropriate for assessing group differences and those that are used for assessing relationships and making predictions. There is an emphasis on the ability to understand the benefits and limitations of particular research designs to answer specific questions, read and understand scientific journal articles that make use of these methods, appropriate use of statistical software for conducting these analyses, interpret output from this software, and professionally present the results from analyses in oral and written form.

Prerequisites: PH 1690, PH 1700, or the equivalent

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Change from:

PHD 1421 Research Design and Analysis in Behavioral Sciences II
Diamond, Williams, Amick, 4 credits, b (even-numbered years)

This course expands on the material covered in PHD 1420 and extends the focus to: analyses that assess measurement reliability, validity and latent structure; methods that can be used to group either people or objects; and procedures that assess differences between groups and/or change over time. There is an emphasis on reading and understanding scientific journal articles that make use of these methods, using of statistical software for conducting the analyses, interpreting the output from this software, and professionally present the results from analyses in oral and written form.

Prerequisites: PHD 1420

Change to:

PHD 1421 Research Design and Analysis in Behavioral Sciences II
Diamond, Williams, Amick, 4 credits, b (even-numbered years)

This course expands on the material covered in PHD 1420 and extends the focus to: analyses that assess measurement reliability, validity and latent structure; methods that can be used to group either people or objects; and procedures that assess differences between groups and/or change over time. There is an em-
phasis on reading and understanding scientific journal articles that make use of these methods, using of sta-
tistical software for conducting the analyses, interpreting the output from this software, and professionally
present the results from analyses in oral and written form.

Prerequisites: PHD 1420

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Change from:

PHD 1434 Research Seminar in Health Promotion and Behavioral Sciences for Doctoral Students
Vernon, Barroso, Escobar-Chaves, Faculty in Health Promotion and Behavioral Sciences, 1 credit a, b

The lab will build on the first hour of the research seminar (PHM 1433) in health promotion and behavioral
sciences. Students will discuss and critique readings related to the seminar topic. Through this experience
students are expected to develop skills in critical thinking and an ability to critique the literature in health
promotion and behavioral sciences.

Change to:

PHD 1434 Research Seminar in Health Promotion and Behavioral Sciences for Doctoral Students
Vernon, Faculty in Health Promotion and Behavioral Sciences, 2 credits a, b

The lab will build on the first hour of the research seminar (PHM 1433) in health promotion and behavioral
sciences. Students will discuss and critique readings related to the seminar topic. Through this experience
students are expected to develop skills in critical thinking and an ability to critique the literature in health
promotion and behavioral sciences.

Prerequisite: PHM 1433 simultaneously

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Add:

PH 5300 Overview of Maternal and Child Health
Caughy, 3 credits a

The purpose of this course is to provide students with an overview of the health status of women, infants,
children, and adolescents in the United States, the structure of health care services for women and children,
and the development and implementation of interventions to improve the health of MCH populations. Over-
view of Maternal and Child Health is open to MCH Certificate students as well as to degree-seeking students
who are not enrolled in the MCH Concentration. MCH Concentration students should take the MCH Core
Training Seminar. Overview of Maternal and Child Health will not count as an elective for MCH Concentra-
tion students.

Prerequisite: PHM 2610

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Change from:

**Course of Study**
The concentration involves the completion of a minimum of 12 credits in qualified courses, which include, but are not limited to the courses listed in the Leadership Studies Concentration program. Students in degree programs requiring a practica should have an experience that is MCH-related. In addition, the thesis or doctoral dissertation topic must be relevant to maternal and child health. The student’s advisory committee determines if the student has met the requirements of the concentration. Students in this concentration are required to complete PH 5301 I (a) and II (b), the two-semester MCH Core Training Seminar. The Core Training Seminar should be taken in sequence during a single academic year, with the fall semester completed first. A list of suggested courses recognized as MCH electives are listed below. Detailed descriptions of the courses can be found in the Division where the course is offered.

**Courses, Maternal and Child Health Concentration**

PH 5301 I (a) and II (b) Maternal and Child Health Core Training Seminar
This course is required for students enrolled in the MCH Concentration.

Change to:

**Course of Study**
The concentration involves the completion of a minimum of 12 credits in qualified courses, which include, but are not limited to the courses listed in the Maternal and Child Health Concentration. Students in degree programs requiring a practica should have an experience that is MCH-related. In addition, the thesis or doctoral dissertation topic must be relevant to maternal and child health. The student’s advisory committee determines if the student has met the requirements of the concentration. Students in this concentration are required to complete PH 5301 I (a) and II (b), the two-semester MCH Core Training Seminar. The Core Training Seminar should be taken in sequence during a single academic year, with the fall semester completed first. A list of suggested courses recognized as MCH electives are listed below. Detailed descriptions of the courses can be found in the Division where the course is offered.

**Courses, Maternal and Child Health Concentration**

PH 5301 I (a) and II (b) Maternal and Child Health Core Training Seminar
This course is required for students enrolled in the MCH Concentration. **It must be taken in sequence, with the fall course (PH 5301 I) taken first.**

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**SECTION – Global Health Concentration**

Change from:

**PH 5613 Critical Cinema for Public Health**
The Faculty in Global Health Concentration, 1 credit, a, b
A series of documentaries and Big Screen movies revolving around public health topics will be shown and discussed. The range of topics presented will include health disparities, health systems, culture – behavior and health, environmental health themes, globalization, addictions, mental health, food production, research ethics and methods, violence, surveillance and control of epidemics. All movie presentations will be followed by a class discussion.

Change to:

**PH 5613 Critical Cinema for Public Health**
The Faculty in Global Health Concentration, 2 credits, a, b

A series of documentaries and Big Screen movies revolving around public health topics will be shown and discussed. The range of topics presented will include health disparities, health systems, culture – behavior and health, environmental health themes, globalization, addictions, mental health, food production, research ethics and methods, violence, surveillance and control of epidemics. All movie presentations will be followed by a class discussion.

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The University of Texas
School of Public Health at Houston

2009-2011 Catalog

The University of Texas School of Public Health at Houston

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211 Accredited Schools of Public Health
Welcome to The University of Texas School of Public Health. We are committed to making health happen through visionary teaching, research, and public health service programs. This school ranks among the top in the nation and has established a state, national, and international reputation as a leader in education and research. In addition to being an outstanding venue for your public health education and research, the University of Texas School of Public Health has the lowest tuition and fees among the Top Ten schools of public health in the country.

Health is among the most important conditions of life and is needed to achieve well-being and happiness. From vaccinations to prevent diseases that devastated past generations, health departments monitoring disease outbreaks, restaurant inspections preventing food poisoning outbreaks, seat belt and drunk driving laws, water systems to fluoridate drinking water, regulations to control pollution in our environment, safer workplaces, family planning programs, school programs to prevent heart disease by teaching children about healthy diets and promoting physical activity, adolescents learning in school about safer sex practices to minimize exposure to and prevent sexually transmitted diseases and avoid unwanted pregnancies, the use of sunscreen to protect our skin, smoke-free public places, to smoking prevention and smoking cessation programs, public health touches our lives every day. Public health as a profession has made great achievements and major advances are imminent, especially from the development and application of population-based health promotion and disease prevention programs, improving health service delivery systems, and improving environmental and occupational health.

The interdisciplinary nature of public health makes it a very appealing profession. Public health has several core areas that work together. Public health professionals collaborate with physicians, nurses, dentists, teachers, schools, education agencies, legislators, government agencies, and the media to improve the health of people.

Our students have the advantage of being a part of an excellent health science center located in the Texas Medical Center, the largest medical center in the world. We have regional campuses in Austin, Brownsville, Dallas, El Paso and San Antonio, where we serve as a resource for the entire state of Texas. We serve a very diverse population in Texas. This diversity is reflected in the make-up of our student body. Our students have abundant opportunities for student employment, student research, and practicum experiences to enrich their education in public health.

Our mission is to improve and sustain the health of people by providing the highest quality graduate education, research, and community service for Texas, the nation, and the world. No matter where you plan to pursue your public health career, the UT School of Public Health is an excellent place to obtain an education in public health. We have an outstanding faculty ready to assist you in your studies and involve you in research and community service activities. I am confident that you will find the School a friendly, supportive, and intellectually stimulating environment for your studies.

Roberta B. Ness, M.D., M.P.H.
Dean of the School of Public Health
M. David Low Chair in Public Health
# Academic Calendar Year 2009-2010

## Fall Semester 2009

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Begins</td>
<td>August 31, 2009</td>
</tr>
<tr>
<td>Classes End</td>
<td>December 11, 2009</td>
</tr>
<tr>
<td>Exams</td>
<td>December 14-18, 2009</td>
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<tr>
<td>Blackboard Holiday</td>
<td>December 26-28, 2009</td>
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## Spring Semester

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Semester Begins</td>
<td>January 11, 2010</td>
</tr>
<tr>
<td>Classes End</td>
<td>April 30, 2010</td>
</tr>
<tr>
<td>Exams</td>
<td>May 3 – 7, 2010</td>
</tr>
<tr>
<td>Spring Break</td>
<td>March 8 – 12, 2010</td>
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## Summer Sessions

### 12 Weeks, 2010

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Begins</td>
<td>May 24, 2010</td>
</tr>
<tr>
<td>Classes End</td>
<td>August 13, 2010</td>
</tr>
<tr>
<td>Exams</td>
<td>August 16 – 17, 2010</td>
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### 1st 6 Weeks, 2010

<table>
<thead>
<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Session Begins</td>
<td>May 24, 2010</td>
</tr>
<tr>
<td>Classes End</td>
<td>July 2, 2010</td>
</tr>
<tr>
<td>Exams</td>
<td>July 6, 2010</td>
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<tr>
<td>Blackboard Holiday</td>
<td>June 4 – 5, 2010</td>
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### 2nd 6 weeks, 2010

<table>
<thead>
<tr>
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<tr>
<td>Session Begins</td>
<td>July 7, 2010</td>
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<tr>
<td>Classes End</td>
<td>August 16, 2010</td>
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<tr>
<td>Exams</td>
<td>August 17, 2010</td>
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*Holidays will be announced in the schedule of classes.*

*For the complete calendar please go to the [Registrar’s Office](#) website.*
## Fall Semester 2011

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
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<td>Semester Begins</td>
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<td>Classes End</td>
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<tr>
<td>Exams</td>
<td>December 13 - 17, 2010</td>
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<td>December 26 - 28, 2010</td>
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## Spring Semester

<table>
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<td>Classes End</td>
<td>April 29, 2011</td>
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<td>Exams</td>
<td>May 2 – 6, 2011</td>
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<td>Spring Break</td>
<td>March 7 - 11, 2011</td>
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## Summer Sessions

### 12 Weeks, 2011

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<th>Event</th>
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<td>Classes End</td>
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<td>Exams</td>
<td>August 15 - 16, 2011</td>
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### 1st 6 Weeks, 2011

<table>
<thead>
<tr>
<th>Event</th>
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<tr>
<td>Classes End</td>
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<td>Exams</td>
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</tr>
<tr>
<td>Blackboard Holiday</td>
<td>June 4 – 5, 2011</td>
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### 2nd 6 weeks, 2011

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Session Begins</td>
<td>July 6, 2011</td>
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<tr>
<td>Classes End</td>
<td>August 15, 2011</td>
</tr>
<tr>
<td>Exams</td>
<td>August 16, 2011</td>
</tr>
</tbody>
</table>

Holidays will be announced in the schedule of classes.

For the complete calendar please go to the [Registrar’s Office](#) website.
**ADMINISTRATIVE OFFICERS**

Robert B. Ness, M.D., M.P.H.
Dean

L. Kay Bartholomew, Ed.D., M.P.H.
Associate Dean for Academic Affairs

David R. Carnahan, M.B.A.
Associate Dean for Management

Linda E. Lloyd, Ph.D., M.B.A., M.S.W.
Associate Dean for Public Health Practice

Laura E. Mitchell, Ph.D.
Associate Dean for Research

Mary Ann Smith, Ph.D.
Associate Dean for Student Affairs

Derek D. Drawhorn, M.C.S.
Assistant Dean, Information Technology

Hector G. Balcazar, Ph.D.
Regional Dean,
El Paso Regional Campus

Raul Caetano, M.D., M.P.H., Ph.D.
Regional Dean,
Dallas Regional Campus

Sharon P. Cooper, Ph.D.
Regional Dean,
San Antonio Regional Campus

Joseph B. McCormick, M.D.
Regional Dean,
Brownsville Regional Campus

Cheryl L. Perry, Ph.D.
Regional Dean,
Austin Regional Campus

Eric Boerwinkle, Ph.D.
Director, Division of Epidemiology and Disease Control

Robert J. Emery, Dr.P.H.
Acting Director, Division of Environmental and Occupational Health Sciences

Barbara C. Tilley, Ph.D.
Director, Division of Biostatistics

J. Michael Swint, Ph.D.
Director, Division of Management, Policy and Community Health

Sally W. Vernon, Ph.D.
Director, Division of Health Promotion and Behavioral Sciences

Maria E. Fernandez, Ph.D.
Director of Diversity Programs

Sandra J. Fisbeck
Director of Administrative Services

Mary Pastore, B.S.
Director of Accounting Services

Sylvia A. Salas, M.P.H.
Director of Academic Affairs

Frank F. Velasquez, B.S.
Director of Research Services Center

Helena M. VonVille, M.L.S., M.P.H.
Director of Library Services
GENERAL INFORMATION

History
The origins of public health can be traced to two roots, the requirement that a community protect itself from the ravages of mass disease, and an altruistic desire to ensure at least a minimal opportunity for a healthy life for underprivileged children. Early practical applications of these roots were the adoption of formal quarantine regulations in the 1300s by the cities of Ragusa and Venice and the child health movements of the late 1800s. Epidemics were an inevitable result of the growth of cities, and urban populations were forced to submit helplessly to the catastrophic epidemics of smallpox, cholera, plague, diphtheria, and other diseases until an explosion of knowledge during the last half of the nineteenth century promised relief. The microbiological era in biomedical research was responsible for the identification of specific microbiological agents of disease and the development of the science of immunology. Precisely designed preventive procedures became available, and simultaneously, advances in engineering made possible the provision of potable water, the removal of noxious wastes, and the construction of more hygienic dwellings and safer working places.

Community problems and community solutions cannot be managed by individual initiatives, so boards of health and health departments were created to protect the health of their constituents. By around 1910, the number of health departments in the United States, and the increasing complexity of their responsibilities, generated a need for specially trained physicians, nurses, and engineers. Educational programs were developed at Massachusetts Institute of Technology, Harvard University, and Johns Hopkins University, and from these programs evolved the concept of a specialized school providing both professional and academic curricula in community health and related fields.

After World War II, the emphasis in community health changed greatly. Chronic diseases displaced infections as primary causes of death, and public concern was directed toward personal medical care services and health hazards of the environment. As the need for a skilled work force continued to grow, new schools of public health were established; enrollments were expanded, and curricula were altered to address the changing circumstances.

In 1947, the Texas State Legislature authorized a School of Public Health within The University of Texas System, but the authorization was not implemented until 1967. In that year, The University of Texas System, supported by many public-spirited citizens in Houston and elsewhere in the State, requested and received an appropriation for the School. The first class was admitted in the fall of 1969, occupying rented and borrowed space. Enrollment doubled in the second year and doubled again in the third year, testimony to the previously unfilled need. In response to the need for graduate public health education in other geographic areas of the state, the School of Public Health at Houston initiated Regional M.P.H. Programs in San Antonio in 1979, in El Paso in 1992, in Dallas in 1998, and in Brownsville in 2001. Strong research programs exist at each campus, addressing especially the health problems of Texas. By the end of Spring 2007, graduates of the School of Public Health at Houston numbered over 4600, serving the public in every phase of community health.
The School of Public Health at Houston is housed in the Reuel A. Stallones Building. Dr. Stallones was the founding Dean of the School and served from 1967 until 1986. His educational philosophy and his eminence in both epidemiology and graduate public health education were recognized by The University of Texas Board of Regents when they named the building in his honor.

**Mission and Goals**

**Education** — The School’s first responsibility is to provide the highest quality graduate education in the theory and practice of public health to present and future practitioners and teachers. It does so within a framework which values the contributions of all persons and a philosophy based on the premise that education is a lifelong process and the fundamental responsibility for each person’s education resides with the individual. Public Health embraces a remarkable variety of skills, attracting persons with many professional and academic backgrounds, including the physical, biological, and behavioral sciences. Public health is committed to maintaining a broad perspective of health and disease and understanding of the health system. The School must teach the values of health and explain the orientation and philosophy that establishes unity from this diversity.

**Research** — Progress requires new knowledge to advance understanding, and the search for new knowledge must be nurtured, lest the practice of public health grow sterile and atrophy. The School of Public Health at Houston is to serve as a focus of research activities directed toward disease prevention, health promotion, community and environmental health, and the health system.

**Community Service** — No professional school can long maintain its excellence if it remains isolated from communities in which it exists or from the realities and the practicalities of professional practice. Thus, the third component of the School’s mission is to provide service to the community and maintain strong relations with public health practice. This helps ensure that the teaching and research programs within the School continue to have relevance to current problems of the community.

**Accreditation**

The University of Texas School of Public Health at Houston is accredited by the Council on Education for Public Health. The University of Texas Health Science Center at Houston is accredited by the Southern Association of Colleges and Schools (SACS) to award certificates, and baccalaureate, master, and doctoral degrees.

The M.P.H. degree program satisfies the academic requirement for certification by the American Board of Preventive Medicine in the areas of public health, occupational medicine, aerospace medicine, and preventive medicine. (See “Programs, Centers, and Institutes”)

**Non-discrimination Policy**

To the extent provided by applicable law, no person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under, any program or activity sponsored or conducted by The University of Texas School of Public Health at Houston on the basis of race, color, national origin, religion, sex, sexual orientation, age, veteran status, or disability.
**Degree Programs**

The School of Public Health at Houston has a variety of degree and non-degree programs. Degree programs include professional (Master of Public Health and Doctor of Public Health) and academic degrees (Master of Science and Doctor of Philosophy). The School also offers opportunities for education and training that do not lead to a degree. Non-degree programs include the Certificate in Public Health and individual courses for those who wish to gain knowledge in particular topics and established curricula for students who are formally enrolled in a collaborative program.

A course generally consists of a combination of lectures, discussion periods, directed reading, and individual study and inquiry. Courses are letter-graded or pass/fail. All courses satisfying the M.P.H. core requirements are letter-graded. Elective courses may be letter-graded or pass/fail at the discretion of the instructor.

Credits earned at other institutions prior to enrollment at the School of Public Health at Houston shall not be applied to UTSPH transcripts or counted toward graduation requirements. Through reciprocal agreements, however, students enrolled at the School of Public Health at Houston may take courses for credit at affiliated institutions.

Students admitted to dual degree programs may transfer the limited number of approved shared credit courses specified in the dual degree agreement. Students should contact the program coordinator for the dual degree program for further information.

General non-degree and certificate students can transfer up to 16 semester credit hours of UTSPH coursework if accepted into a degree program, provided a grade of A or B was earned in the course, and the course was completed within five years prior to matriculation into the degree program.

Credits earned at other institutions prior to enrollment at the School of Public Health at Houston shall not be applied to UTSPH transcripts or counted toward graduation requirements. Through reciprocal agreements, however, students enrolled at the School of Public Health at Houston may take courses for credit at affiliated institutions, provided the courses are recommended and approved prospectively by the student’s advisory committee.

Credit hours toward a degree program’s graduation requirements begin to accrue at the time of matriculation into the degree program. Credit hours earned as part of a master’s degree program do not count toward a doctoral degree program unless the student has been admitted to the master’s degree with the “right to petition.” (See the section on “Admission Process” for details on the “right to petition”.) In addition, the Division of Biostatistics and the Division of Epidemiology and Disease Control may admit students holding a bachelor’s degree directly to the Ph.D. program. (See the section on “Admission Process” for details.)

A student is classified “full-time” if enrolled in at least nine semester credit hours during the Fall or Spring semesters, at least six semester credit hours during a 12-week Summer session, or at least three semester credit hours during each six-week Summer session. Full-time students generally enroll in 12-16 credit hours per semester. A minimum of three credit hours must be taken in each semester a student is enrolled. Students are expected to enroll in culminating experience, thesis, or dis-
sertation hours during the time that resources are being used in this endeavor. All courses taken by students accumulate semester credit hours, but no more than a combined total of six credit hours earned for culminating/thesis/dissertation research plus the practicum experience may be counted toward the total credit hour minimum of the degree.

Enrollment is required in the semester in which the research proposal is submitted and continuously through the semester in which all requirements for graduation are completed. Enrollment is also required in the semester in which the qualifying examination (doctoral programs) is taken and in the semester in which the student is involved in a practicum/internship (M.P.H. and Dr.P.H. programs). Students must maintain enrollment in the School so that any absence from the program does not exceed one calendar year (three consecutive semesters). Policies and procedures regarding re-admission to a degree program are addressed in the section, Grading, Conduct, and Satisfactory Progress Policies.

All research papers, theses, and dissertations authored by degree candidates are available to interested members of the general public upon request. Culminating experience documents, theses and dissertations are published electronically and are widely available.

General and specific requirements for degrees may be altered in successive catalogs. A student is bound by the requirements of the catalog in force at the time of his/her admission or readmission; however, a student must complete all degree requirements within seven years or be subject to the degree requirements of the catalog in effect at the time of graduation.

Please note that the school is essentially a day time operation and that it is not possible to earn a degree at night.

**Time Limits on Degree Programs**
Students are expected to complete master’s degree programs (M.P.H. and M.S.) within five years and doctoral degree programs (Dr.P.H. and Ph.D.) within seven years. In case of extenuating circumstances, a student may request a one-year extension provided there is adequate justification. The possibility of a second year of extension exists for extraordinary circumstances. Students who do not graduate within the approved time limit will be dismissed from the program and must be readmitted to the School in order to complete the degree program.
**MASTERS OF PUBLIC HEALTH**

The Master of Public Health (M.P.H.) degree is the basic professional degree in the field. It is required for many supervisory and managerial positions in public health and is recommended for many others.

Students are admitted to one of the Divisions or Regional Campuses listed below through which they complete a series of courses covering the breadth of public health and develop competencies appropriate for their elected discipline. Many courses and educational activities are available to qualified students across all disciplines. Students are encouraged to diversify their curricula by selecting among these opportunities.

The majority of students take approximately 18 to 24 months to complete the degree. With careful planning some students may be able to complete the degree program in a shorter time. Part-time students should plan accordingly.

**Major Areas of Study:**
- Biostatistics
- Community Health Practice
- Epidemiology
- Healthcare Management
- Health Promotion/Health Education
- Health Services Organization
- Occupational and Environmental Health Services

**Regional Campuses M.P.H. Programs:**
- Austin Regional Campus
- Brownsville Regional Campus
- Dallas Regional Campus
- El Paso Regional Campus
- San Antonio Regional Campus

**Optional Concentrations:**
- Global Health (Interdivisional)
- Health Disparities (Interdivisional)
- Leadership (Interdivisional)
- Maternal and Child Health (Interdivisional)

Concentrations consist of a curriculum designed to address a problem or area of public health concern. Concentrations may be added or discontinued to meet the needs of the public health community.

**Admission Requirements:**
- The degree of M.D., D.D.S., D.O., Pharm.D. or D.V.M. from a regionally accredited school, or
- A baccalaureate or more advanced degree, in an appropriate field, from a regionally accredited university or school, and
- Submission of application and supporting documents by the application deadline, and
• Previous public health experience or evidence of the potential to contribute significantly to public health programs and services, particularly to underserved and vulnerable populations. The applicant must submit an original career goal statement and may include a curriculum vita, copies of reports, articles, recommendations, or other written material believed to reflect such potential.

• Graduate Record Exam (GRE) scores are required for all M.P.H. degree applicants. GRE scores are reviewed by the Admissions Committee as one factor among others. An exemption from the GRE requirement may be requested for applicants holding previous doctoral level degrees from accredited U.S. or Canadian universities or for international medical graduates who hold ECFMG certification.

• Applicants who are nationals of countries where English is not the parent language are required to submit satisfactory scores from the Test of English as a Foreign Language (TOEFL). International graduates may request waiver of the TOEFL requirement if their post-secondary schooling was conducted with English as the primary language of instruction.

See Application Procedures and Deadline Dates for a list of required application materials. See Admissions Process for factors considered in the admission decision.

Degree Requirements
• Satisfactory completion of a prescribed course of study of at least one academic year, a minimum of 45 semester credit hours, and demonstration of a breadth of knowledge in the disciplines basic to public health,

• Satisfactory completion of a planned, supervised, and evaluated practice experience (Practicum) that includes the application of public health science and theory, and

• Satisfactory completion of a culminating experience, written in English, demonstrating a substantial knowledge of public health. The culminating experience may take the form of a thesis or report which meets criteria set forth by the School. With the approval of the Advisory Committee, a student may elect to include articles of publishable quality consistent with the standards of a peer-reviewed journal. The number of articles will be subject to the discretion of the Committee. It is expected, however, that the final submission to the Office of Student Affairs will contain all supporting elements of an acceptable culminating experience.

• All M.P.H. students must give an oral presentation of their culminating experience projects at the School prior to graduation. All completed theses or reports will be made available to the public.

Enrollment is required during the semester in which the student is involved in a practicum/internship. Students must also be enrolled in the semester in which the research proposal is submitted and continuously thereafter through the semester in which degree requirements are completed.

Practicum
The practicum experience is an essential part of the curriculum and is a requirement of the Council on Education for Public Health (CEPH, the accrediting body of all U.S. schools of public health) for completion of a Master of Public Health degree. The practicum is designed specifically for M.P.H. and Dr.P.H. students. It consists of an organized internship at an agency or organization located outside the School of
Public Health at Houston that is engaged in work related to public health. Alternatively, the practicum may be done in a UTSPH Center or project that interacts with practice agencies. The student is expected to spend a minimum of 12 hours per week (approximately 180-200 hours total) at the practicum site.

Culminating Experience (CE)
The culminating experience is a requirement of the CEPH, for completion of a Master of Public Health degree. The CE requires a student to synthesize and integrate knowledge and skills acquired in the degree program and apply those to some aspect of professional practice. Some portion of the CE must be original, whether it is the topic itself, an analysis of newly collected or extant data, the reinterpretation of others’ findings, or the design and completion of a practicum-based project. The CE document may be a report based on a public health practice experience, primary or secondary data collection, a systematic review of the literature, or the analysis of a policy or professional practice issue. The student must also give an oral presentation of his or her findings.

Advisory Committee
An Advisory Committee is assigned during the first semester an M.P.H. student is enrolled. The Committee consists of the student, a faculty advisor from the academic unit to which the student was admitted, and an “at large” selection. A student has the option of appointing a third faculty member or a qualified practitioner approved by the Associate Dean for Student Affairs. During evaluation week at the end of each the Fall and Spring semesters, each M.P.H. student meets with his or her advisory committee to review the academic plan and the student’s progress toward completion of the degree program.

Core Requirements for M.P.H. Students
The following courses satisfy the M.P.H. core public health discipline requirement.

Biostatistics:
(Courses PH 1610, PH 1725 and PH 1726 will not be offered after Summer 2010. PH 1610 will become PH 1600 Biostatistics I and PH 1725 and PH 1726 will be combined into PH 1700 Biostatistics II from Fall 2010-Summer 2011.)

PH 1610 (PH 1600 Biostatistics I, beginning Fall 2010-Summer 2011) Introduction to Biostatistics (Available Online)
PH 1725 (and PH 1726 combined into PH 1700 Biostatistics II, beginning Fall 2010-Summer 2011) Intermediate Biostatistics I
PH 1726 (and PH 1725 combined into PH 1700 Biostatistics II, beginning Fall 2010-Summer 2011) Intermediate Biostatistics II

PH 1725 and PH 1726 (PH 1700 Biostatistics II, beginning Fall 2010-Summer 2011) is required for majors in the Division of Biostatistics and the Division of Epidemiology and Disease Control and highly recommended for majors in the Division of Environmental and Occupational Health Sciences. Students majoring in the Division of Health Promotion and Behavioral Sciences or the Division of Management, Policy and Community Health may take PH 1610 (PH 1600 Biostatistics I, beginning Fall 2010-Summer 2011) or the PH 1725 and PH 1726 (PH 1700 Biostatistics II, beginning Fall 2010-Summer 2011) sequence. For non-majors, PH 1725 and PH 1726 (PH 1700 Biostatistics II, beginning Fall 2010-Summer 2011) must be taken in a sequence; one course alone does not satisfy the core requirement.
Environmental and Occupational Health Sciences:

PHM 2100 Foundations of Environmental and Occupational Health Sciences (Available Online)
PHM 2110 Overview of Environmental Health
PHWM 2120 Man’s Impact on the Environment (Available Online)
PHM 2130 Recognition of Environmental and Occupational Hazards
PH 2175 Toxicology I: Principles of Toxicology

Four courses, PHM 2100, PHM 2130, PH 2175 and PH 3725 (listed under Management, Policy and Community Health courses), are required for majors in the Division of Environmental and Occupational Health Sciences. Non-majors may meet the requirement by taking either PHM 2110 or PHWM 2120.

Epidemiology and Disease Control:

PHM 2610 Fundamentals of Epidemiology (Available Online)
PHM 2612 Epidemiology I

PHM 2612 is required for majors in Epidemiology and Disease Control; non-majors meet the requirement by taking PHM 2610.

Health Promotion and Behavioral Sciences:

PHM 1110 Social and Behavioral Aspects of Community Health (Available Online)
PHM 1111 Health Promotion Theory and Methods I
PHM 1112 Health Promotion Theory and Methods II

PHM 1111 and PHM 1112 Health Promotion Theory and Methods I and II is a two course sequence required for majors in the Health Promotion and Behavioral Sciences Division.

PHM 1111 May be taken in place of PHM 1110 at the Regional Campuses.

Management, Policy and Community Health:

PHM 3710 Administration and Public Health
PHM 3715 Introduction to Management and Policy Sciences (Available Online)
PHM 3620 Principles and Practice of Public Health (Available Online)
PH 3725 Health and Safety Program Management
PH 3740 Community-Based Health Assessment
PHM 3922 Economic and Social Determinants of Health

 Majors in the Division of Management, Policy or Community Health, Division of Biostatistics, and the Division of Health Promotion and Behavioral Sciences may meet the requirement by taking any one of the above courses. PHM 3620 is recommended for majors in the Division of Epidemiology and Disease Control. PH 3725 is required for majors in the Division of Environmental and Occupational Health Sciences.
**Doctor of Public Health**

The Doctor of Public Health (Dr.P.H.) degree signifies distinguished scholarly accomplishment. It is primarily offered for those who plan careers involving professional practice, teaching, or community-based research. Students will be affiliated with one of the Divisions listed below. In addition, students may elect an interdivisional concentration, such as Global Health.

**Major Areas of Study:**

- Community Health Practice
- Epidemiology
- Health Promotion/Health Education
- Health Services Organization
- Occupational Health and Environmental Sciences

In order to complete a degree with appropriate public health breadth, Dr.P.H. students are required to complete one minor area of study in one of the five public health disciplines (separate from the major area) and one public health breadth area. A disciplinary minor requires the successful completion of at least nine semester credit hours that address competencies as specified by the student’s advisory committee. The disciplinary minor is based on the student’s degree plan and the recommended minor courses from the Division.

**Regional Campus Dr.P.H. Programs**

- Health Promotion/Health Education (Austin, Brownsville, El Paso)
- Community Health Practice (San Antonio)

**Dr.P.H. Optional Concentrations**

- Global Health (Interdivisional)
- Health Disparities (Interdivisional)
- Leadership (Interdivisional)
- Maternal and Child Health (Interdivisional)

Concentrations consist of a curriculum designed to address a problem or area of public health concern. Concentrations may be added or discontinued to meet the needs of the public health community.

**Admission Requirements**

- Prior M.P.H. degree or equivalent preparation from a regionally accredited university or college, and
- An original goal statement, and
- Outstanding promise for scholarly accomplishment and professional leadership or for extending public health practice, particularly to underserved and vulnerable populations. In addition to the M.P.H., evidence of promise could include previous or current employment in a public health or health-related agency or service to such agencies, curriculum vita, copies of reports, articles, recommendations, or other written material believed to reflect such potential.
- Supporting letters of recommendation documenting and evaluating the applicant’s achievements.
The requirement for the Graduate Record Examination (GRE) varies among Divisions. Applicants should refer to “Special Entrance Requirements” listed in each Division.

Applicants who are nationals of countries where English is not the parent language are required to submit scores from the Test of English as a Foreign Language (TOEFL). International graduates may request waiver of the TOEFL requirement if their post-secondary schooling was conducted with English as the primary language of instruction.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Degree Requirements

- Satisfactory completion of a prescribed course of study of at least one academic year, comprising a minimum of at least 48 semester credit hours.
- Satisfactory completion of a planned, supervised, and evaluated practice experience that includes the application of public health science and theory.
- Satisfactory performance on a qualifying examination deemed the student’s Qualifying Committee to test breadth and depth of knowledge in public health and a capacity to conceive and conduct independent research in the field. Students will have completed at least 36 semester credit hours in preparation for the qualifying examination.
- Satisfactory completion of an original research dissertation, written in English, that constitutes a substantial contribution to the body of knowledge in public health. All doctoral students must present their dissertation research in a public forum at the School prior to graduation. All completed dissertations will be made available to the public.

If a student is unable to successfully complete the qualifying examination (demonstrate competence) after two attempts the student will not be allowed to continue in the Dr.P.H. program. That student’s ability to complete the M.P.H. degree program (if the student does not already possess a M.P.H. degree) is not automatic, and acceptance into the M.P.H. program is decided collectively by Divisional faculty.

Practicum

The practicum is designed specifically for M.P.H. and Dr.P.H. students and consists of an organized internship at an agency or organization located outside the School of Public Health at Houston engaged in work related to public health, or located in a School of Public Health at Houston Center or project that interacts with practice agencies. M.S. and Ph.D. students are encouraged to include a practice experience in their education plan as well, but it is not required. The student is expected to spend a minimum of 12 hours per week (approximately 180-200 hours total) at the practicum site.

Qualifying Committee

The Qualifying Committee assists the student in preparing for the qualifying examination and constructs and administers the exam. The Qualifying Committee consists of at least three regular faculty members, including an academic advisor who is assigned during the admissions process, and two faculty members from the minor field of study and public health breadth area, respectively. The two additional
members of the Committee are selected by the principal advisor and the student and must agree to serve on the Committee. Committee membership must be approved by the Associate Dean for Student Affairs. Successful completion of the qualifying examination advances the doctoral student to a doctoral candidate.

**Dissertation Committee**

A Dissertation Committee of at least three members of the regular faculty, including a principal advisor, must agree to guide the candidate’s research. The advisor and at least two additional members of the regular faculty are recruited by the candidate to constitute the Committee. An optional fourth member of the Committee may be selected to contribute special expertise to the candidate’s research. The optional Committee member may belong to another academic institution. The Committee membership must be approved by the Associate Dean for Student Affairs.

The dissertation requirement will be fulfilled when the document has been approved and signed by all members of the Dissertation Committee, a copy has been filed in the Dean’s office, and an oral presentation of the work has taken place.

**Required Review**

Any student who has been admitted to candidacy for a Dr.P.H. degree (i.e., following successful completion of the qualifying examination) is expected to complete the degree within three years from the date of admission to candidacy, not to exceed seven years total time in the degree program. The dissertation committee will review the case at the end of the three-year period following admission to candidacy and will consider such recommendations as (1) a one-year extension of the degree program, or (2) dismissal. Recommendations of the dissertation committee are forwarded to the Associate Dean for Academic Affairs.
MASTER OF SCIENCE

The Master of Science (M.S.) degree signifies scholarly accomplishment in a public health discipline and is offered to those who plan careers in teaching and research. The M.S. student is expected to focus in one area while gaining an understanding of the interrelations within the public health disciplines. Students are encouraged to draw upon the resources of the School but may also work with faculty at other institutions of higher learning in Houston. The academic plan will be guided by the faculty advisor, the student, and the Advisory Committee to meet the student's specific educational goals. A student elects one field as a major and selects another public health discipline as a minor area of study. The majority of full-time M.S. students take at least two years to complete all degree requirements.

Major Areas of Study

Biostatistics
Environmental Health Sciences (currently inactive)
Epidemiology

The Master of Science degree is offered at the Houston campus only.

Optional Concentrations

Concentrations consist of a curriculum designed to address a problem or area of public health concern. Concentrations may be added or discontinued to meet the needs of the public health community.

Admission Requirements

- Prior baccalaureate or a more advanced degree, in an appropriate field of study, from a regionally accredited university or college, and
- Submission of application and supporting documents by the application deadline.
- The requirement for the GRE varies with the Division. Applicants should refer to “Special Entrance Requirements” listed in each Division.
- Applicants who are nationals of countries where English is not the parent language are required to submit scores from the Test of English as a Foreign Language (TOEFL). International graduates may request waiver of the TOEFL requirement if their post-secondary schooling was conducted with English as the primary language of instruction.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Degree Requirements

- Satisfactory completion of a prescribed course of study of at least one academic year and at least 36 semester credit hours, and
- Satisfactory completion of a research thesis, written in English, deemed by the faculty to be of excellent quality and to demonstrate an appropriate depth of knowledge in the field of study. If approved by the student’s Advisory Committee, a student may elect to include articles of publishable quality consistent with the standards of a peer-reviewed journal. The number of articles will be subject to the discretion of the Committee. It is expected, however, that the final submission to the Office of Student Affairs will contain all supporting elements of an acceptable research thesis.
All completed theses will be made available to the public. All courses taken by students count toward their degree, but no more than six (6) semester credit hours of the 36 credit hour minimum may be earned for thesis research.

**Advisory Committee**
A faculty advisor representing the field of study is appointed during the admissions process. During the first semester of enrollment, the student and faculty advisor nominate two additional regular UTSPH faculty members from major and minor areas, who with the faculty advisor constitute the student’s Advisory Committee. The Committee assists in the selection of a course of study and related academic matters and evaluates the student’s academic progress. A fourth member of the Committee may be selected to contribute special expertise to the student’s research. The optional committee member may belong to another academic institution. Committee membership is approved by the Associate Dean for Student Affairs.
**DOCTOR OF PHILOSOPHY**

The Doctor of Philosophy (Ph.D.) degree in Public Health represents outstanding scholarly attainment and signifies a capacity for independent study. It is primarily a research and teaching degree. Curricula leading to this degree are offered in the following fields of study:

- Biostatistics
- Behavioral Sciences
- Environmental Health Sciences
- Epidemiology
- Management and Policy Sciences

In order to complete a degree with appropriate public health breadth, Ph.D. students are required to complete one minor area of study in a public health discipline (separate from the major area) and one public health breadth area. A disciplinary minor requires the successful completion of at least nine semester credit hours that address competencies as specified by the student’s advisory committee. The disciplinary minor is based on the student’s degree plan and the recommended minor courses from the Division.

**Regional Campus Ph.D. Programs**

- Epidemiology (Austin, Brownsville, Dallas)

Doctoral candidates may complete their course of study by engaging in research in residency in Houston or at a Regional Campus in Austin, Brownsville, Dallas, El Paso or San Antonio. Research activities of the faculty at the Houston and Regional Campuses are indicated in the Division’s list of faculty.

**Admission Requirements for Bachelor’s Prepared Applicants**

Direct admission to the Ph.D. degree program for those holding a bachelor’s degree is offered in Biostatistics or Epidemiology.

**Biostatistics:**

- Prior bachelor’s degree (B.A. or B.S.) in a mathematical, biomedical, or physical science from a regionally accredited university or college; and
- An original goal statement; and
- Outstanding promise of scholarly accomplishment and research capability; and
- Submission of application and supporting documents by the application deadline; and
- Graduate Record Exam (GRE); and
- Applicants who are nationals of countries where English is not the parent language are required to submit scores from the Test of English as a Foreign Language (TOEFL). International graduates may request waiver of the TOEFL requirement if their post-secondary schooling was conducted with English as the primary language of instruction.

*See Special Entrance Requirements* listed in the Division of Biostatistics for further information.
Epidemiology:
- Prior bachelor’s degree that indicates the development of strong scientific and analytical skills, such as a degree in biology, biochemistry, mathematics, or statistics or a professional doctoral degree in a medical field, such as an M.D., D.D.S., or D.V.M. degree or a prior doctoral degree in a field not directly related to medicine or public health, coupled with evidence of adequate preparation in the biological sciences and mathematics; and
- An original goal statement; and
- Outstanding promise of scholarly accomplishment and research capability; and
- Submission of application and supporting documents by the application deadline; and
- Graduate Record Exam (GRE); and
- Applicants who are nationals of countries where English is not the parent language are required to submit scores from the Test of English as a Foreign Language (TOEFL). International graduates may request waiver of the TOEFL requirement if their post-secondary schooling was conducted with English as the primary language of instruction.

See Special Entrance Requirements listed in the Division of Epidemiology and Disease Control for further information.

Admission Requirements for Master’s or Doctoral Prepared Applicants
- Prior master’s or a more advanced degree, in an appropriate field of study, from a regionally accredited university or college; and
- An original goal statement; and
- Outstanding promise of scholarly accomplishment and research capability; and
- Submission of application and supporting documents by the application deadline.
- The requirement for the GRE varies with the Division. Applicants should refer to “Special Entrance Requirements” listed in each Division.
- Applicants who are nationals of countries where English is not the parent language are required to submit scores from the Test of English as a Foreign Language (TOEFL). International graduates may request waiver of the TOEFL requirement if their post-secondary schooling was conducted with English as the primary language of instruction.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Degree Requirements
- For the student with a master’s degree, satisfactory completion of a prescribed course of study of at least one academic year and a minimum of at least 48 semester credit hours; for the student with a bachelor’s degree, satisfactory completion of a prescribed course of study of at least one academic year and a minimum of at least 72 semester credit hours.
- Satisfactory performance on a qualifying examination deemed by the faculty of the Advisory Committee to test depth of knowledge in the major and two minor fields of concentration in the public health sciences, and a capacity to conceive and conduct independent research in the chosen field.
Students with a master’s degree will have completed at least 36 semester credit hours in preparation for the qualifying examination. Students with a bachelor’s degree will have completed at least 60 semester credit hours in preparation for the qualifying examination.

- Satisfactory completion of an original research dissertation, written in English, that makes a substantial contribution to knowledge in the public health sciences. All doctoral students must present their dissertation research in a public forum at the school prior to graduation. All completed dissertations will be made available to the public.

If the student is unable to successfully complete the qualifying examination after two attempts, the student will not be allowed to continue in the Ph.D. program. For students with a bachelor’s degree student the ability to complete an M.S. degree program is not automatic, and acceptance into the M.S. program is decided collectively by Divisional faculty.

All courses taken by students count toward their degree, but students with a masters degree, no more than a total of nine (9) semester credit hours of the 48 semester credit hour minimum may be earned for dissertation research. For students with a bachelor’s degree, no more than a total of nine (9) semester credit hours of the 72 credit hour minimum may be earned for dissertation research.

Enrollment is required during the semester in which the qualifying examination is taken. Candidates for a degree must also be enrolled during the semester in which the research proposal is submitted and continuously through the semester in which degree requirements are completed.

### Advisory Committee
The Qualifying Committee advises the student in preparation for the qualifying examination and administers the exam. At least three members of the regular faculty, including an academic advisor and representatives from faculty in the minor fields of study and the public health breadth area, comprise the Qualifying Committee. The academic advisor is assigned during the admission process. Two additional regular faculty members are selected from the student’s minor fields of study and breadth area, respectively. Committee membership is approved by the Associate Dean for Student Affairs. Successful completion of the qualifying examination converts the doctoral student to doctoral candidate.

### Dissertation Committee
A Dissertation Committee comprised of at least three members of the regular faculty, including the advisor, will be recruited by the candidate to provide guidance in a research dissertation emphasizing depth of knowledge in the area of concentration. The second member of the Committee represents the student’s major discipline, while the third member represents a different discipline, often one of the student’s minor areas of study. A fourth optional member of the Committee may be selected to contribute special expertise to the candidate’s research. The optional committee member may belong to another academic institution. Committee membership must be approved by the Associate Dean for Student Affairs.

The dissertation requirement will be fulfilled when the document has been approved and signed by all members of the Dissertation Committee, a copy has been filed in the Dean’s office, and an oral presentation of the work has taken place.
Required Review

Any student who has been admitted to candidacy for a Ph.D. degree (i.e., successful completion of the qualifying examination) is expected to complete the degree within three years from the date of admission to candidacy, not to exceed seven years total time in the degree program. Otherwise, the Committee will review the case at the end of the three-year period following admission to candidacy and will consider such recommendations as (1) a one-year extension of the degree program or (2) dismissal. Recommendations of the dissertation committee are forwarded to the Associate Dean for Academic Affairs.
**Dual Degree Programs**

Dual degree programs in The University of Texas School of Public Health are designed so that the curricula of both degrees are integrated to the extent possible. Through these programs students are able to complete both degrees in a shorter time period than doing each separately.

Students in the dual degree program must be admitted separately to each institution and must meet the requirements of each institution for its respective degree. Admission to one program does not assure admission to the other. Students in the dual degree program will receive a diploma from each degree program after meeting the individual requirements of each program.

**J.D./M.P.H. Program**

Students interested in health law and policy may study concurrently for a Master of Public Health degree from the School and a Juris Doctorate from the University of Houston Law Center.

When possible and appropriate, the student’s coursework at the two institutions is coordinated to provide a curriculum that integrates law with public health sciences. Students admitted to both institutions may transfer credits between institutions for appropriate coursework. However, prior approval is required, and the procedures of the institution receiving the academic credits must be followed. Typically, a student in the dual degree program develops a culminating experience (CE) dealing with a legal issue affecting the public’s health. The CE should demonstrate the student’s mastery of the analytical methods used in public health and how these methods assist with the development of public health policy.

**Contact**

Carl S. Hacker, Ph.D., J.D.
[Carl.S.Hacker@uth.tmc.edu](mailto:Carl.S.Hacker@uth.tmc.edu)

**M.D./M.P.H. Program (Houston)**

Medical students at The University of Texas Medical School at Houston may apply for the five-year integrated M.D./M.P.H. Program. Students spend the fall and spring semesters at the School of Public Health at Houston after the first, second, or third medical school year. Interested students may apply early (as soon as possible after medical school acceptance) so that they can enroll in online classes during the summer before they begin medical school. This facilitates completion of the requisite hours needed for graduation. Students may also apply to the dual degree program after they have begun medical school, but this may lengthen the M.P.H. program beyond five years. The usual application procedures and deadlines should be followed at the School of Public Health at Houston, in consultation with the Medical School’s Associate Dean for Educational Programs.

**Contact**

Jan M. Risser, Ph.D.
[Jan.M.Risser@uth.tmc.edu](mailto:Jan.M.Risser@uth.tmc.edu)
**M.D./M.P.H. Program (San Antonio)**

This four-year dual degree program is designed for students attending medical school at The University of Texas Health Science Center at San Antonio. Students are advised to complete two public health core courses in the summer prior to medical school. The remaining public health courses are completed during the four-year medical curriculum with the option of a fifth year for those finding the four-year curriculum too demanding. The dual degree program is integrated so that a number of courses and learning experiences in the medical school are counted toward the M.P.H. degree program.

The usual application procedures should be followed at the School of Public Health at Houston. However, early applications will be accepted so that an admissions decision may be made prior to the applicant’s selection of one of The University of Texas medical schools.

*Contact*
Sharon P. Cooper, Ph.D. or Joseph B. McCormick, M.D.
Sharon.P.Cooper@uth.tmc.edu Joseph.B.McCormick@uth.tmc.edu

**M.D./M.P.H. Program (El Paso)**

This four-year dual degree program is designed for students attending medical school at Texas Tech University Paul L. Foster School of Medicine. Students are advised to complete public health core courses in the summer prior to medical school. The remaining public health courses are completed during the four-year medical curriculum. The dual degree program is integrated so that a number of courses and learning experiences in the medical school are counted toward the M.P.H. degree program.

The usual School of Public Health application procedures should be followed. However, early applications will be accepted so that an admissions decision may be made prior to the applicant’s notification of admission to medical school.

*Contact*
Theresa Byrd, Dr.P.H.
Theresa.L.Byrd@uth.tmc.edu

**M.D./M.P.H. Program (Baylor College of Medicine)**

The University of Texas School of Public Health (UTSPH) in conjunction with Baylor College of Medicine offers students the opportunity to obtain a M.P.H. Degree along with their medical doctorate degree. Usually, a student earns both degrees in five years of full time study. Students should apply to the UTSPH at the same time as the medical school, although application decisions will be considered separately. During the first three years of medical school, the M.P.H. curriculum is integrated with the standard medical school curriculum. The fourth year is spent primarily at the School of Public Health with students returning to the medical school for the fifth and final year. Students may also apply to the dual degree program after they have begun medical school, but this may lengthen the M.P.H. program beyond five years.

*Contact*
Linda Piller, M.D.
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**M.S.N./M.P.H. Program**
Students wishing to pursue concurrent M.S.N. and M.P.H. degrees may apply to the integrated program available through the School of Public Health (UTSPH) and The University of Texas School of Nursing at Houston (SON). Those interested in the program must be admitted separately to each School and must meet the admission and degree requirements of each School. Students admitted to the integrated program, however, can meet the requirements of both degree programs with fewer credit hours than if the degrees were earned separately and may submit a single thesis. Students enrolled in this program will emphasize public health skills at UTSPH, clinical skills at the SON, and the combining of these skills through courses that are taught by faculty from both schools. Students who are contemplating entering the dual degree program are strongly encouraged to seek further information before applying.

*Contact*
Beth E. Quill, M.P.H.
Beth.E.Quill@uth.tmc.edu

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**M.S.W./M.P.H. Program**
Public health and social work professionals deal with complex and mutually reinforcing health and social problems, and with their assessment, prevention, and reduction in individuals and populations. The University of Texas School of Public Health at Houston and the University of Houston Graduate School of Social Work have developed a M.S.W./M.P.H. degree program to address these concerns.

Both degree programs require completion of specific courses and acquisition of specific competencies, but each will give academic credit for a limited number of courses completed at the other institution. The development of specific academic programs, and scheduling of courses, field work, and practica for individual students are guided by advisory committees which include faculty from both institutions.

*Contact*
Michael W. Ross, Ph.D., M.P.H.
Michael.W.Ross@uth.tmc.edu

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**M.S.S.W./M.P.H. Program (Austin Regional Campus)**
Public health and social work professionals have complementary interests in understanding and improving the health and well-being of individuals and populations. Interested students may study for a Masters in Public Health from The University of Texas School of Public Health Austin Regional Campus and a Masters of Science in Social Work at The University of Texas at Austin School of Social Work. Students are expected to integrate the knowledge and learning experiences through shared credit courses as well as practicum and culminating (thesis) experiences. Students will work with an advisory committee that includes faculty from both institutions. This program offers students an opportunity to integrate their studies in social work and public health, while minimizing duplication in course content and reducing the time and costs that are associated with pursuing each degree independently. The integrated program is designed as a three-year course of study.
M.S. or Ph.D./M.P.H. Program
The M.S./M.P.H. and the Ph.D./M.P.H. dual degree programs combine the M.P.H. from the School of Public Health with the M.S. or Ph.D. degree from The University of Texas School of Biomedical Informatics at Houston. The training and curriculum in the dual degree program is designed to provide students and future leaders in public health with the necessary skills to be leaders in the field of Public Health Informatics. The dual degree program provides an integrated curriculum that includes a number of shared courses as well as a practicum experience and/or the thesis topic in the area of public health informatics. The selection of specific academic programs and scheduling of specific courses, field work, and practica for individual students is guided by an advisory committee, which includes faculty from both institutions.

Students in the dual degree program must be admitted separately to each School and must meet the requirements of each School for its respective degree. Admission to one program does not assure admission to the other. Students in the dual degree program will receive a diploma from each degree program after meeting the individual requirements of each program.

Contact
Keith D. Burau, Ph.D.
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M.B.A./M.P.H. Program
The Master of Public Health (M.P.H.) and Master of Business Administration (M.B.A.) dual degree program is a collaborative effort between The University of Texas School of Public Health Brownsville Regional Campus and The University of Texas at Brownsville Texas Southmost College. The M.B.A./M.P.H. graduate degree program is designed to prepare students from many different academic backgrounds, experiences, and interests for careers in the fields of public health, health services, research, policy development, economics, business, management, and operations. This program provides opportunities to gain advanced knowledge and skills needed to assume upper level management and leadership positions in a broad range of health and business related industries and career tracks. The curriculum is specifically designed to provide students a breadth and depth of academic knowledge and perspective, supported through classroom and practice-based experiences. The M.B.A./M.P.H. program is only available through the UTSPH Brownsville Regional Campus.

Contact
Joseph McCormick, M.D.
Joseph.B.McCormick@uth.tmc.edu
**M.B.A./M.P.H. Program (San Antonio)**

Students interested in combining business administration and public health skills may pursue both degrees through application to the integrated three year M.B.A./M.P.H. dual degree program. The M.B.A. degree is offered by The University of Texas at San Antonio College of Business and may be earned concurrently with an M.P.H. degree from The University of Texas School of Public Health at the San Antonio Regional Campus (SARC). This dual degree program allows students to complete both degrees more efficiently and with fewer total credit hours than if each degree were done separately.

Students interested in the dual degree program must apply and be admitted separately to each institution according to the usual application procedures of each school and meet the requirements of each institution for its respective degree. Admission to one program does not ensure admission to the other program.

**Contact**
Sharon Cooper, Ph.D.
Sharon.P.Cooper@uth.tmc.edu

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**Ph.D./M.P.H. Program**

The Doctor of Philosophy (Ph.D.) and Master of Public Health (M.P.H.) is a collaborative effort between The University of Texas Medical Branch and The University of Texas School of Public Health at Houston. The Ph.D./M.P.H. combines a research degree in the biomedical sciences with valuable training in the public health disciplines. Professionals trained in both areas will be prepared to pursue careers in varied health-related fields including academia, governmental agencies, biotech firms, pharmaceutical corporations, law, and public health.

**Contact**
Kristy Murray, D.V.M., Ph.D.
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NON-DEGREE PROGRAMS

Non-degree programs provide students who do not wish to seek a formal degree an opportunity to take School of Public Health courses for credit. A separate application procedure is required for admission as a non-degree student. The application and a description of the process may be found on the UTHSC-H registrar’s website. Admission to a non-degree program does not assure subsequent admission to a degree program. Persons interested in applying to a degree program must follow the usual application procedure.

The non-degree student is allowed to take up to 16 semester credit hours of School of Public Health courses, including non-degree students associated with a formally-recognized educational collaboration or the Certificate of Public Health program. These courses (i.e. up to 16 semester credit hours of courses may be applied to the required credit hours of a UTSPH degree program provided that a grade of A or B was earned; the course was completed within five years of matriculation into the degree program; and the applicant meets all the requirements for admission to the graduate degree program.

Baylor College of Medicine Educational Collaboration
Students enrolled in the Baylor College of Medicine’s (BCM) Clinical Scientist Training program, including students in both the BCM Master of Science and Certificate Programs, may apply to the School of Public Health as non-degree students. Typically, the non-degree student under this program agreement will be eligible to enroll in four to six courses, depending on the need of the student.

Contact
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The University of Texas at San Antonio Educational Collaboration
This non-degree program in the School of Public Health is specifically designed for students enrolled in the Applied Statistics and Demography Ph.D. program at The University of Texas at San Antonio. Applicants will be reviewed for admission to the UTSPH as non-degree students consistent with current policies and, if admitted may attend classes at the San Antonio Regional Campus. Students may take up to eight School of Public Health courses, and all successfully completed courses will be credited toward the UTSA Applied Statistics and Demography Ph.D. program.

Contact
Sharon P. Cooper, Ph.D.
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Certificate in Public Health
The Certificate in Public Health program is intended for public health practitioners and individuals wishing to increase their basic public health knowledge or considering a graduate degree in the field. The five courses in this non-degree program cover the core content of the disciplines that are basic to public health and are available at all campuses and online. A certificate is awarded to students who pass all five courses. The Certificate is designed to be completed in one year.
Certificate in Public Health Informatics
The Certificate in Public Health Informatics is a joint program between two of The University of Texas Health Science Center at Houston schools: the School of Health Information Sciences and the School of Public Health. The Certificate was created to address the growing emphasis of public health informatics (PHI) at federal and national level and the increased demand in PHI employment market. The Certificate consists of five courses that provide the basic knowledge and skills in epidemiology, biostatistics, informatics, public health informatics, and one elective. A certificate is awarded to students who pass all five courses. The Certificate is designed to be completed in one year.

Contact
Ross Shegog, Ph.D.
Ross.Shegog@uth.tmc.edu

Certificate in Maternal and Child Health
The Certificate in Maternal and Child Health (MCH) was created to provide public health professionals working in maternal and child health agencies and programs with a flexible and accessible curriculum intended to enhance skills in designing and implementing effective community-based MCH programs. The MCH Certificate consists of four courses providing basic instruction and skills development in reproductive, perinatal, child, and adolescent health. A background in epidemiology or biostatistics is required either before admission to the MCH certificate program, or under certain circumstances may be completed before initiating MCH Certificate coursework. A certificate is awarded to students who pass all required courses. The MCH Certificate is designed to be completed in one year.

Contact
Margaret O’Brien Caughy, Sc.D.
Margaret.O.Caughy@uth.tmc.edu

Certificate in Health Disparities
A certificate program in Health Disparities provides an orientation to health disparities for individuals who are not seeking a degree in public health but who are working in public health or health care and seek to focus their work on the recognition, description and elimination of disparities. Health disparities have been defined as differences in “the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates.” Health disparities exist across race/ethnic groups, geographic residence, gender, age, and disability status. Determinants of health disparities are multi-factorial and include cultural factors, socioeconomic factors, racism/discrimination, and political factors. Public health, health care practitioners and researchers play a critical role in the identification and amelioration of health disparities. The University of Texas School of Public Health builds upon extensive faculty expertise and existing courses to provide focused training in health disparities for SPH students and other professionals.
Contact
Maria E. Fernandez, Ph.D. or Luisa Franzini, Ph.D.
Maria.E.Fernandez@uth.tmc.edu or Luisa.Franzini@uth.tmc.edu
**SPECIAL PROGRAMS**

**Residency Program in Occupational and Environmental Medicine**

This Program has been approved since 1977 by the Accreditation Council for Graduate Medical Education (ACGME) and offers occupational medicine residency training to qualified physicians in preparation for certification by the American Board of Preventive Medicine. The residency consists of a two-year plan of study (academic and practicum years). Applicants must possess the M.D. or D.O. degree and must have completed a minimum of one year (PGY-1) of clinical training in an ACGME-accredited program. Candidates not already holding the M.P.H. degree or its equivalent must apply for and achieve admission to the School of Public Health M.P.H. degree program.

Program Director  
George Delclos, M.D., M.P.H., Ph.D.  
George.Delclos@uth.tmc.edu

Residency Coordinator  
Marice Barahona  
Marice.Barahona@uth.tmc.edu

**Dietetic Internship**

R.D./M.P.H., R.D./M.S., R.D./Dr.P.H., R.D./Ph.D.

This combined program offers the opportunity to pursue a dietetic internship in conjunction with a graduate degree in public health. Individuals with a background in nutrition and dietetics and a degree from a didactic program in dietetics are eligible to apply. Separate applications are required for each program, and admission to the internship program School of Public Health. Applications for fall admission to the School of Public Health must be received by December 14th of the year of admission; applications for the Dietetic Internship must be received by February 14th. The Dietetic Internship Program is fully accredited by the American Dietetic Association and participates in their national matching program. The program is also approved by The Commission on Accreditation for Dietetic Education. The Dietetic Internship Program provides more than 1000 supervised practice hours in four major areas of dietetics: Community Nutrition, Food Service Systems Management, Medical Nutrition Therapy, and Specialty Practice. Students accepted into the program are placed in affiliations within the Texas Medical Center and throughout the city of Houston and Harris County.

Director  
Ann-Marie Hedberg, Dr.P.H., R.D., L.D.  
Ann-Marie.Hedberg@uth.tmc.edu
APPLICATION PROCEDURES AND DEADLINE DATES

Students enrolling in the School of Public Health are expected to have reliable access to a computer, preferably their own. Software needs are dependent on academic fields and career goals. Hardware specifications depend on a variety of factors, including software, speed, and capacity. In general, students will need word processing, spreadsheets, data base management, statistics, and access to the Internet. Computers that use Windows®-based operating systems are strongly recommended. Students with questions may refer to Information Technology Services.

Completed applications for degree programs, with all supporting documents, must be received by:

February 1 for Fall Semester
August 1 for Spring Semester

Completed applications for certificate, non-degree programs and petitions, with all supporting documents, must be received by:

October 1 - Spring Semester
March 1 - Summer Session
June 15 - Fall Semester

There are no rolling admissions. Applicants will be notified by mail of the Admission Committee’s decision within 90 days of the application deadline, provided that all supporting materials are received by the application deadline.

Degree Program Application Procedures
Applications to the School of Public Health are received and processed using either the application form that is available through The University of Texas Health Science Center at Houston Office of the Registrar or the centralized School of Public Health Application Service (SOPHAS). Applicants to dual degree programs apply to the School of Public Health independently of the respective complementary dual degree. Dual degree program applicants should use the online application form available through The UT Health Science Center at Houston registrar’s office website. The following contains the elements of the application materials required when submitting online The UT Health Science Center at Houston Office of the Registrar application form for the dual degree programs and the process for using the centralized application service, SOPHAS.

Application to dual degree programs
Persons wishing to enroll in dual degree programs at the School of Public Health should submit the following to the Office of the Registrar, The University of Texas Health Science Center at Houston (UTHSC-H), P. O. Box 20036, Houston, TX 77225-0036:

- A completed application form. Applicants should describe their interests in public health in the essay/goal statement section of the application form. The essay should address educational goals specific to the chosen program of study. Applicants should also describe career goals as well as any experience relating to the health field, research, community service, and leadership positions. Experience in these areas may include work, internship, or
volunteer settings. Applicants are encouraged to describe how significant
life experiences have influenced their motivation, qualifications, or aca-
demic record. This essay/goal statement is central to the admission deci-
sion and is read by the faculty. (Each applicant will be reviewed by only one
program.)

• The requirements for admission also include evidence of proficiency in ba-
sic mathematical or other quantitative skills, documented through tra-
scripts, publications, or statement as to how this proficiency was achieved,
or will be achieved, prior to enrollment.

• A $30.00 non-refundable application fee.

• Official transcripts covering all periods of post-secondary enrollment in all
accredited institutions of higher education attended. Applicants should re-
quest that all institutions attended send official (original) transcripts direct-
ly to the Office of the Registrar, UTHSC-H, P. O. Box 20036, Houston, TX
77225-0036.

• Graduates of Texas colleges and universities should request that transcripts
be sent in electronic format. Copies of transcripts sent by the applicant are
not considered. Transcripts must include both grades and credit hours.
Foreign graduates whose academic institutions cannot send official tra-
scripts (marks sheets) should call the Office of the Registrar for instructions
(713-500-3361). The School prefers a grade point average of at least 3.0 or
higher on a 4.0 scale.

• Letters of recommendation from at least two persons qualified to evaluate
the applicant’s academic or professional performance, ability, motivation,
and character. Academic letters of reference are preferred. Letters should
be on official letterhead.

• Applicants who are nationals of countries where English is not the paren-
tal language are required to submit scores from the Test of English as Foreign
Language (TOEFL). (See the application form for current requirements.) A
minimum score of 565 on the paper-based test, 225 on the computer-
based test (CBT) or 86 on the internet-based test (IBT) is required for ad-
mission to the School. Information and application booklets may be ob-
tained from any University admissions office or by writing to the Office of
the Registrar at the address given below.

• Applicants who hold degrees from institutions outside of the U.S. must
submit their transcripts for an educational credential evaluation and de-
termination of U.S. equivalency. This can be accomplished by submitting
transcripts to either:

  Educational Credential Evaluators, Inc.
P.O. Box 514070
Milwaukee WI 53203-3470
USA
(414) 289-3400
Email: mailto:eval@ece.org
Website: http://www.ece.org/

or
The results of the evaluation must be submitted directly to the Office of the Registrar by the evaluation agency.

- Graduate Record Exam (GRE) scores are required for all M.P.H. applicants. Some programs of study require GRE scores for Dr.P.H., M.S., and Ph.D. applicants (see application form for current requirements). GRE scores will be reviewed by the Admissions Committee as one factor among others. Applicants holding previous doctoral level degrees from accredited U.S. or Canadian universities may request an exemption from the GRE requirement.
- A combined GRE score (quantitative and verbal sections) below 1000 at the master’s level or below 1200 at the doctoral level is generally not competitive. This test is given at many universities across the United States and in many foreign cities. Information and application booklets may be obtained from any University admissions office or by writing to the Office of the Registrar at the address given below. Only scores received directly from Educational Testing Service (ETS) will be considered. The GRE is but one of several factors considered in the aggregate during the admission process.
- Any published papers, reports, or other materials believed to provide information on an applicant’s capability and performance should be included in the application. Several programs require a writing sample (see application form). NOTE: Please send copies only. The School will not be responsible for returning this material.

Application to all other degree programs

Applicants to the M.S., Ph.D., M.P.H., and Dr.P.H. degrees apply to the School of Public Health using the centralized application service application that is available through SOPHAS (http://www.sophas.org/). The centralized application service is intended to streamline the application process for applicants who intend to apply to multiple institutions as only one set of transcripts, reference letters and standardized test scores need to be submitted in support of the application. The application fee through SOPHAS is based upon a sliding scale that is determined by the number of schools the applicant is intending to apply to. All of the supporting documentation detailed above for the dual degree program applications is required of those applicants submitting their applications through SOPHAS. Detailed instructions for submission of applications using SOPHAS are described in the SOPHAS link provided above. Official transcripts must be submitted directly to SOPHAS at the following addresses:
For regular mail, please send your transcript to:
SOPHAS
P.O. Box 9111
Watertown, MA 02471-9111

For Overnight Delivery ONLY:
SOPHAS/o Liaison International
311 Arsenal Street Watertown, MA 02472
Phone: 617-612-2090

**Admissions Process**

Applicants to the M.P.H. and Dr.P.H. degree programs apply to one of the programs housed within one of the five Divisions. Master of Public Health applicants and applicants to certain Dr.P.H. programs may also apply to one of the five Regional Campuses: Austin, Brownsville, Dallas, El Paso, or San Antonio. Applicants to the Ph.D. degree programs indicate one of the five public health Disciplines or Regional Campus-based Ph.D. programs for review; applicants to the M.S. degree programs may select one of two public health disciplines. The faculty of the appropriate program of study or Regional Campus reviews each application and all supporting documentation. Their recommendations are presented to the Admissions Committee of the School, which is composed of one faculty representative from each Division and Regional Campus, and two student representatives. After reviewing the recommendations, the Committee may concur with the recommendation or override it. The recommendations from the Admissions Committee of the School are forwarded to the Dean for administrative review and notification of applicants.

Factors believed to contribute to the academic success of students and their subsequent contributions to the knowledge base and practice of public health throughout Texas are considered in each admission action. Applicants are screened for their potential for success in the program to which they are applying. These criteria, and the material reviewed in evaluating each, include:

- Prior academic preparation (depth, breadth, and performance): application, college transcripts, letters of recommendation;
- Relevant work experience (particularly public health practice in or research related to underserved and vulnerable communities): application, essay/goal statement, letters of recommendation;
- Educational Goals (should be consistent with the chosen area of study): application, essay/goal statement, letter of recommendation;
- Career Goals (especially the intent to practice public health in underserved and vulnerable communities): application, essay/goal statement, letters of recommendation;
- Motivation (describe any special obstacles or challenges that have been overcome to achieve goals thus far): essay/goal statement, letters of recommendation, college transcripts;
- Integrity: essay/goal statement, letters of recommendation;
- Community Service (particularly service to diverse communities in need): application, essay/goal statement, letters of recommendation;
- Scores on Graduate Record Examination and TOEFL (if required); standardized tests;
• Theses, publications, and other scholarly works: supplemental documents provided by applicant.

While personal interviews are not routinely required, prospective students are encouraged to visit the School and discuss their proposed program with faculty and staff.

Address application inquiries to:

Office of the Registrar
University of Texas Health Science Center at Houston
P.O. Box 20036
Houston, Texas 77225-0036

Direct telephone inquiries to the School of Public Health: (713) 500-9032.
(8:00 a.m. to 5:00 p.m., Central Standard Time)

UTLINK Student.net is available for applicants to check on the status of the application and supporting documents. Enrolled students may also use this service to access their official grades, register for classes, view bills and pay fees, check on the status of financial aid applications, submit address changes, and request official UTHSC-H transcripts.

“Right to Petition” to a Doctoral Program
Applicants to the following doctoral programs are expected to hold a master’s degree (M.S. or M.P.H.) or equivalent in the field: Biostatistics, Environmental and Occupational Health Sciences, Epidemiology and Disease Control, and all of the Doctor of Public Health programs. Students who have a master’s degree in an unrelated area of study but who otherwise meet admission standards to the School may be admitted to the master’s program with the “right to petition” to a doctoral program. This mechanism allows the attainment of equivalency of the M.P.H. or M.S. in the student’s public health field of study without completing a culminating experience or thesis. The student consults with an advisor to ensure that the necessary courses to satisfy the master’s equivalency have been completed. Once equivalency is met, the student may apply to the doctoral program.

Applicants who are candidates for the “right to petition” are identified during the admissions process. The “right to petition” is granted by the Admissions Committee and designated in the letter of admission to the master’s program. Students who are currently enrolled in any degree program in the school are not eligible to invoke the “right to petition.”

“Right to petition” students apply to a doctoral program by completing the “Petition for Admission to a Doctoral Program” form (available on the Student Affairs website) and submitting the petition request to the Admissions Committee. Course credits earned toward the master’s equivalency may be counted toward the credit hours required for completion of the doctoral degree.

Direct Admission to a Ph.D. Program
The Division of Biostatistics may admit students holding a B.A. or B.S. degree directly into the Ph.D. program. A student requesting direct admission to the Ph.D. program is expected to have a bachelor’s degree that emphasizes the development of
strong quantitative skills, such as degrees in mathematical, biomedical or physical sciences. The successful applicant will have mastered multivariable calculus and linear algebra.

The Division of Epidemiology may admit students holding a B.A. or B.S. degree directly into the Ph.D. program. A student requesting direct admission to the Ph.D. program is expected to have a bachelor’s degree that demonstrates the development of strong scientific and analytical skills or a professional doctoral degree in a medical field, or a doctoral degree in a field not directly related to medicine or public health that is coupled with evidence of adequate preparation in biological sciences and mathematics. In addition, evidence of academic achievement that includes completion of advanced courses in biological sciences, at least two semesters of college-level calculus (or the equivalent) and at least one course in statistics. All other requirements for admission to the Ph.D. program as described above should be met as well.

Criminal Background Check

Entering students will be expected to authorize and pay for a criminal background check by an entity designated by the School. Failure to comply with the above shall be cause for withdrawal of acceptance.

Fresh Start

In 1993, the Texas Legislature passed a bill regarding an academic fresh start. The following paragraph describes options pursuant to this law. A Texas resident may apply for admission to and enroll as an undergraduate student under Texas Education Code 51.931, “Right to an Academic Fresh Start.” If an applicant elects to seek admission under this section, The University of Texas Health Science Center at Houston shall not consider academic course credits or grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who applies under this section and is admitted as a student may not receive any course credit for courses undertaken 10 or more years prior to enrollment.

If a student who enrolls under this section completes a prescribed course of study, earns a baccalaureate degree, under the "academic fresh start" statute, Texas Education Code, § 51.931, and applies for admission to a postgraduate or professional program, the student will be evaluated on only the grade point average of the course work completed after enrollment under this statute and the other criteria stated herein for admission to the postgraduate or professional program. Nothing in this section prohibits a public institution of higher education from applying standard admissions criteria generally applicable to any person seeking admission to the institute.

TSI – Texas Success Initiative (Formerly TASP)

The Texas Success Initiative (TSI), formerly TASP, is a state mandated program that is designed to improve student success and outcomes in college. Any student seeking to enroll in an undergraduate program at The University of Texas Health Science Center at Houston must provide proof of successful completion of the Texas Success Initiative prior to being enrolled. For more information on specific testing requirements, testing exemptions, and college readiness, go to Texas Success Initiative Rules. See exemptions and waivers from TSI testing requirements based on other test scores – TAAS, TAKS, SAT, ACT.
**TUITION AND FEES**

The resident tuition for 2009-2010 is $50.00 per semester credit hour. The 2009-2010 nonresident rate is $327.00 per semester credit hour as determined by The Texas Higher Education Coordinating Board. A resident doctoral student who has a total of 129 or more semester credit hours of doctoral work at a Texas institution of higher education is required to pay nonresident doctoral tuition rates. Contact the UTSPH Associate Dean for Management for more information.

In addition, UTHSC-H assesses a $46.00 per semester credit hour charge of designated tuition for deferred maintenance, and a graduate differential tuition of $50.00 per semester credit hour for residents and $185.00 per semester credit hour for nonresidents. Tuition and fees are subject to change by legislative or regental action and become effective on the date enacted. The Texas Legislature does not set the specific amount for any particular student fee. Student fees are authorized by state statute; however, the specific fee amounts and determination to increase fees are made by the University administration and The University of Texas System Board of Regents.

**International Students**

New students who are not U.S. citizens must obtain clearance through the International Office prior to attempting to register by UTLINK. Students on temporary “F” or “J” visas must be enrolled full-time or will be considered in violation of visa status.

**Tuition Waiver**

Texas law provides for the waiver of tuition and/or fees for students under some conditions, such as certain veterans, and deaf and blind students. Specific exemptions exist for children of veterans killed in action and children of POWs or MIAs. For more information, contact the Office of the Registrar at (713) 500-3361, or by email at registrar@uth.tmc.edu.

**Texas Residence Requirements**

In general, residence in Texas for tuition purposes for an individual over 18 years of age is established if: the individual has been gainfully employed within the state for a 12-month period immediately preceding registration at the University. An individual who registers at the University before having resided in Texas for 12 months will be classified as a nonresident; an individual who has come to the state primarily for the purpose of education will be classified as a non-resident.

All students are classified as non-residents until a Residency Questionnaire is completed and returned to the Registrar’s Office for determination of residency status. Students who claim Texas as their state of residence must complete the Residency Questionnaire Form.

Nonresident students who believe they are eligible to pay Texas tuition rates due to employment, scholarship, military assignment, Academic Common Market, or economic development must complete a "Petition for Determination of Resident Tuition" and submit it to the Registrar’s Office each term. If the Registrar’s Office is able to verify Graduate Research Assistant employment related to the student’s
course of study prior to registration, a waiver will be entered into [UTLINK] and the student will not need to complete a petition.

For additional information regarding classification as a Texas resident, please visit these resources: [College For Texans - Residency Information], [Texas Higher Education Coordinating Board], and [Section 54.052 of the Texas Education Code].

Further information on residency is available on the [Registrar’s Office] website.

### Special Resident Tuition
Although classified as non-residents, students falling within certain categories may be given the privilege of paying resident tuition. These categories include:

- Students employed as teaching or graduate research assistants in state institutions of higher education in which they are enrolled at least half-time in a degree-related position;
- Students whose spouses or parents (student must be a dependent child) are employed in state institutions of higher education in faculty positions that are at least half-time on a regular monthly salary basis;
- Students who are enrolled and have been awarded a competitive scholarship of at least $1000 for the academic year; the scholarship must be awarded by a scholarship committee officially recognized by UTHSC-H;
- Students participating in programs approved as part of the [Academic Common Market] which provides reciprocal higher educational opportunities to the citizens of states declared as parties to the Southern Regional Education Compact. Students must be approved by the Academic Common Market coordinator in their home state. In addition, the student’s participation requires approval by The Texas Higher Education Coordinating Board and The University of Texas System Board of Regents.
- Students who are in the military, spouses of persons in the military, and children of persons in the military who have been assigned to duty within the State of Texas. See [Texas Education Code] such as [Section 54.058]; for current information see [Tuition and Fees Exemption Summary].

### Tuition and Fees Payment Policy
Payment of tuition and fees is due no later than the end of the registration period.

Those students whose registration is cancelled because of non-payment or issuing an insufficient funds check will not be reinstated for the term. Students who have checks returned for insufficient funds will be charged a $25.00 fee.

Students who have fees billed to a sponsor are financially responsible for any charges determined to be uncollectible by the Accounting Office from the sponsor. Furthermore, extended delays in collection of receivables from sponsors will require the student to make the uncollected payment. Student payments will be refunded upon receipt of payment from the sponsor.

Payment of tuition and fees during the Fall and Spring semesters may be paid through the following alternatives: (1) full payment of tuition and fees before the beginning of the semester, or (2) one-half payment of tuition and fees before the beginning of the semester and separate one-fourth payments prior to the start of the sixth and eleventh class weeks. Although a student may select the installment
payment plan, certain fees must be paid in full in the initial payment. A non-refundable fee of $15 will be applicable to initial payments. A $15 fee will be assessed if the initial payment is late; a $10 charge will be assessed for each subsequent delinquent installment payment. A non-refundable late fee ($15.00) is charged to a student who pays after the last day of regular registration.

A student who fails to provide full payment of tuition and fees, including late fees assessed by The University is subject to one or more of the following actions:
1. Prohibited from registration until full payment is made;
2. Withholding of degree and/or official transcript;
3. Subject to all penalties and action authorized by law.

Refund of Tuition and Fees

Fall and Spring Semesters
Drops: Refunds are made of applicable tuition and fees collected for courses from which a student drops within the first 12 days of a semester, provided the student remains enrolled at the institution.

Complete Withdrawals: Refunds of tuition and required fees (less non-refundable fees) are made to students withdrawing completely from the institution during a Fall or Spring semester according to the following withdrawal schedule. The percent refunded is based upon the full payment of all tuition and fees. If full payment has not been made, it is possible that a balance may be due. Not all fees are refundable beyond the first day of the term.

<table>
<thead>
<tr>
<th>1</th>
<th>prior to first class day (from which a $15 matriculation fee shall be assessed)</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>during the first 5 class days</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>during the second 5 class days</td>
<td>70%</td>
</tr>
<tr>
<td>4</td>
<td>during the third 5 class days</td>
<td>50%</td>
</tr>
<tr>
<td>5</td>
<td>during the fourth 5 class days</td>
<td>25%</td>
</tr>
<tr>
<td>6</td>
<td>after the fourth 5 class days</td>
<td>None</td>
</tr>
</tbody>
</table>

Summer Sessions
Drops: Refunds are made of applicable tuition and fees collected for courses from which a student drops within the first four calendar days of a session, provided the student remains enrolled at the institution.

Complete Withdrawals: Refunds of tuition and fees (less non-refundable fees) shall be made to students withdrawing completely from the institution during a Summer term according to the following withdrawal schedule. The percent refunded is based upon the full payment of all tuition and fees. If full payment has not been made, it is possible that a balance may be due. Not all fees are refundable beyond the first day of the term.

<table>
<thead>
<tr>
<th>1</th>
<th>prior to first class day (from which a $15 matriculation fee shall be assessed)</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>during the first, second, or third class days</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>during the fourth, fifth, or sixth class days</td>
<td>50%</td>
</tr>
<tr>
<td>4</td>
<td>after the seventh day of class and thereafter</td>
<td>None</td>
</tr>
</tbody>
</table>
**Note:** Refunds are based on the first day of the term, not on the first day a class convenes. Refunds are based on the day the student drops the class in UTLINK or the day the student’s withdrawal form arrives in the Registrar’s Office. Tuition reassessment refunds will be made after the seventh class day in the Summer and after the 20th class day in the Fall and Spring.

Refund of tuition and fees paid by a sponsor, donor, or scholarship will be made to the payer rather than directly to the withdrawing student.

The University shall terminate student services and privileges, such as health services, library privileges, and facilities usage when a student withdraws from the institution.

All policies regarding the payment or refunding of tuition, fees, and charges are approved by The University of Texas System Board of Regents and comply with applicable state statutes. Requests for clarification of any matter relating to payment or refund of such charges should be addressed to the Registrar’s Office, UTHSC-H, P.O. Box 20036, Houston, TX 77225-0036.

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**Refunds Under Installment Payment Plans**

Dropping courses or withdrawing from The University does not relieve a student of the responsibility for unpaid financial obligations to The University. Students enrolled in an installment payment plan will be required to continue making payments until the non-refundable portion of their account is paid in full. Refunds or credits are based on the percentage of tuition and fees charged, not on the percentage of tuition and fees paid. Contact the Registrar’s Office for more information.

A student who withdraws from an institution of higher education because the student is called to active military service is entitled to a refund (or other available options) as provided by State law.

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**Fees**

Certain required and voluntary fees should be anticipated at the School of Public Health. Required fees are mandatory for all students. Voluntary fees are not required, but the student may elect to subscribe to any of the services listed under the voluntary fees. All fees are subject to change by the Texas Legislature or The University of Texas System Board of Regents.

**Required Fees**

**Accelerated M.P.H. Program San Antonio (MPHACC):** The supplemental fee for the Accelerated M.P.H Program in San Antonio is $4,000.00 per semester.

**Alternative Instruction Fee:** UTSPH web courses delivered within Texas - $35.00 per semester credit hour. UTSPH web courses delivered out of state - $725.00 per semester credit hour.

**Application Fee:** Any student submitting an application to the School for consideration must also submit a non-refundable $30.00 application fee. This fee is assessed to cover the cost of processing the application.
Auditing a Class: The fee for auditing a class is $25.00 (per course). Auditing a class does not give academic credit and does not count toward total hours enrolled for the semester. Not all classes may be audited. For information about auditing a class, call the Registrar’s Office at (713) 500-3361.

Computer Resource Fee (per semester): A computer resource fee of $62.00 is assessed each semester to all UTSPH students. The fee is to defray costs of providing computer resources for students in courses requiring access to computers, including computer laboratories.

Graduation Fee: A graduation fee of $75.00 is payable at registration for the final semester. This fee covers expenses associated with graduation but does not cover rental of regalia. This fee is charged whether or not the student attends graduation.

Health Insurance: The University of Texas System Board of Regents mandates health insurance for students enrolled in the UT System health components, including students enrolled prior to the adoption of the requirement. The Board of Regents has authorized the assessment of a health insurance fee for each semester to each student who cannot provide evidence of continuing coverage under another approved plan. Information on the Student Health Insurance Plan can be found at Auxiliary Enterprises. Students with coverage outside of the plan must provide a Health Insurance Waiver Form to Auxiliary Enterprises to provide the information needed to waive the insurance fee. To obtain additional details of the insurance plan, contact the Auxiliary Enterprises office at (713) 500-8400.

PLEASE NOTE: The form must be submitted no later the 12th class day of the Spring and Fall terms, and the fourth class day of the Summer term. If you do not take action by the deadline, you MUST pay the insurance premiums assessed to you. Insurance charges and details about coverage for the current year can be found on the Registrar’s website.

International Students: The University of Texas System Board of Regents requires all international students holding non-immigrant visas and living in the United States to have coverage for repatriation and medical evacuation while enrolled at component institutions of The University of Texas System. The required health insurance fee assessed by UTHSC-H includes coverage for repatriation and medical evacuation. International students with comparable coverage outside of the plan can contact Auxiliary Enterprises at 713/500-8400 or provide the Health Insurance Waiver Form needed to waive the insurance fee by email: student-insurance@uth.tmc.edu and, if needed, purchase coverage for repatriation and medical evacuation. The majority of outside insurance carriers do not provide repatriation and medical evacuation coverage. The waiver form may also be obtained from the Registrar's Office or Auxiliary Enterprises.

PLEASE NOTE: The form must be submitted no later than the 12th class day of the Spring and Fall term, and the fourth class day of the Summer term. Major medical coverage in excess of $50,000 may also be purchased from Auxiliary Enterprises during the initial term of enrollment.

Information Technology Access Fee: An information technology fee of $20.00 is assessed each semester to all students. This fee is assessed to cover the cost of
providing student Internet access, email accounts, “help desk” support and other related assistance.

**Installment Use Fee:** Students who wish to use the installment option may select the installment payment plan using UTLINK or may make the selection at the Student Financial Services Office. A $15 fee will be assessed for use of the installment plan. In addition, a $15 fee will be assessed if the initial payment is late; a $10 charge will be assessed for each subsequent delinquent payment.

**Lab Fees:** Lab fees range in cost from $10.00 – 30.00 per semester.

**Late Registration Fee:** Any student who registers during late registration will be assessed a $15 late fee for processing.

**Liability Insurance:** All UTSPH students are required to pay the UTHSC-H liability insurance fee regardless of any other coverage the student may have. At the time of registration, UTSPH students will be assessed an insurance fee at a rate of $14.50 for the Fall semester and $9.00 for the Spring semester. Students who enroll mid-year will be charged a prorated amount. Liability insurance fees are nonrefundable and are subject to change.

**Library Resources Fee:** All UTSPH students are required to pay a library resources fee of $60.00 per semester. The fee provides access to the resources of the UTSPH library.

**Student Services Fee:** The student services fee, required of all students, is assessed per semester credit hour up to a maximum charge of $183.84 per Fall and Spring semester and $105.86 for the summer session. Information about these fees can be found on the Registrar’s Office website. The fee provides for student activities, outpatient care by UT Medical School Health Services, counseling, shuttle services and recreational facilities. Optional family coverage is available. The schedule of fees is:

<table>
<thead>
<tr>
<th>Number of Semester Hours Taken</th>
<th>Fall or Spring Semester</th>
<th>Summer Sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$85.53</td>
<td>$41.48</td>
</tr>
<tr>
<td>2</td>
<td>97.79</td>
<td>49.40</td>
</tr>
<tr>
<td>3</td>
<td>110.11</td>
<td>57.47</td>
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<tr>
<td>4</td>
<td>122.41</td>
<td>65.56</td>
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<tr>
<td>5</td>
<td>134.69</td>
<td>73.59</td>
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<tr>
<td>6</td>
<td>146.99</td>
<td>81.67</td>
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<tr>
<td>7</td>
<td>159.27</td>
<td>89.71</td>
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<tr>
<td>8</td>
<td>171.54</td>
<td>97.78</td>
</tr>
<tr>
<td>9 or more</td>
<td>183.84</td>
<td>105.86</td>
</tr>
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</table>

**Voluntary Fees**

**Academic Regalia Rental:** Participation in the graduation exercise is not required. If a student wishes to take part in the ceremony, the charge for rental of regalia (cap and gown) is approximately $70.00 for master’s degree students and $75.00 for
doctoral degree students. A late fee of $25.00 will be assessed after the deadline. For a comprehensive description of how to order regalia and other accoutrements for graduation please see the UTSPH Student Affairs website.

Parking Fee: Contract parking is available to students throughout the Texas Medical Center; prices per hour vary for each parking lot. Complimentary parking for a maximum of 1½ hours is available at the University Center Tower (UCT) Parking Garage for students conducting business in one of the student services offices. The student must present a valid student ID card (with a current semester sticker) and a parking ticket at the UCT first floor parking office before leaving the building.

Recent changes to the parking policy for motorcycles and other motorized vehicles can be found at the following website: http://ae.uth.tmc.edu/parking/policy.htm

Transcript Fees: Transcripts are available, for a fee of $5.00 per transcript, upon WRITTEN request of the STUDENT or by accessing UTLINK Web. No transcripts will be issued showing only a portion of the student’s academic record. Students who owe debts to The University of Texas Health Science Center at Houston may have their official transcripts withheld until the debts are paid. Transcript Request Forms are available from the Office of the Registrar, or at UTLINK Web.

NOTE: A transcript is classified as OFFICIAL if it is sent BY THE REGISTRAR’S OFFICE directly to the receiving institution. It will bear the college seal, date, and appropriate signature. If the transcript is given to the student, it is stamped "Issued to Student," and the receiving institution may not recognize it as official.

Address/Name Change
In order to achieve consistency of identity, a student’s full legal name will appear on all permanent academic records, certifications and diplomas. The original application for admission will initially provide the student’s full legal name.

Notify the Registrar’s office in writing if your name changes. Download the Name Change Request form; attach a copy of the supporting documentation (marriage license, divorce decree, court order, etc.) and submit to the Registrar’s office. A driver’s license is not acceptable proof of a name change.

Students are responsible for ensuring that their current address and telephone number are correct in UTLINK. Updates may be made on UTLINK, or the address change form is available at both the Registrar and Student Affairs Offices. Financial aid checks and other important notices will be mailed only to the current address on file with the Office of the Registrar.

Student Communication
E-mail accounts constitute a major mode of communication linking students, faculty, and/or administration. Consequently, students are responsible for maintaining a UTHSC-H e-mail account, and reading messages on a regular basis. A student’s e-mail account is automatically activated upon payment of tuition and fees.
DIVISIONS, COURSES OF INSTRUCTION AND FACULTY

Academic Term Structure

Fall Semester

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>a</td>
<td>15 weeks</td>
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Spring Semester

<p>| | |</p>
<table>
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<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>b</td>
<td>15 weeks</td>
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Summer Session

<table>
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<tr>
<th>c</th>
<th>d</th>
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</thead>
<tbody>
<tr>
<td>1st 6 weeks</td>
<td>2nd 6 weeks</td>
</tr>
<tr>
<td>cd</td>
<td>12 weeks</td>
</tr>
</tbody>
</table>

Letter codes a, b, c, d indicate the Semester/Session in which courses are offered. For example:

- **a** Course offered in the Fall semester.
- **b** Course offered in the Spring semester.
- **c** Course offered in the first half of the Summer session.
- **d** Course offered in the second half of the Summer session.
- **cd** Course offered for the full Summer session

UT System regulations generally equate course credits with class hours per week per semester. Courses carrying four credits meet four hours per week for a full semester.

*Availability of courses is contingent upon sufficient registration.*

The courses described in the following section are organized by Divisions and are offered on a regular basis. The School also offers individual study courses and a wide variety of Special Topics courses which vary by semester and are designed to respond to current public health issues as well as to specific areas of faculty and student interest. The entire list of course offerings is included in the registration materials distributed each semester.
Public health is an interdisciplinary field that focuses on a number of important issues, such as changing patterns of health associated with population and socio-demographic trends; influencing changes in behavior to reduce the risk of disease and to promote health; preserving an environment consistent with human health; and improving the organization and availability of health services for all segments of society. An interdisciplinary, problem-centered field requires an academic structure serving that fundamental idea.

The School of Public Health has five academic divisions that correspond to the five core disciplines of public health. Each division serves to bring teaching, research, and practice activities together conceptually, organizationally, and physically under the common umbrella of life-long learning. The five Divisions are Biostatistics, Environmental and Occupational Health Sciences, Epidemiology and Disease Control, Health Promotion and Behavioral Sciences, and Management, Policy and Community Health.

Each Division has research centers which focus and enhance areas of common, yet interdisciplinary research. The centers provide a forum for exchange of ideas and development of collaborative research. The research activities within the centers provide excellent opportunities for student involvement for meeting academic research requirements as well as for employment opportunities. Each faculty member has a primary appointment in one of the five Divisions. Faculty members are able to affiliate with research centers and have secondary appointments in other Divisions. This encourages development of student and faculty capabilities and initiatives, promotes studies that are comprehensive, and encourages close, cooperative relations between persons with different disciplinary backgrounds.

All students earn a degree in Public Health. Divisions include major and minor areas of study and provide breadth of knowledge and skills for all students. Each student is expected to work with his or her advisor to develop a course of study and academic plan geared to his or her individual professional goals.
Biostatistics

Biostatistics is a discipline encompassing the study and development of statistical, mathematical, and computer methods applied to the biological and health sciences. Biostatisticians play a key role in the design, conduct, and analysis of research studies of health and disease. There is ample opportunity for experience in consulting and collaborative research. Alumni of the Biostatistics program are prominent in academia, industry, and government.

The Biostatistics Division offers the M.P.H., M.S., and Ph.D. degrees in Public Health with an emphasis in Biostatistics. The curriculum includes courses in applied and theoretical statistics, statistical computing, clinical trials, genetics, and operations research.

The Division also offers a minor course of study (9 semester credit hours) for M.S., Dr.P.H. and Ph.D. students majoring in other public health disciplines. Courses strongly recommended for the minor include:

- PH 1725 and PH 1726 Intermediate Biostatistics I and II (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.)
- Biostatistics elective

A minor in Biostatistics with an emphasis in health informatics is also available and consists of PH 1725, PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) and three health informatics courses selected from a designated curriculum.

Centers

The Coordinating Center for Clinical Trials is located within the Division of Biostatistics. The mission of the Coordinating Center for Clinical Trials (CCCT) is to improve public health by providing leadership in designing, conducting, coordinating and reporting large multicenter clinical trials for the prevention and treatment of disease and other medical conditions. Using a collaborative approach involving clinical trials, biostatistics, epidemiology, medicine, health services, and health promotion, the CCCT makes important contributions to medical, statistical, and clinical trials knowledge. The Center has played a leading role in cardiovascular disease and vision research by serving as a coordinating center for 16 nationwide multi-center clinical trials.

Master of Public Health Degree Program

The Master of Public Health (M.P.H.) program in Biostatistics is designed to prepare individuals for positions that require a broad knowledge of public health as well as specialized knowledge of biostatistics. In particular, the student will have the opportunity to learn applied biostatistical analysis, statistical theory, study design, data management, and ethics of research.

Special Entrance Requirements

Students entering the M.P.H. program should have strong quantitative skills and at least one year of calculus.
Course of Study

The following two Divisional course sequences are strongly recommended for an M.P.H. student majoring in Biostatistics:

- PH 1725 and PH 1726 Intermediate Biostatistics I and II (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.)
- PH 1820 and PH 1821 Applied Statistical Analysis I and II

In addition to biostatistics courses, M.P.H. students are required to take courses that satisfy the core M.P.H. curriculum requirements of the other four Public Health disciplines (the courses are described elsewhere in this Catalog). Students may also select biostatistics electives from among the following courses: theory of biostatistics, linear models, generalized linear models, multivariate analysis, logistic regression, survival analysis, categorical data, methodology of clinical trials, distribution free methods, time series analysis, stochastic processes, operations research, experimental design, statistical programming, or special topics courses.

Master of Science Degree Program

The M.S. degree program is ordinarily a two-year, full-time program. Training is offered in research design, basic statistical theory, data analysis, computer applications, and statistical consultation. Graduates of the program are expected to have prepared themselves to assume intermediate statistical posts in government, private health agencies, or in health research programs. The program emphasizes fundamental statistical theory and methods and provides the basis for doctoral level biostatistical studies.

Special Entrance Requirements

Students entering the M.S. program in Biostatistics should hold an undergraduate degree that emphasizes the development of strong quantitative skills through multivariate calculus and at least one semester of linear algebra. Examples would be degree programs in mathematical, physical, biological, or social sciences. Advanced mathematical training and knowledge of computer programming are highly desirable. The GRE is required.

Course of Study

The following two course sequences are strongly recommended for an M.S. student majoring in biostatistics:

- PH 1820 and PH 1821 Applied Statistical Analysis I and II
- PH 1910 and PH 1911 Theory of Biostatistics I and II

Students may also select biostatistics electives from among the following courses: linear models, generalized linear models, multivariate analysis, logistic regression, survival analysis, categorical data, methodology of clinical trials, distribution free methods, time series analysis, stochastic processes, operations research, experimental design, statistical programming, or special topics courses. Graduates are expected to have acquired knowledge in at least one minor area selected from one of the other Public Health disciplines (the courses are described elsewhere in this catalog).
Doctor of Philosophy Degree Program
The Ph.D. program is ordinarily a three-year, full-time program beyond the M.S. degree or a five-year, full-time program beyond the B.A. or B.S. degree. Graduates of the program are expected to prepare themselves to be independent investigators in the development and application of biostatistical analyses to problems of human health and disease. The curriculum is designed to provide opportunities for students to prepare themselves to assume senior statistical posts in governmental or private health research agencies, or to follow careers in teaching and research.

Special Entrance Requirements
Students entering the Ph.D. program are required to have mathematical training beyond the introductory calculus level, including advanced calculus and linear algebra. They should hold degrees in areas that emphasize the development of strong quantitative skills. Examples are degrees in mathematical, biomedical, physical, or social sciences. Students with B.S. or B.A. degrees in one of these areas with appropriate grounding in mathematics and statistics and who show promise for advanced studies may be admitted directly into the Ph.D. program. Students with graduate degrees that are not in one of these areas who have the requisite statistical training may be admitted to the Ph.D. program with the approval of the faculty. These students are expected to fulfill the course requirements for the M.S. degree in biostatistics or its equivalent during their academic program. GRE scores are required of all students and TOEFL scores are required for all international students.

Course of Study
The following Divisional courses are recommended for a Ph.D. student in Biostatistics:

- PH 1820 and PH 1821 Applied Statistical Analysis I and II
- PH 1910 and PH 1911 Theory of Biostatistics I and II
- PH 1988 Biostatistics Seminar

Students are also expected to take courses in linear models, stochastic processes, multivariate analysis, generalized linear models/categorical data analysis and survival analysis and to select additional courses including but not limited to, logistic regression, statistical methods in correlated outcome data, survey sampling, methodology of clinical trials, distribution free methods, time series analysis, operations research, experimental design, statistical programming, or special topics courses. Students are encouraged to enroll in the weekly biostatistics seminar series (at least one semester is required).

For bachelor’s prepared students entering the Ph.D. program, the recommended courses include all of the recommended courses for the M.S. program plus the recommended courses for the Ph.D. program. The eight credit hours for the Intermediate Biostatistics Course series PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics I.) count toward the minimum credit hours for the M.S. program, but do not count toward the minimum credit hours for the Ph.D. program or the “direct admission” Ph.D. It is expected that most applicants will be sufficiently prepared for advanced courses beyond Intermediate Biostatistics.
The Ph.D. program requires course work in one minor field, ordinarily selected from one of the other public health disciplines UTSPH (see course descriptions given elsewhere in this catalog), as well as a public health breadth area.

At the end of the second year of doctoral study, students must satisfactorily complete a written comprehensive examination ("qualifying examination") in biostatistics and the minor and breadth fields. The comprehensive examination ("qualifying examination") will be given twice a year, at the beginning of the fall and spring semesters. Upon successful completion of the qualifying examination, the student is admitted to candidacy, and a doctoral dissertation committee is appointed. The doctoral candidate will work with this committee to prepare a research plan that demonstrates the capacity to conceive and conduct independent research in biostatistics. The research plan culminates in the completion and presentation in written form of an original research project that makes a substantial contribution to knowledge in biostatistics.

**Minor in Biostatistics**

A minimum of 9 credit hours in Biostatistics, including PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.), is required to meet the minor requirement in Biostatistics.

**Courses, Biostatistics**

**PH 1610 Introduction to Biostatistics** (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.)

The Faculty in Biostatistics, 4 credits, a, b, cd (Available online)

This course is designed for students with little previous coursework in mathematics or statistics. Topics include data description, elements of probability, distribution of random variables, applications of the binomial and normal distributions, estimation and confidence intervals, hypothesis testing, contingency tables, regression, and analysis of variance. Additional topics include research ethics, study design, introduction to statistical computing and data management, distribution free statistical methods, and life tables.

This is a designated core course for non-majors.

**PH 1615 Applied Linear Regression**

Harris, 2 credits, c

This course is intended primarily for students in disciplines other than Biostatistics. It is an introduction to linear regression, and in particular, multiple regression as a means of adjusting for covariates. Topics include verbal, algebraic, and graphical interpretation of models fitted to data; explained variance; testing hypotheses about individual variables and groups of variables; confounding, mediation, and moderation in regression models; evaluation of models including regression diagnostics; and procedures for variable selection. The course will include use of computer software. Analysis of data with public health relevance will be emphasized.
Prerequisite: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.)

**PH 1616 Applied Logistic Regression**
Harris, 2 credits, d  
This course is intended primarily for students in disciplines other than Biostatistics. It is an introduction to logistic regression, and in particular, multiple logistic regression as a means of adjusting for covariates. Topics include similarities and differences between linear and logistic regression; verbal, algebraic, and graphical interpretation of models fitted to data, including connections with the odds ratio; testing hypotheses about individual variables and groups of variables; confounding, mediation, and moderation; procedures for variable selection; and procedures for evaluating and revising models. The course will include use of computer software. Analysis of data with public health relevance will be emphasized.

Prerequisite: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.)

**PH 1620 Introduction to Public Health Research Computing**
Burau, 4 credits, a  
This course introduces the use of computers in public health research. Emphasis will be on concepts of research data processing. Topics include microcomputers, operating systems, file management, data entry, and the use of statistical packages for data analysis.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) or consent of instructor

**PH 1690 Foundations of Biostatistics** (previously PH 1610, offered from Fall 2009-Summer 2010)  
The Faculty in Biostatistics, 4 credits, a  
This course is designed as the first biostatistics course for students who have not previously taken a course in Biostatistics; this course is a designated core course for M.P.H. students. This course introduces the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health. Computer applications are included.

**PH 1700 Intermediate Biostatistics** (previously PH 1725 and PH 1726, offered from Fall 2009-Summer 2010)  
The Faculty in Biostatistics, 4 credits, b  
This course is required for a Biostatistics minor and for students in Biostatistics who have not previously taken courses in Biostatistics. This course extends the topics covered in Foundations of Biostatistics to provide a deeper foundation for data analysis, particularly focusing on its application on research problems of public health and the biological sciences. Computer applications are included.

Prerequisites: PH 1690, (or 1725), or have had equivalent knowledge/training. PH1610 is not sufficient.
**PH 1725 Intermediate Biostatistical Methods I** (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, PH 1725 in combination with PH 1726, becomes PH 1700 Biostatistics II.)
The Faculty in Biostatistics, 4 credits, a, b

This course is designed for students whose future work will require extensive data analysis in research problems of public health and the biological sciences. Topics include measurement problems, descriptive statistics, graphics, sampling distributions, hypotheses testing, and comparison of samples, non-parametric methods, and applications. Basic design issues are discussed as are ethical considerations in design and analysis. Computer applications are included. Illustrations and applications are selected from research studies.

*(The following applies to Fall 2009-Summer 2010, beginning Fall 2010, courses PH 1725 and PH 1726 will be combined into PH 1700).*

**PH 1725 must be followed by PH 1726 for the Intermediate Biostatistics course sequence to be applied to any biostatistics or core course requirement. The completion of PH 1725 by itself does not meet any degree requirement.*

This is a designated core course for non-majors.

Prerequisites: A course in calculus or consent of instructor

**PH 1726 Intermediate Biostatistical Methods II** (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, PH 1726 in combination with PH 1725, becomes PH 1700 Biostatistics II.)
The Faculty in Biostatistics, 4 credits, b, cd

This course is a continuation of PH 1725 (not offered after Summer 2010). Topics include single and multiple regression, correlation theory, one and two way classifications for attributes and measurements, analysis of discrete data, and introduction to factorial experiments. Computer applications are included. Illustrations and applications are selected from research studies.

This is a designated core course for non-majors.

Prerequisites: PH 1725 (not offered after Summer 2010) or consent of instructor

**PH 1727 Statistical Programming I**
Ford, Burau, 4 credits, a

This course will introduce the student to statistical computing. No previous computing experience is necessary. Topics covered will include hardware devices, data storage media, and language types. Data entry, forms design, and data coding will be introduced. Computer-specific job control language will be covered to familiarize the student with operating systems. FORTRAN will be used to demonstrate the concepts of data types, file organization, file structure, record format, sequential programming logic, and mass storage input/output. FORTRAN statement types will be used to demonstrate data-type specification, assignment, input/output, branching, iteration, and subprograms.
Prerequisites: Working knowledge of college algebra or consent of instructor.

**PH 1728 Statistical Programming II**
Ford, Burau, 4 credits, b

This course is a continuation of PH 1727. Topics include issues in data collections, processing, analysis, and reporting for various types of studies. Students will be introduced to methods of communicating or interacting with computer software packages, including text query commands, procedure calls, and menu-directed interfaces. A FORTRAN software package will be developed in class to implement simple statistical methods. The techniques used by the package will be compared with techniques used by other statistical software. Typical statistical procedures to be covered include topics such as t-tests, contingency tables and chi-square tests, and multiple regression and contrast tests.

Prerequisites: PH 1727 or consent of instructor

**PH 1730 Statistical Methods in Epidemiological Research**
The Faculty in Biostatistics, 4 credits, b

This course introduces the statistical methods used in epidemiological investigations. Topics include the identification of sources of bias, incidence and prevalence rates, measures of association in contingency tables, retrospective and prospective study designs, confidence intervals for the odds ratio, combining sets of data using the Mantel-Hansel Test, techniques for combining evidence from 2x2 contingency tables, matched control studies, standardized rates, life tables, Cox regression, and logistic regression.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) or consent of instructor

**PH 1745 Sampling Techniques**
The Faculty in Biostatistics, 3 credits, b (even-numbered years)

This course introduces the principles and current practices of survey sampling with health-related applications. Topics include basic concepts and practical issues in statistical sampling, design and analysis for common sample designs, including simple random sampling, stratified random sampling, systematic sampling, cluster sampling, and multistage sampling, and analytic issues concerning the use of complex survey data, such as the National Health and Nutrition Examination Survey.

Prerequisites: PH 1726 (not offered after Summer 2010) or consent of instructor

**PH 1750 Survey Design and Analysis**
The Faculty in Biostatistics, 3 credits, b

This course is a seminar, so the success of the class depends strongly on student participation, and the schedule is flexible. The first half of the course will be devoted to questionnaire design and sampling methods, while the second half will be devoted to the analysis of data from the NHIS and the BRFSS.
Prerequisites: PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) or consent of instructor

**PH 1820 Applied Statistical Analysis I**
The Faculty in Biostatistics, 4 credits, a

This course in methods of data analysis is intended for graduate students in biostatistics, and M.S. or Ph.D. students in other disciplines. The course emphasizes the design, implementation, analysis, and reporting of research investigations. Topics include two-sample inference using t-distributions, robustness and resistance, alternatives to the 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 course requires intensive computer analyses of case studies, emphasizing graphics and the proper use and interpretation of statistical software packages using Stata as a model statistical software package.

Prerequisites: PH 1726 (not offered after Summer 2010) or consent of instructor

**PH 1821 Applied Statistical Analysis II**
The Faculty in Biostatistics, 4 credits, b

This course is a continuation of PH 1820. Topics include the analysis of variance for two-way classifications, factorial arrangements and blocking designs, analysis of repeated measures and other multivariate responses, exploratory tools for summarizing multivariate responses, logistic methods for binary response variables and binomial counts, and log-linear regression for Poisson counts. As in PH 1820, emphasis is placed on case studies, graphics, and proper use and interpretation of statistical software packages using Stata as a model statistical software package.

Prerequisites: PH 1820 or consent of instructor

**PH 1830 Categorical Data Analysis**
Baraniuk, 4 credits, a

This course presents the theory and applications of categorical data analysis. Topics include contingency tables, applied generalized linear models, logistic regression model, sampling methods, model building strategies, assessing model fit, conditional logistic regression for matched analyses, polychotomous logistic regression, and Poisson regression.

Prerequisites: PH 1700 and calculus or consent of instructor

**PH 1831 Survival Analysis**
Davis, 4 credits, b

This course presents the theory and applications of survival analysis. Topics include censoring, parametric and nonparametric models, hypothesis testing, proportional hazards model with fixed and time-varying covariates, model building strategies, and assessing model fit.
Prerequisites: PH 1830 or consent of instructor

**PH 1835 Statistical Methodology in Clinical Trials**  
Baraniuk, 4 credits, b

This course covers the use of current statistical methodology in the design, execution, and analysis of clinical trials. Some of the topics include basic study design, randomization, sample size issues, data analysis issues, and interim monitoring. The course is intended primarily for M.S. and Ph.D. biostatistics students and doctoral students minoring in biostatistics.

Prerequisites: PH 1726 (not offered after Summer 2010) and calculus, or the consent of instructor

**PH 1855 Distribution-Free Methods**  
Lai, 3 credits, b (even-numbered years)

This course introduces the theory and applications of distribution-free (non-parametric) statistical methods. Topics include properties of distribution functions, K-S tests, runs tests, rank sum tests, non-parametric analysis of variance, rank correlation, contingency table analysis, and distribution-free confidence intervals.

Prerequisites: PH 1726 (not offered after Summer 2010) or consent of instructor

**PH 1910 Theory of Biostatistics I**  
The Faculty in Biostatistics, 4 credits, a

Topics include probability theory, distributions of discrete and continuous random variables, mathematical expectation, moments and moment generating functions, distribution of transformed variables, limiting distributions, and estimation. Theoretical results are applied to selected research problems in public health and the biomedical sciences. This course is designed primarily for students specializing in biostatistics.

Prerequisites: Working knowledge of differential and integral calculus

**PH 1911 Theory of Biostatistics II**  
The Faculty in Biostatistics, 4 credits, b

This course is a continuation of PH 1910. Topics include statistical hypothesis tests, LR tests, Bayes tests, noncentral distribution and power, selected non-parametric tests, sufficiency, completeness, exponential family, and the multivariate normal distribution. Theoretical results are applied to research problems in public health and biomedical sciences.

Prerequisites: PH 1910 or consent of instructor

**PH 1915 Linear Models I**  
The Faculty in Biostatistics, 3 credits, a (even-numbered years)
This course is an introduction to the fundamentals of linear statistical models for students with preparation in statistical theory and methods. Using matrix algebra, distributions of quadratic forms are presented and used to develop the general linear model for multi-factor data. Topics include estimation and hypothesis testing in the full rank model, estimability and statistical inference in the less than full rank model. Theory and computation are emphasized. This course is intended primarily for students specializing in biostatistics.

Prerequisites: PH 1911 or consent of instructor

**PH 1916 Generalized Linear Models**
The Faculty in Biostatistics, 3 credits, b (even-numbered years)

This course will cover the theory of generalized linear models. This includes estimation and inference of linear regression, logistic and Poisson regression, as well as models for polytomous data. The topics will also include methods for handling overdispersion and diagnostics for generalized linear models. The focus will be on the theory, but applied examples will also be presented.

Prerequisites: PH 1911 or knowledge of linear models and computational skills

**PH 1918 Statistical Methods in Correlated Outcome Data**
Chan, 4 credits, b

This course presents extensions of general and generalized linear models to correlated outcome data. Such models arise from hierarchical designs such as longitudinal studies or sample surveys. Major topics include mixed linear models for continuous, binomial, and count data; maximum likelihood estimation; generalized estimating equations; REML, EM algorithm; current general and specialized software applicable to these methods; and readings from current statistical literature. This course is intended for students with a background in linear models.

Prerequisites: PH 1916 or consent of instructor

**PH 1920 Categorical Data Analysis**
Lai, 3 credits, a (even-numbered years)

This course covers approaches of maximum likelihood, weighted least squares, and generalized estimating equations applied to the analysis of contingency tables and other categorical outcomes. It emphasizes the formulation of hypotheses and hypothesis testing through generalized linear models. Special topics include the analysis of matched case-control studies, repeated measurements, and clustered categorical data. Computer programs from SAS are used in the analysis of the data.

Prerequisites: PH 1911 or consent of instructor.

**PH 1950 Stochastic Processes in Biostatistics I**
Chan, Kapadia, 3 credits, a (even-numbered years)

This course covers the application of stochastic processes to problems in the biological and health sciences. Topics include discrete-time Markov chains; discrete-time branching processes; random walks; estimation of parameters in discrete-time Mar-
kov chains with complete or partially observed data; test of the Markov property and test of stationarity; time-reversible Markov chains; basic theory of Markov chains; Monte Carlo methods and its applications; and Poisson processes. Recent developments in related areas and their applications will be explored. Basic statistical theory, especially the estimation methods and EM algorithm, will be reviewed.

Prerequisites: PH 1911 and a thorough knowledge of calculus.

**PH 1951 Stochastic Processes in Biostatistics II**  
Chan, 3 credits, b (odd-numbered years)

This course is a continuation of PH 1950. Differential equations and partial differential equations will be briefly reviewed. The main course contents cover several models of continuous-time Markov processes that include the Poisson process, the Yule process, the birth-and-death process, the epidemic process, the queuing process, the illness-death process, and other stochastic models in public health. Statistical inference for some of these models will also be explored. The appropriate data using these models will be analyzed. Applications of counting processes and the concept of Martingale theory to other statistical methods including survival analysis will be introduced. Brownian motion will be briefly discussed.

Prerequisites: PH 1950 or consent of instructor

**PH 1960 Time Series Analysis**  
Lai, 3 credits, a (odd-numbered years)

The uses, descriptions, and analyses of time series models are covered. Methods are developed for fitting models to time series data, and using the fitted models for forecasting future values of the series, as well as for adjusting concomitant variables to control future values of the series. The course also covers spectral and cross spectral methods for analyzing time series data, and sampling distributions of model parameters and of future forecasts. Univariate models are generalized to the case where more than one observation is taken at each time period.

Prerequisites: A course in theoretical statistics or consent of instructor

**PH 1970 Multivariate Analysis I**  
Ford, 4 credits, a (even-numbered years)

This course is an introduction to the theory and applications of multivariate analysis emphasizing geometric development and interpretation. Topics include perpendicular projections, generalized matrix inverses, the spectral theorem, multivariate densities, moments and characteristic functions, principal components, and the multinormal distribution with associated derived distributions.

Prerequisites: PH 1910 and PH 1911 or equivalent courses in mathematical statistics

**PH 1971 Multivariate Analysis II**  
Ford, 4 credits, b (odd-numbered years)

This course is a continuation of PH 1970. Topics include the Wishart distribution, Jacobians and content, and hypotheses tests on mean vectors and dispersion ma-
trices. Additional topics include the multivariate general linear model, principal components, factor analysis, clustering techniques, discrimination and classification, asymptotic estimation, and distribution theory. Applications are selected from public health and the biomedical sciences.

Prerequisites: PH 1970 or consent of instructor

**PH 1980 Introduction to Genomics and Bioinformatics**
Xiong, Fu, White, 3 credits, a

This course introduces basic concepts, statistical methods and computational algorithms and tools for the creation and maintenance of databases of biological information, DNA sequence analysis, modeling of evolution, genetic studies of complex diseases including linkage analysis, linkage disequilibrium and association studies, gene expression data analysis, and identification of biological networks. Students will be introduced to the basic concepts behind Bioinformatics and Computational Biology tools. Hands-on sessions will familiarize students with the details and use of the most commonly used online tools and resources.

Prerequisites: Calculus, statistics, and consent of instructor

Cross-listed with UTHSC-H GSBS GS110032

**PH 1982 Evolution of DNA and Protein Sequences**
Rodin, Fu, Hewett-Emmett, 3 credits, a (odd-numbered years)

This course will provide basic principles for understanding factors that govern the evolution of DNA and protein sequences. Students will be provided with the opportunity to learn about the formation and evolution of multigene families and other evolutionary phenomena. They will also be introduced to statistical methods and computer programs for analyzing DNA and protein sequence data. There will be computer demonstrations of some topics. The application of these principles and methods to genome-wide epidemiology will be discussed.

Prerequisites: Calculus, statistics, and consent of instructor

Cross-listed with UTHSC-H GSBS GS110103

**PH 1984 Population Genetics**
Fu, Xiong, 3 credits, b

This course will discuss the principles of population genetics and statistical methods for analyzing genetic samples of individuals from one or more populations. Students will learn classical theory of population genetics and a modern approach known as coalescent theory, the cornerstone for analyzing DNA sequence samples from populations.

Prerequisites: Genetics, statistics, and consent of instructor

Cross-listed with UTHSC-H GSBS GS110042

**PH 1986 Statistical Genetics**
Fu, Xiong, Rodin, Liu, Maxwell, 3 credits, a

This course is designed as an introduction to statistical genetics/computational biology, and serves as the entry point to several courses in this area. It reviews the key statistical concepts and methods relevant to statistical genetics, discusses various topics that have significant statistical component in genetics, particularly in population and quantitative genetics. Topics include estimation of gene frequencies, segregation analysis, test of genetic linkage, genetics of quantitative characters, inheritance of complex characters, forensic science and paternity testing, phylogeny and data mining.

Prerequisites: Calculus, statistics, and consent of instructor

Cross-listed with UTHSC-H GSBS GS110072

**PH 1988 Biostatistics Seminar**
The Faculty in Biostatistics, 1 credit, a, b

The seminar in biostatistics will consist of presentations from guest speakers as well as some students that are working on doctoral dissertation research. It will provide an overview of various topics of current importance in the field of biostatistics and public health with emphasis on the mathematical and statistical tools needed to address these issues.

**PH 1998 Special Topics in Biostatistics**
The Faculty in Biostatistics, 1-4 credits, a, b, cd

Selected topics provide intensive coverage of biometric theory and applications. Topics vary from semester to semester. Previous topics have included:

*Advanced Statistical Theory*
*Applied Multivariate Analysis*
*Applied Survival Analysis*
*Bayesian Data Analysis*
*Current Topics Seminar*
*Computational Systems Biology*
*Demographic Analysis for Small Areas*
*Demography and Public Health*
*Design of Experiments*
*Data Mining in Genetic Epidemiology*
*Intermediate SAS*
*Introduction to SAS Data Management*
*Introduction to Spatial Statistics*
*Operations Research: A Decision Making Process*
*Monte Carlo Approach in Statistics and Genetics*
*Statistical Applications in Public Health Research*
*Statistical Computing*
*Statistical Methods for Handling Missing Data*

**PH 1999 Individual Study in Biostatistics**
The Faculty in Biostatistics, 1-9 credits, a, b, cd
A plan of study is determined for each participating student and supervised by a member of the Biostatistics faculty. In general, courses of individual study are not recommended unless a student has completed the appropriate introductory courses in biostatistics or presents evidence of experience in the field of biostatistics. This course may be repeated for credit.

PH 9997 Practicum
The Faculty in Biostatistics, 1-9 credits, a, b, cd

A practicum is determined by the student and advisor, and supervised by a member of the Biostatistics faculty.

PH 9998 Culminating Experience/Thesis Research
The Faculty in Biostatistics, 1-9 credits, a, b, cd

Thesis research is determined by the student with approval of the student’s advisory committee. This course may be repeated for credit.

PH 9999 Dissertation Research
The Faculty in Biostatistics, 1-9 credits, a, b, cd

Dissertation research is determined by the student with approval of the student’s advisory committee. This course may be repeated for credit.

Primary Faculty, Biostatistics
Sarah Baraniuk, Assistant Professor. B.Sc., Mount Saint Vincent University, 1995; M.S., Texas Tech University, 1997; Ph.D., The University of Texas School of Public Health at Houston, 2001.
Research Interests: Survival analysis; missing data; clinical trial methodology.

Elizabeth R. Baumler, Assistant Professor. B.S., Texas A&M – Commerce, 1992; M.S., Mathematics, Texas A&M – Commerce; Ph.D., The University of Texas School of Public Health at Houston, 1998.
Research Interests: Multilevel modeling; youth risk behavior; population health.

Keith D. Burau, Associate Professor. B.A., Southwest State University, 1973; M.S., University of Minnesota, 1975; Ph.D., University of Minnesota, 1980.
Research Interests: Job exposure matrix development and applications to epidemiological studies; spatial/temporal analysis in epidemiology; occupational exposure analysis; automated ECG/VCG analysis; clinical data systems.

Wenyaw Chan, Professor. B.S., National Central University, Taiwan, 1974; M.S., Ohio State University, 1978; M.S., Purdue University, 1982; Ph.D., Ohio State University, 1984.
Research Interests: Stochastic modeling; longitudinal studies.

Barry R. Davis, Professor, Director, Coordinating Center for Clinical Trials. B.S., Massachusetts Institute of Technology, 1973; M.D., University of California, 1977; Sc.M., Brown University, 1981; Ph.D., Brown University, 1982.
Research Interests: Development and applications of statistical methods to clinical trials and epidemiology.
Charles E. Ford, Associate Professor. B.S., Central State College, 1969; M.S., The University of Texas School of Public Health at Houston, 1981; Ph.D., The University of Texas School of Public Health at Houston, 1986.

Research Interests: Management and analysis of clinical trial data; polychotomous logistic regression analysis; statistical computing; hypertension; cardiovascular disease.

Ralph F. Frankowski, Professor. B.S., DePaul University, 1957; M.S., DePaul University, 1959; M.P.H., University of Michigan, 1962; Ph.D., University of Michigan, 1967

Research Interests: Design and analysis of clinical experiments; traumatic brain injury and cerebrovascular disease.

Yun Xin Fu, Professor. B.S., Zhongshan University, China, 1982; Ph.D., Reading University, England, 1988.

Research Interests: Biostatistics; bioinformatics; molecular evolution; population genetics and computational biology.

Jay H. Glasser, Professor. B.S., University of Connecticut, 1957; M.S., Columbia University, 1960; Ph.D., North Carolina State University, 1967.

Research Interests: Health services research; utilization analysis; health survey methodology; technology assessment; policy applications.

Robert J. Hardy, Professor. B.S., Southeastern Louisiana College, 1962; M.S., Tulane University, 1964; Ph.D., University of California, 1969.

Research Interests: Biometrical methods; statistical epidemiology; clinical trials.

T. Robert Harris, Associate Professor (Dallas Regional Campus). B.A., Reed College, 1965; Ph.D., Johns Hopkins University, 1972; M.S., Kansas State University, 1986; Ph.D., Kansas State University, 1990.

Research Interests: Biostatistics; survey methods; exploratory data analysis; imputation; alcohol epidemiology.

Ronald B. Harrist, Associate Professor (Austin Regional Campus). B.S., Texas Technological University, 1959; M.S., Texas Technological University, 1963; Ph.D., Southern Methodist University, 1971.

Research Interests: Statistical design and data analysis for longitudinal studies; multilevel statistical methods.

Asha S. Kapadia, Professor. B.A., Delhi University, India, 1957; M.A., Delhi University, India, 1959; M.S., Massachusetts Institute of Technology, 1965; Ph.D., Harvard University, 1969.

Research Interests: Operations research modeling of health systems; meta analysis; Bayesian statistics; compartmental modeling; pharmacokinetic modeling.

Dejian Lai, Professor. B.S., Jiangxi University, China, 1982; M.S., The University of Texas at El Paso, 1989; Ph.D., The University of Texas at Dallas, 1994.

Research Interests: Biostatistics; chaos; demography; global health; life table; time series analysis; nonparametric methods; spatial statistics; statistical methods.
Sheng Luo, Assistant Professor. B.E. Huangzhong University of Sci. & Tech., China, 1996; M.E., Huangzhong University of Sci. & Tech., China, 2000; M.S., University of Texas at Arlington, 2003; Ph.D., Johns Hopkins University, 2008. Research Interests: longitudinal and survival data analysis; genetic epidemiology; nonparametric statistics.

Lemuel A. Moyé, Professor. B.A., The John Hopkins University, 1974; M.D., Indiana University School of Medicine, 1978; M.S., Purdue University, 1980; Ph.D., The University of Texas School of Public Health at Houston, 1987. Research Interests: Bayes methods; continuous time stochastic processes.

Mohamed E. Mubasher, Associate Professor (Dallas Regional Campus). B.Sc., Statistics, University of Khartoum, Sudan; M.Sc., Mathematical Statistics, University of Khartoum, Sudan; M.A., Applied Statistics, University of Pittsburgh, 1983; Ph.D., Biostatistics, University of Pittsburgh, 1990. Research Interests: Statistical methods in design, conduct and analyses of clinical trials; sequential and survival data analyses.

Andrei S. Rodin, Assistant Professor. B.S., Novosibirsk State University, Russia, 1992; M.S., The University of Texas Graduate School of Biomedical Sciences at Houston, 1997; Ph.D., The University of Texas Graduate School of Biomedical Sciences at Houston, 1999. Research Interests: Genetic epidemiology; computational biology; bioinformatics; data mining; artificial intelligence; machine learning; molecular evolution and phylogenetics.

Barbara C. Tilley, Professor. B.A., California State University, 1972; M.S., University of Washington, 1975; Ph.D. University of Texas School of Public Health, 1981. Research Interests: Parkinson’s Disease, health disparities, clinical trials, and gerontology.

Momiao Xiong, Associate Professor. B.S., Fudan University, Shanghai, 1968; M.S., University of Georgia, 1990; Ph.D., University of Georgia, 1993. Research Interests: Computational systems biology; functional genomics; bioinformatics; genetic epidemiology; statistical genetics; pharmacogenetics; population genetics.

Secondary Faculty, Biostatistics
Benjamin Bradshaw (Management, Policy and Community Health), Chin-Hsing Chen (Health Promotion and Behavioral Sciences), Pamela Diamond (Health Promotion and Behavioral Sciences), Luisa Franzini (Management, Policy and Community Health), Xiaoming Liu (Epidemiology and Disease Control), Linda Piller (Epidemiology and Disease Control), Jan Risser (Epidemiology and Disease Control).

Faculty Emeritus, Biostatistics

Faculty of other components of The University of Texas System who participate on a regular basis in the teaching or research programs in Biostatistics.
Chul Ahn, Professor of Biostatistics (University of Texas Southwestern Medical Center at Dallas). M.S., Georgia Institute of Technology, 1982; M.S., Carnegie Mellon University, 1983; Ph.D., Carnegie Mellon University, 1986.

E. Neely Atkinson, Associate Professor of Biomathematics (The University of Texas M.D. Anderson Cancer Center). B.A., Rice University, 1975; M.A., Rice University, 1981; Ph.D., Rice University, 1981.

Scott B. Cantor, Professor of Biostatistics (The University of Texas M.D. Anderson Cancer Center). B.A., Yale University, 1981; S.M., Harvard University, 1987; Ph.D., Harvard University, 1991.

Alice Z. Chuang, Associate Professor of Ophthalmology, (The University of Texas Medical School at Houston). B.B.A., National Chung Hsing University, Taiwan, 1981; M.A., York University, Ontario, 1983; Ph.D., University of Waterloo, Ontario, 1988.

J. Jack Lee, Professor of Biostatistics (The University of Texas M.D. Anderson Cancer Center). B.D.S., National Taiwan University, 1982; M.S., University of California, 1984; Ph.D., University of California, 1989.

Adjunct Faculty, Biostatistics

Alok Bhargava, B.A., B.Sc., M.Sc., Ph.D., Adjunct Associate Professor. Professor, University of Houston, Department of Economics, Houston, Texas.

Charles F. Contant, Jr., B.A., M.P.H., Ph.D., Adjunct Assistant Professor. Associate Director of Biostatistics, Pfizer Pharmaceutical Research & Development, Groton, CT.

Edmund A. Gehan, B.A., M.S., Ph.D., Adjunct Professor. Professor Emeritus, Vincent T. Lombardi Cancer Research Institute, Georgetown University Medical Center, Washington, D.C.

Harvey Goldstein, Ph.D., Adjunct Professor. Professor of Social Statistics and Director of The Centre for Multilevel Modeling, School of Education and Geographical Sciences, Institute of Public Affairs, University of Bristol, UK.

Susan G. Hilsenbeck, B.S., M.S., Ph.D., Adjunct Professor. Professor, Breast Cancer at Baylor College of Medicine, Department of Medicine, Houston, Texas.

Xuelin Huang, Ph.D., Adjunct Professor. Associate Professor of Biostatistics, University of Texas MD Anderson Cancer Center, Houston, Texas.

Kresimir Josic, Ph.D., Adjunct Associate Professor. University of Houston, Department of Medicine, Houston, Texas.

Kay T. Kimball, B.S., M.S., Ph.D., Adjunct Assistant Professor. Statistical consultant.

Marek Kimmel, M.S., Ph.D., Adjunct Professor. Professor of Statistics, Department of Statistics, Rice University, Houston, Texas.
Clyde F. Martin, Ph.D., Adjunct Professor. Texas Tech University, Mathematics Department, Lubbock, Texas.

Bruce E. Rodda, B.A., M.S., Ph.D., M.B.A., Adjunct Professor. Principal, Strategic Statistical Consulting, L.L.C., Spicewood, Texas.

E. O'Brian Smith, B.S., M.S., Ph.D., Adjunct Professor. Professor of Pediatrics, Baylor College of Medicine, Houston, Texas.

James R. Thompson, B.E., M.A., Ph.D., Adjunct Professor. Professor, Statistics Department, Rice University, Houston, Texas.

Shan Pou Tsai, B.S., M.S., Ph.D., Adjunct Professor. Senior Epidemiologist, Shell Oil Co., Houston, Texas.
Environmental and Occupational Health Sciences

Environmental and Occupational Health Sciences is the field of study that deals with the (1) anticipation, identification and characterization of potentially harmful physical, chemical, and biological agents in community and workplace environments; (2) identification and study of the relevant pathways of exposure; (3) assessment of the effects of such agents on the environment and human health; and (4) development of interventions to prevent or ameliorate problems associated with environmental or occupational contaminants. Biological, genetic, psychological, and social factors are also important determinants of environmental and occupational health.

Within the division, the industrial hygiene master’s curriculum is accredited by the Applied Science Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700. The occupational medicine residency program is accredited by the Accreditation Council for Graduate Medical Education (ACGME), 515 North State St., Chicago, Illinois 60610-4322 - telephone: (312) 755-5000. For more information, refer to the website for the Southwest Center for Occupational and Environmental Health (under ‘Academic Programs’).

The Division of Environmental and Occupational Health Sciences offers the M.P.H., Dr.P.H. and Ph.D. degrees. The M.P.H. and Dr.P.H. degrees focus upon public health practice related to prevention, assessment, and control of occupational and environmental exposures, and injuries and illnesses, which constitute major problems not only nationally but worldwide. The Ph.D. degree is designed to train professionals to develop both in-depth knowledge in a particular specialty area, and a broad understanding of the complexities inherent in environmental problems with a focus on research.

The Division also offers a minor course of study (9 semester credit hours) for M.S., Dr.P.H. and Ph.D. students majoring in other public health disciplines. Courses for the minor include:

- PHWM 2100 Foundations of Environmental and Occupational Health Sciences (required)
- PHM 2130 Recognition of Environmental and Occupational Hazards (recommended)
- PH 2175 Toxicology I (recommended)

Centers

Two Centers are located within the Division of Environmental and Occupational Health Sciences. The mission of the Southwest Center For Occupational and Environmental Health (SWCOEH) is to promote health, safety, and well-being in the workplace and the community. The mission of the Center for Biosecurity and Public Health Preparedness (CBPHP) is to educate frontline public health workforce, medical and emergency responders, key leaders and other professionals to respond to threats such as bioterrorism and other emergencies affecting our communities. Each Center has training and research grant funding devoted to problems related to its core area of focus.

Master of Public Health Degree Program

The Master of Public Health (M.P.H.) degree program in Occupational and Environmental Health prepares students to assume positions in public health practice in the
government or the private sector. The program provides a foundation in environmental and occupational health sciences in addition to the skills needed to function as a practitioner in a variety of public health settings.

**Special Entrance Requirements**
Applicants for this degree are expected to have successfully completed coursework in mathematics, chemistry, and biological sciences and typically hold a baccalaureate or higher degree in the physical, chemical, or biological sciences, engineering, nursing, or medicine from a regionally accredited institution of higher education. Applicants with majors from other disciplines who satisfy the undergraduate course work requirements will be considered. Additional requirements apply for certain areas of study, including industrial hygiene and occupational medicine.

A GRE score of 1000 for the combined verbal and quantitative portions is preferred. Test scores more than five years old will not be accepted. For those applicants who have not received an undergraduate or graduate degree in an English-speaking program, the Test for Written English (TWE) will also be evaluated – a score of 4.0 is preferred.

**Course of Study**
The following Divisional courses are required for an M.P.H. student majoring in Environmental and Occupational Health Sciences:
- PHM 2100 Foundations of Environmental and Occupational Health Sciences
- PHM 2101 Contemporary Issues in Environmental and Occupational Health
- PHM 2130 Recognition of Environmental and Occupational Hazards
- PH 2175 Toxicology I
- PH 3725 Health and Safety Program Management

At least three additional courses are recommended from the Division offerings. The practicum and culminating experience should have an environmental or occupational health focus.

Students usually require a minimum of two years of full-time study to complete the degree requirements. The actual scope and length of the program will be determined by the student's advisory committee based on the student's academic objectives and prior experience.

**Doctor of Public Health Degree Program**
The Doctor of Public Health (Dr.P.H.) program in Occupational and Environmental Health offers interdisciplinary training for students who wish to practice at an advanced level or pursue academic careers in public health practice.

**Special Entrance Requirements**
Applicants for this degree should have a prior M.P.H. degree or equivalent preparation from an accredited institution of higher education. In addition, applicants are expected to have successfully completed coursework in mathematics, chemistry, and biological sciences.

A GRE score of 1200 for the combined verbal and quantitative portions is preferred. Test scores more than five years old will not be accepted. For those applicants who have not received an undergraduate or graduate degree in an English-speaking
program, the Test for Written English (TWE) will also be evaluated – a score of 4.0 is preferred.

Course of Study
The curriculum program is tailored to meet the specific goals of the student. At least four Divisional courses beyond the master’s degree and courses in a public health breadth area are expected. In addition, students are strongly encouraged to have a minor area of study in Management and Leadership. Students are expected to carry out original research that constitutes a substantial contribution to public health practice with an emphasis in Environmental and Occupational Health Sciences.

Doctor of Philosophy Degree Program
The Doctor of Philosophy (Ph.D.) program offers in-depth didactic and research training for students who wish to focus their careers in academic, governmental or other research institutions, and/or in high-level policy/regulatory positions.

Special Entrance Requirements
Applicants for this degree should have a prior M.S. or equivalent degree in Environmental Health Sciences or a related field from an accredited institution of higher education. In addition, it is expected that applicants have successfully completed coursework in calculus, organic chemistry, physics, and biological sciences.

A GRE score of 1200 for the combined verbal and quantitative portions is preferred. Test scores more than five years old will not be accepted. For those applicants who have not received an undergraduate or graduate degree in an English-speaking program, the Test for Written English (TWE) will also be evaluated – a score of 4.0 is preferred.

Course of Study
Training at the doctoral level is tailored to meet the student’s educational and career goals. Students are expected to complete at least four Divisional courses beyond the master’s degree and the courses constituting a minor in another discipline as well as a public health breadth area. Students will carry out original research leading to a dissertation with a special emphasis in Environmental and Occupational Health Sciences. Graduates of the program are prepared to carry out research activities in governmental or private organizations or to pursue academic careers.

Courses, Environmental and Occupational Health Sciences

**PHWM 2100 Foundations of Environmental and Occupational Health Sciences**
Delclos, Perkins, Whitehead, 4 credits, a (Available Online)

This one-semester course offering covers basic concepts in the field as groundwork on which the remainder of the Environmental and Occupational Health Sciences (EOHS) curriculum is built. Together with PH 2130 Recognition of EOHS Hazards, PH 2175 Principles of Toxicology, and PH 3725 Health and Safety Program Management, PH 2100 Foundations of EOHS comprises the common ‘Core of Four’ courses required of all M.P.H majors in the EOHS division. Completion of PH 2100 alone does not meet the M.P.H core course requirement in environmental health.
In addition, doctoral students minoring in EOHS will typically complete this course, together with PH 2130 Recognition of EOHS Hazards, in partial fulfillment of their coursework requirements.

Prerequisites: Must be a masters student majoring in the EOHS Division, or a doctoral student from another division with a minor in EOHS; or equivalent undergraduate preparation as that of an EOHS major. Exceptions with approval from instructor.

This is a designated core course for M.P.H. students majoring in Environmental and Occupational Health Sciences.

PHM 2101 Contemporary Issues in Environmental and Occupational Health
Sexton, 2 credits, b

This core course for majors provides an overview of many of the most important topics at the forefront of the field, including gene-environment interactions and environmental health disparities. In addition, students learn how to analyze, interpret, and critique articles published in the peer-reviewed literature through discussion of published articles on crucial topics. Students will participate in a series of group discussions on assigned journal articles. Course emphasis is on understanding how a peer-reviewed journal article is constructed, learning basic techniques for analyzing and appraising a journal manuscript and becoming familiar with some of the most critical contemporary scientific and policy issues.

PHD 2101 Contemporary Issues in Environmental and Occupational Health
Sexton, 2 credits, b

The purpose of this course is to ensure that doctoral students are familiar with the most significant scientific issues currently affecting the field of environmental health sciences, and that they can read, understand, and evaluate/criticize relevant articles in the peer-reviewed literature. Class discussions of assigned journal articles are used to explore topical research issues, identify key scientific uncertainties, assess the utility of relevant methods and techniques and examine the role of scientific research in policy decisions about environmental and occupational health hazards.

PHD 2105 Environmental and Occupational Health Sciences Doctoral Seminar
Gimeno, Delclos, 1 credit, a, b

This is a seminar course for doctoral students and post-doctoral fellows in EOHS. Doctoral students in other divisions may enroll with the consent of the instructor. The course combines research seminar presentations with specific assignments to provide students an opportunity to improve their knowledge of the latest EOHS topics, their presentation skills and their scientific productivity in the formulation of research proposals and journal publications and presentations at scientific meetings. The seminar provides opportunities to involve mentors (advisors, dissertation supervisors, committee members) and to practice mentoring and teaching with other class members.
**PHWD 2106** *Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences*  
Gimeno, Delclos, 2 credits, b

This course provides doctoral students with a background in the perspectives, the key concepts as well as the methods involved in conducting research and evaluating scientific claims in the EOHS context, part of the necessary training to undertake a future research project. The course considers basic aspects and challenges of the philosophy of science and the inference of causality, ethical issues on conducting research, study design and sampling methods, the role of statistics and the appropriateness of the measures of association, including hypothesis formulation and testing, and presentation of findings. Students will also be introduced to the scientific production process.

**PHM 2108** *Applied Epidemiological Analyses in Environmental and Occupational Health Sciences*  
Gimeno, 3 credits, b

The purpose of the course is for Master’s level students to gain experience on applying skills and strategies to analyze epidemiological data from occupational and environmental settings. The goal of the course is to prepare students to demonstrate their knowledge of epidemiology and biostatistics through applied data analysis in the context of occupational and environmental problems.

**PHD 2108** *Applied Epidemiological Analyses in Environmental and Occupational Health Sciences*  
Gimeno, 4 credits, b

The purpose of the course is for doctoral level students to gain experience on developing skills and designing strategies to plan the analysis of and critically evaluate epidemiological data from occupational and environmental settings. The goal of the course is to prepare students to integrate their knowledge of epidemiology and biostatistics through applied data analysis in the context of occupational and environmental problems.

**PHM 2110** *Overview of Environmental Health*  
Sexton, Mena, 3 credits, a, b

This course is a survey of the major areas of environmental health, and provides students with an understanding of hazards in the environment, the effects of environmental contaminants on health, and various approaches to address major environmental health problems. Areas of emphasis are population dynamics, global environmental health problems, toxicology, food, air and water quality, occupational health, radiation, noise, and solid and hazardous waste.

This is a designated core course for M.P.H. students not majoring in Environmental and Occupational Health Sciences.

**PHWM 2120** *Man’s Impact on the Environment*  
Schroder, 3 credits, a, b, cd (Available Online)
The major goals of this course are to develop a general awareness of how the man-made and natural ecosystem interact to affect health and the quality of life, review relevant principles from the natural sciences, and discuss issues influencing the solutions to environmental health problems. This will be accomplished through lectures, videos, class discussions, group activities, written assignments, and examinations.

This is a designated core course for M.P.H. students not majoring in Environmental and Occupational Health Sciences.

**PHM 2125 Medical Geographic Information Systems and Time Series Methods**
Cech, 4 credits, a

This course teaches methods of spatial and temporal analyses that are critical for the conduct of studies in environmental science, epidemiology, biometry, human genetics, health planning, international health and other fields of public health. The course consists of lectures, computer laboratory exercises and student projects.

**PHD 2125 Medical Geographic Information Systems and Time Series Methods**
Cech, 4 credits, a

This course teaches methods of spatial and temporal analyses that are critical for the conduct of studies in environmental science, epidemiology, biometry, human genetics, health planning, international health and other fields of public health. The course consists of lectures, computer laboratory exercises and student projects. Students will demonstrate additional competencies in formulating a research proposal including testable hypotheses, methods related to disease clusters and environmental risks and a pilot project.

**PHM 2130 Recognition of Environmental and Occupational Hazards**
Whitehead, Stock, Mena, 2 credits, a

This course provides an overview of industrial and community sources of major chemical hazards. Principal toxicological effects of and diseases affected by these chemicals are presented. The occurrence as ambient air, water, soil, and indoor and workplace pollutants is described. Transport to other environmental media, and environmental and biological fate are discussed for some key pollutants.

Prerequisites (or, concurrently): PHM 2100, 2110, 2115, or 2120

**PH 2131 Environmental Risk Assessment**
Perkins, 2 credits, b

Basic concepts of Environmental Health and previous work in hazards recognition, toxicology (hazard assessment), exposure assessment and biostatistics are utilized as building blocks in risk analysis associated with chemical and biological hazards. This is a problem-oriented course which relies upon examples and homework problems involving environmental data. Problems are meant to be solved using computer techniques. Computer software programs will be utilized, including @Risk Monte Carlo simulations software.

Prerequisites (or, concurrently): PHM 2100 or PHM 2110, PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600
Biostatistics I.) or PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses, PH 1725 and PH 1726 become PH 1700 Biostatistics II.), and PHM 2610 or consent of instructor

**PHM 2135 Risk Analysis - Principles and Practice**
Sexton, 3 credits, a

This course provides an introduction to risk assessment for environmental and occupational health hazards as currently practiced in the United States. The course will examine the strengths and weakness of existing procedures for integrating and interpreting scientific data for the purpose of making risk management decisions. Assumptions underlying both cancer and non-cancer risk assessment are examined. Compromises that must be made to span the gap between available scientific evidence and decisions about acceptable risk are elucidated. Case studies are used to demonstrate important principles and practices.

**PHD 2135 Risk Analysis - Principles and Practice**
Sexton, 3 credits, a

The purpose of this course is to acquaint doctoral students with the principles underlying risk assessment and to provide them with a working knowledge of the practices by which these principles are implemented, particularly in the United States. Through a combination of lectures, class discussions and team projects, students will become proficient at evaluating the strengths and weaknesses of contemporary health risk assessments, will be able to compare and contrast traditional risk assessment approaches with application of the precautionary principle and will know and be able to explain the role of science in risk assessment and risk management decisions.

**PH 2150 Air Environment**
Stock, 3 credits, a

This course provides an overview of air pollution, including sources, influencing factors, effects, regulations, surveillance methods, control techniques and standards, and the criteria upon which they are based. Both outdoor ambient air and (non-occupational) indoor air quality will be considered. Special emphasis will be placed on human health effects and the determinants of human exposure.

**PH 2155 Environmental Sampling and Analysis**
Stock, 4 credits, b

This course covers the theoretical bases and practical applications of sampling techniques and analytical methods used in the quantitative determination of chemical air contaminants, ionizing radiation, and noise in the workplace and community environments. Emphasis will be on spectroscopic, chromatographic, and other modern instrumental methods. Laboratory exercises will be included.

Prerequisites: Undergraduate chemistry and mathematics, consent of instructor
PH 2165 *Mutagenesis and Carcinogenesis* (not offered after Summer 2010)
Hewett-Emmett, Smith, El-Zein, 3 credits, cd

This basic course in genetic toxicology includes current research involving environmental mutagenesis and carcinogenesis. Topics include, short-term test systems (DNA damage in vitro, bacterial, and cellular mutagenesis), metabolic activation/deactivation of genotoxins, chromosomal damage, epidemiological and public health aspects of cancer, biomarkers, radiation effects, and occupational exposure to genotoxins, and effects of genotoxins on reproduction.

Prerequisites: Consent of instructor

PHD 2170 *Methods for Exposure Assessment*
Symanski, 4 credits, b

This course examines qualitative and quantitative methods to evaluate exposures to occupational and environmental contaminants. Particular emphasis focuses on statistical techniques for describing sources of variability and identifying determinants of exposure. This course also explores implications of exposure variability on the design of sampling strategies, the evaluation of compliance with exposure limits, the assessment of exposure-response relationships, and the classification of individuals in epidemiologic studies. Students apply models presented formally in class to occupational and environmental exposure data sets.

Prerequisites: PHM 2610 or PHM 2612, PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses, PH 1725 and PH 1726 become PH 1700 Biostatistics II.), and one graduate-level course in Environmental and Occupational Health Sciences, consent of instructor

PH 2175 *Toxicology I: Principles of Toxicology*
Smith, 3 credits, a

This course presents basic principles of toxicology and their applications to the understanding of xenobiotic-induced target organ toxicity. Topics covered include toxicant disposition, mechanisms of toxicity, and target organ responses to toxic agents. A broad overview of various classes of toxic agents will be presented in the context of their exposure routes, disposition, toxicologic sequelae, and mechanisms of toxicity. This course is designed to provide a foundation for understanding the complex interactions between toxicants and biologic systems.

Prerequisites: Prior biological science coursework required (i.e., biology, chemistry, or physiology) and consent of instructor

PH 2177 *Toxicology II: Toxic Agents and the Environment*
Smith, 3 credits, b

Guided readings will provide the basis for in-class discussions on current topics in toxicology. The discussions include the historical context for our understanding of toxicant-induced adverse health effects. Class activities will be based on discussions of books designed for the lay public and the scientific literature on which the books are based. Principle mechanisms of toxicity as they relate to the understanding of environmentally-induced disease form the framework for the course. In-depth re-
views of various classes of environmental contaminants and their adverse health effects will be presented.

Prerequisites: PH 2175 preferred; consent of instructor

**PHM 2190 Environmental and Occupational Health Policy**  
Sexton, 3 credits, b

This course provides graduate students with a general survey of environmental and occupational health policy, acquaints them with the public policy process in the United States, introduces conceptual frameworks for analyzing public policy alternatives and instills an appreciation of the challenges inherent in making policy decisions. Because public policies aimed at protecting worker and community health form the structure and context for most of the professional activities in the field of environmental health sciences, it is imperative that students gain an appreciation of the complexities involved in formulating, implementing and evaluating regulatory and non-regulatory policies.

Prerequisites: Graduate standing

**PHD 2190 Environmental and Occupational Health Policy**  
Sexton, 3 credits, b

The purpose of this course is to provide doctoral students with a firm grounding in the basics of policy formulation, implementation and evaluation within the context of protecting public health from the adverse effects of environmental and occupational hazards. Students learn essential frameworks for analyzing and evaluating policy decisions, use these tools to examine and assess contemporary environmental health policies, and evaluate relative roles played by science, economics, politics, social factors and legal issues in various policy decisions.

**PHM 2230 Water Environment**  
Cech, Burau, 4 credits, b

This course is designed to provide “hands-on” practical experience to students across the School of Public Health, especially those majoring in biosecurity, global health, epidemiology, disease control, biostatistics, management policy and planning. Topics include water and soil resources, availability, pollution control (water and soil-related, acute and chronic), health risk assessment, quality criteria, standards, community preparedness and control methods.

Classroom lectures are reinforced by field sampling, laboratory and computer mapping experiences. There are several field days, including a tour of USEPA laboratory; a tour of the City of Houston drinking water plant and wastewater treatment plant in the City of Bellaire; sampling of benzene contamination in yard soil; rapid surface water quality assessment (Lake Conroe); stream flow exercises; and land subsidence monitoring methods. This course includes student projects, reading and discussions. There are no exams, but students are expected to present a poster.
PHD 2230 *Water Environment*
Cech, Burau, 4 credits, b

This course teaches concepts, skills, and "hands-on" methods (field and laboratory) necessary to assess and monitor the quality of hydrological systems utilized as water supplies. Issues of water quality, as they relate to human and ecological health, will include appropriate biomarkers of human exposure to water and soil pollutants, as well as water quality criteria, goals, standards, enforcement, oversight, water supply protection, and means of remediation. Integrated classroom, laboratory, computer, and fieldwork learning sessions will focus on water quantity and quality issues. Students will identify and formulate a question of importance to public health, define why it is important to public health and what is still unknown, develop methods for answering this research question (either in laboratory, in community, or both) analyze results, and identify how findings will help improve the Public Health.

PHWM 2235 *Global Environmental Health*
Cech, 4 credits, cd

This course addresses environmental issues with global implications. The course will build a foundation to understanding environmental hazards, the health effects they have on people, as well as the theory and practice of assessing, correcting, controlling and preventing those hazards. Examples will be drawn from the domestic United States experience, but for the most part, the course will focus and learn from experiences (both positive and negative) of neighboring countries to the North and South, as well as in other parts of the world.

PHWD 2235 *Global Environmental Health*
Cech, 4 credits, cd

This course addresses environmental issues with global implications. The course will build a foundation to understanding environmental hazards, the health effects they have on people, as well as the theory and practice of assessing, correcting, controlling and preventing those hazards. Examples will be drawn from the domestic US experience, but for the most part, the course will focus and learn from experiences (both positive and negative) of neighboring countries to the North and South, as well as in other parts of the world. Students will demonstrate additional competencies in formulating a research proposal including testable hypotheses, methods related to disease clusters and environmental risks, and conducting a pilot project.

PH 2245 *Fundamentals of Industrial Hygiene*
Whitehead, 4 credits, a

This course introduces students to concepts of industrial hygiene and occupational health hazards. Typical industrial conditions which may produce work-related disorders and diseases are studied. Major chemical, physical, and biological stresses in the industrial environment are presented, and important sources, effects, and evaluation and control measures are discussed. Where appropriate, typical calculation methods are included.
Prerequisites: Undergraduate biology, chemistry (through organic), and mathematics

**PH 2250** *Environmental and Occupational Health Controls*
Whitehead, 4 credits, b

This course presents the principles and practice of controlling air, water, land and workplace hazards, and details CPC, respiratory protection, dilution and local exhaust ventilation engineering controls: basic design and evaluation of industrial ventilation systems, and noise control.

Prerequisites: PHM 2100 or 2110 or 2120, and PH 2130; PH 2245 in lieu of the previous courses

**PH 2255** *Clinical Occupational Medicine*
Schecter, Delclos, 4 credits, b

This course offers students the opportunity to familiarize themselves with the clinical practice of and current issues in occupational medicine, supplement their basic knowledge in the clinical presentations of occupational illness and injury by organ systems, and are introduced to systematic approaches to the evaluation and management of work-related injury and illness. The course is designed for students interested in occupational medicine practice and who have taken at least a college level biology course.

**PH 2260** *Occupational Health Field Trips*
Whitehead, Delclos, 3 credits, b

The course takes students into approximately one-half dozen industrial and occupational settings, with analysis of processes and potential worker health hazards involved. Course goals are to introduce students to basic industrial processes and delivery of occupational health services through plant visits, enable students to perform simple walk-through evaluations of plant facilities and to provide written reports on these evaluations in order to identify potential workplace hazards and evaluate their level of control, and have students appreciate the importance of using an integrated interdisciplinary approach in the anticipation, evaluation, and control of workplace hazards.

Prerequisites: PH 2245 or permission of instructor

**PH 2280** *Environmental Microbiology*
Chappell, Mena, 3 credits, a

This course is an introduction to environmental microbiology, with particular emphases on how microorganisms are transmitted to humans as well as ways to identify and prevent this transmission. Topics include microbial sources of contamination, environmental sampling and laboratory techniques, preventive strategies for air-, water- and food-borne disease, global issues impacting microbial disease and the roles of epidemiology and risk assessment in addressing human exposure to environmental microbes.
**PH 2285 Topics in Infectious Disease**  
Schecter, 3 credits, a

This course introduces students to current perspectives of selected classical and emerging infectious diseases. Guest lecturers are from academia, including Southwestern Medical Center, Infectious Diseases Division, and also the Dallas County Health and Human Services Department. Temporal and geographical aspects of the diseases are presented from a public health perspective. Students are expected to write a short summary or analysis of each lecture prior to the following lecture. Grades in this Pass-Fail course are determined by attendance and participation (with the short summary as well as class discussion constituting participation). The course assumes a minimum of college biology training but is aimed also at health care providers including physicians, nurses, physician assistants and others.

**PHM 2290 Immunology**  
Douglas, 3 credits, b

This course covers the essential concepts of the human immune response and their relevance to disease control and prevention. In the first part of the course, the foundations of the subject of immunology will be outlined. In part two of the course, there will be presentations from guest lecturers who have expertise in specific areas where the principles of immunology find their application to human health. Throughout, extra emphasis is given to aspects of immunology with particular relevance to public health, such as immunodeficiency, blood transfusion, nutrition and immunology, tumor immunology, and vaccines. Each student will prepare a report on an area of immunology that is of particular interest to them. Grades are based on two written examinations and a report on the current state of knowledge in an area of basic or applied immunology selected by the student.

Prerequisites: Basic background in biology

**PH 2498 Special Topics in Environmental and Occupational Health Sciences**  
The Faculty in Environmental and Occupational Health Sciences, 1-4 credits, a, b, cd

Topics will vary from semester to semester to provide intensive study of selected environmental factors, or specific methods of analysis, evaluation, or control. Previous topics have included:

*Occupational and Environmental Respiratory Disease*
*Environmental Health Seminar*
*Site Visits in Environmental Public Health*

**PH 2499 Individual Study in Environmental and Occupational Health Sciences**  
The Faculty in Environmental and Occupational Health Sciences, 1-9 credits, a, b, cd

A plan of study is determined for each participating student and supervised by a member of the Environmental and Occupational Health Sciences faculty. This course may be repeated for credit.
**PH 9997 Practicum**
The faculty in Environmental and Occupational Health Sciences, 1–9 credits, a, b, c, d

A practicum is determined by the student and advisor and supervised by a member of the Environmental and Occupational Health Sciences faculty.

**PH 9998 Culminating Experience/Thesis Research**
The Faculty in Environmental and Occupational Health Sciences, 1-9 credits, a, b, c, d

Thesis research is determined by the student with approval of the student’s advisory committee. This course may be repeated for credit.

**PH 9999 Dissertation Research**
The Faculty in Environmental and Occupational Health Sciences, 1-9 credits, a, b, c, d

Dissertation research is determined by the student with approval of the student’s advisory committee. This course may be repeated for credit.

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**Primary Faculty, Environmental and Occupational Health Sciences**

- **Irina Cech**, Professor. M.S., State University, Moscow, 1965; Ph.D., The University of Texas School of Public Health at Houston, 1973.
  
  *Research Interests:* Environmental health, medical geography, GIS and time series research methods, water quality, chemical, biological, and radioactive contamination, hazardous waste management, and the health risks related to pollution; the role and interactions of chemical and biological risk factors in the etiology of birth defects (neural tube defects and facial cleft) and chronic illnesses (diabetes, Alzheimer’s disease). Health issues on the Texas-Mexico border; international health; environmental policy, regulatory process, and oversight.

- **Cynthia L. Chappell**, Professor. B.S., Middle Tennessee State University, 1971; M.S., Middle Tennessee State University, 1976; Ph.D., Baylor College of Medicine, 1985.
  
  *Research Interests:* Parasitology; gastrointestinal parasites; immune response to parasites.

- **George L. Delclos**, Professor. M.D., University of Barcelona, 1981; M.P.H., The University of Texas School of Public Health at Houston, 1988; Ph.D., Pompeu Fabra University 2007.
  
  *Research Interests:* Occupational hazards of health care workers; occupational and environmental respiratory disease; international aspects of occupational health.

- **Tommy C. Douglas**, Associate Professor. A.B., Princeton University, 1969; M.S., California Institute of Technology, 1970; Ph.D., California Institute of Technology, 1974.
  
  *Research Interests:* Antibody; apolipoprotein; gene expression; genetics; immunogenetics; immunoglobulin; immunology.

- **Robert J. Emery**, Associate Professor. B.A., University of North Carolina, Wilmington, 1979; M.S., University of North Carolina, Chapel Hill, 1989; M.S., East Carolina University, 1991; Dr. P.H., The University of Texas School of Public Health at Houston, 1997.
  
  *Research Interests:* Comprehensive approaches to health and safety; health and safety program outcome measures; health and safety for special populations; occu-
pational radiation protection; hazardous waste management; emergency preparedness and response, training.

David Gimeno Ruiz de Porras, Associate Professor. B.A. and M.A., Universitat de Barcelona, Barcelona, Catalonia (Spain), 1997; Ph.D., Universitat Pompeu Fabra, Barcelona, Catalonia (Spain), 2003. Research Interests: Occupational and social epidemiology; employment status, work organization and health; work stress; health-related productivity; social inequalities in health and aging; applied multilevel statistical models; cross-national epidemiological studies.

Thomas A. Mackey, Professor. B.S.N., Loyola University, 1974; M.P.H., University of Tennessee, 1977; Ph.D., Southern Illinois University, 1988. Research Interests: Quality improvement and changes in diabetic patient outcomes in an academic nurse practitioner primary care practice and manage patient violence; nurse practitioner clinic based practices.


Jimmy L. Perkins, Professor (San Antonio Regional Campus). B.A., The University of Texas at Austin, 1974; M.S., The University of Texas School of Public Health at Houston, 1976; Ph.D., The University of Texas School of Public Health at Houston, 1981. Research Interests: Chemical exposure assessment; risk communication; risk analysis; dermal exposure; statistical applications.

Arnold J. Schecter, Professor (Dallas Regional Campus). B.S., University of Chicago, 1957; M.D., Howard University Medical School, 1962; M.P.H., Columbia University, 1976. Research Interests: Exposure assessment; environmental epidemiology; persistent organic pollutants (POPS), especially dioxins and related compounds and also brominated flame retardants; Agent Orange; Dioxins in Vietnam, Cambodia and Laos; the USA; Russia; Israel and Palestinian Areas; Germany; China; and Japan.

Gene D. Schroder, Associate Professor. B.A., Rice University, 1967; M.A., Rice University, 1970; Ph.D., University of New Mexico, 1974. Research Interests: Ecosystem structure and dynamics; environmental contaminating rodent ecology.


Mary Ann Smith, Assistant Professor. B.S., The University of Texas at Austin, 1979; Ph.D., The University of Texas at Austin, 1984. Research Interests: Cellular and molecular mechanisms of nephrotoxicity; in-vitro toxicology; environmental justice.
Thomas H. Stock, Associate Professor. B.S., Villanova University, 1968; M.S., Cornell University, 1972; Ph.D., Cornell University, 1977; M.P.H., The University of Texas School of Public Health at Houston, 1979.

Research Interests: Assessment of community and occupational pollutant exposures; characterization of major determinants of indoor and outdoor air quality; evaluation of air monitoring and industrial hygiene methods.

Lawrence W. Whitehead, Associate Professor. B.A., B. Arch., Rice University, 1971; M.P.H., The University of Texas School of Public Health at Houston, 1972; M. Arch., Rice University, 1973; Ph.D., The University of Texas School of Public Health at Houston, 1976.

Research Interests: Exposure assessment; occupational epidemiology; environmental health, industrial noise, and demography of the industrial hygiene profession.

Emeritus Faculty, Environmental and Occupational Health Sciences

Marcus M. Key, Professor Emeritus. B.A. Columbia University, 1949; M.D., College of Physicians and Surgeons, Columbia, 1952; M.I.H., Harvard School of Public Health, 1954, Irvington, VA.

Secondary Faculty, Environmental and Occupational Health Sciences

Benjamin C. Amick III (Health Promotion and Behavioral Sciences) Keith Burau (Biostatistics), Sharon P. Cooper (Epidemiology and Disease Control), Herbert L. DuPont (Epidemiology and Disease Control), Sarah Felknor (Management, Policy and Community Health), Ralph Frankowski (Biostatistics), Carl S. Hacker (Management, Policy and Community Health), John R. Herbold (Epidemiology and Disease Control), David Hewett-Emmett (Epidemiology and Disease Control), James E. Hixon (Epidemiology and Disease Control), Zhi-Dong Jiang (Epidemiology and Disease Control), Stephen H. Linder (Management, Policy and Community Health), Lisa Pompeii (Epidemiology and Disease Control), Eva Shipp (Epidemiology and Disease Control), Elaine Symanski (Epidemiology and Disease Control), and Kim Waller (Epidemiology and Disease Control).

Facility of other components of The University of Texas System who participate on a regular basis in the teaching or research programs in Environmental and Occupational Health Sciences

Kathleen Becan-McBride, Professor (Cross-appointment) (The University of Texas Medical School at Houston). B.S., University of Houston, 1971; M.Ed., University of Houston, 1973; Ed.D., University of Houston, 1977.

Leanne H. Field, Adjunct Associate Professor (The University of Texas at Austin, Senior Lecturer, School of Biological Sciences). B.A., Florida State University, 1972; M.S., The University of Georgia, 1974; Ph.D., The University of Texas at Austin, 1987.

Thomas J. Goka, Assistant Professor of Biological Sciences (The University of Texas Health Science Center at Houston, Graduate School of Biomedical Sciences) B.S., Univ. of Houston, 1969; M.S., The University of Texas Health Science Center Graduate School of Biomedical Sciences, 1974; Ph.D., The University of Texas Health Science Center Graduate School of Biomedical Sciences.
H. Erle Janssen, Jr., Adjunct Associate Professor (Retired from The University of Texas at Austin, formerly Director of Environmental Health and Safety). B.S., Sam Houston State University, 1974; M.S., Texas A&M University, 1976.

Philip C. Johnson, Professor (Cross-appointment) (The University of Texas Medical School at Houston). B.A., Vanderbilt University, 1975; M.D., Baylor College of Medicine, Houston, 1979.

Wen-Whai Li, Adjunct Associate Professor (The University of Texas at El Paso). B.S.E., National Taiwan University, 1976; M.S., Colorado State University, 1981; Ph.D., Colorado State University, 1984.

Julie Lindenberg, Assistant Professor of Environmental and Occupational Health (Cross-appointment) (The University of Texas School of Nursing at Houston). B.S., University of Delaware, 1983; M.S., The University of Texas School of Nursing at Houston, 1989, DNP, Columbia University, 2007.

Claudia S. Miller, Adjunct Professor (The University of Texas Health Science Center at San Antonio). B.A., University of Wisconsin, 1968; M.S., University of California, Berkeley, 1969; M.D., The University of Texas Health Science Center at San Antonio, 1985.

William E. Seifert, Jr., Assistant Professor (Cross-appointment) (The University of Texas Medical School at Houston). B.S., Marietta College, 1970; M.S., Purdue University, 1973; Ph.D., Purdue University, 1975.

John A. Thomas, Adjunct Professor (The University of Texas Health Science Center at San Antonio). B.S., University of Wisconsin, 1956; M.A., University of Iowa, 1958; Ph.D., University of Iowa, 1961.

Charles D. Turner, Adjunct Professor (The University of Texas at El Paso). B.S., University of Nebraska at Lincoln, 1968; M.S., University of Nebraska at Lincoln, 1970; Ph.D., Colorado State University, 1981.

John C. Walton, Adjunct Professor (The University of Texas at El Paso). B.S., Western Illinois University, 1977; M.S. (Environmental Science), University of Virginia, 1981; M.S. (Chemical Engineering), University of Washington, 1988; Ph.D., University of Idaho, 1991.

Adjunct Faculty, Environmental and Occupational Health Sciences

Antonio Aguirre, M.D., Ph.D. Adjunct Associate Professor, Department of Ophthalmology, Huddersfield Royal Infirmary, Huddersfield, United Kingdom.

Arif Ahmed, M.D., Ph.D., Adjunct Assistant Professor. School of Medicine, Texas Tech University, Lubbock, Texas.

Stephanie Barczyk, M.S.P.H., J.D., Adjunct Instructor, Toxicologist/Risk Assessor, URS Corporation, Houston, Texas.

Danelle Belhatechce, P.E., Adjunct Instructor, Senior Assistant Director, City of Houston, Public Works and Engineering, Houston, Texas.
Ben Beltz, B.S., Adjunct Instructor, Chemist, U.S. EPA, Region 6 Laboratory, Houston, Texas.

Ian B. Berger, S.B., M.S., M.P.H., Dr.P.H., Adjunct Professor. Director, InFOCUS, College of Optometry, University of Houston, Houston, Texas.

Faiyaz A. Bhojani, M.D., M.P.H., Dr.P.H., Adjunct Associate Professor. Director Health Services, Shell Oil Company, Houston, Texas.

Gail M. Blakley, B.S., M.D., Adjunct Assistant Professor. Physician’s Assistant, Milby Medical Group, Houston, Texas.

Michael Charlton, Ph.D., Adjunct Assistant Professor, Assistant Vice President for Risk Management and Safety, UTHSC San Antonio, San Antonio, Texas.

Ann Oliver Cheek, B.S., Ph.D., Adjunct Assistant Professor. Houston Baptist University, Houston, Texas.

Dianne Gregg, B.S., Adjunct Instructor. Chemist, U.S. EPA Region 6 Laboratory, Houston, Texas.

Myron C. Harrison, M.D., M.P.H., Adjunct Associate Professor. Senior Health Advisor, Exxon Mobil Corp., Dallas, Texas.

J. Jack Hinton, Dr.P.H., Adjunct Professor. Texaco, Houston, Texas.

Benjamin Hoffman, M.D., M.P.H., Adjunct Professor. Vice President & Chief Medical Officer, Waste Management Inc., Houston, Texas.

Cynthia L. Howard, B.A., M.S., Ph.D., Adjunct Assistant Professor. Assistant Professor of Biology, University of Houston at Clear Lake, Clear Lake, Texas.

Howard L. Kusnetz, B.A., B.S.E., M.Sc., Adjunct Professor. Retired, Houston, Texas.

Craig E. Litton, B.S., M.P.H., Dr.P.H., Adjunct Assistant Professor. Assistant Professor, Brazosport College, Lake Jackson, Texas.

Richard McMillin, B.S., Adjunct Instructor, Deputy Branch Chief, Laboratory Manager, U.S. EPA. Region 6 Laboratory, Houston, Texas.


Christina L. Nance, Ph.D., Adjunct Assistant Professor. Texas Children’s Hospital, Houston, Texas.


Lakshimi Putcha, Ph.D., Adjunct Professor. Pharmacologist, NASA/Johnson Space Center, Houston.
Timothy Sanders, B.S., Adjunct Instructor. Chemist, U.S. EPA Region 6 Laboratory, Houston, Texas.

Lawrence Schulze, Ph.D., P.E., C.P.E., Adjunct Associate Professor. Director of the Occupational Safety and Ergonomics Core Program, Department of Industrial Engineering, University of Houston, Houston, Texas.

David Stockton, B.S., Adjunct Instructor. Chemist-Team Leader, U.S. EPA Region 6 Laboratory, Houston, Texas.

Melissa D. Tonn, M.D., M.B.A., M.P.H., Adjunct Assistant Professor. President, Occ M.D. Occupational Medicine. Dallas, Texas.

Alex Van Keuren, M.P.H., Adjunct Instructor. City of Houston Public Works and Engineering, Houston, Texas

James M. Vanderploeg, B.S., M.D., M.P.H., Adjunct Associate Professor. President, Center for Aerospace & Occupational Medicine, Houston, Texas.
Epidemiology and Disease Control

Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems. With its focus on disease causation and prevention, this field is a fundamental science of both preventive medicine and public health. In addition to having specific research activities, the epidemiology faculty interacts closely with colleagues in government and industry, in clinical institutions of the Texas Medical Center, in community agencies, and with international organizations to provide a broadly based research and learning environment for students.

The Division of Epidemiology and Disease Control offers the M.P.H., M.S., Dr.P.H., and Ph.D. in Epidemiology. The curricula of these degree programs are based on instruction in epidemiological principles, concepts and methods, with an emphasis on the application of this knowledge. Students are encouraged to include interdisciplinary coursework, independent research, and practical public health experiences within their academic plan.

The Division also offers a minor course of study (nine semester credit hours) for M.S., Dr.P.H., and Ph.D. students majoring in other public health disciplines.

The following Divisional courses are strongly recommended for the M.S. student minoring in Epidemiology:

- PHM 2612 Epidemiology I
- PH 2710 Epidemiology III
- One elective course in Epidemiology

The following Divisional courses are strongly recommended for the doctoral student minoring in Epidemiology:

- PH 2615 Epidemiology II (or equivalent)
- PH 2710 Epidemiology III
- One elective course in Epidemiology

Note that PH 1725 and PH 1726, Intermediate Biostatistics I and II, (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) are prerequisites for PH 2710 Epidemiology III but do not count toward the credit hours for the minor in Epidemiology.

The Division of Epidemiology and Disease Control offers strong training in the fundamental research methods and practice of epidemiology.

Centers

The Division of Epidemiology and Disease Control is home to three centers. The mission of the Center for Infectious Diseases (CID) is to address public health concerns of the citizens of the state of Texas by providing infrastructure and administrative support for multidisciplinary and coordinated research, teaching, and community service programs; to foster epidemiological and biomedical research and training in infectious diseases; and to encourage international collaborative research efforts addressing infectious disease problems of mutual concern. The mis-
sion of the Human Genetics Center is to understand the genetic etiology of the common chronic diseases, including cardiovascular disease, diabetes, and various vision disorders. This objective is pursued and accomplished in multiple human populations. The Hispanic Health Research Center, based at the Brownsville regional campus, is also affiliated with this Division. The program focuses on obesity and diabetes research and prevention, particularly the impact on mental health and infectious diseases.

**Master of Public Health**

The Master of Public Health (M.P.H.) in Epidemiology is designed to provide a breadth of achievement in the five core disciplines of public health, as well as additional knowledge and skills in epidemiology. The goal of this program is to prepare students to put epidemiologic concepts and methods into public health practice, including research studies in public health and the interpretation of scientific evidence relevant to public health.

**Special Entrance Requirements**

A candidate for this degree should hold a baccalaureate or professional degree in the biomedical or social sciences from a regionally accredited university or school or have several years of experience in public health practice.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

**Course of Study**

To obtain a basic understanding of epidemiologic principles and practice in the broader context of public health, full time students will ordinarily complete the course sequence of four semesters.

The following Divisional courses are strongly recommended for an M.P.H. student majoring in Epidemiology:

- PHM 2612 Epidemiology I
- PH 2615 Epidemiology II
- PH 2710 Epidemiology III
- PH 1730 Statistical Methods in Epidemiology
- Two elective courses in Epidemiology

Note that PH 1725 and PH 1726, Intermediate Biostatistics I and II, (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) are prerequisites for PH 2710 Epidemiology III.

Additionally, the M.P.H. degree requires the completion of a formal practicum involving the application of epidemiological science and theory. The culminating experience focuses on an epidemiological problem and requires the student to synthesize the knowledge gained during course work, research, and practice, and includes both a written and oral presentation.

**Doctor of Public Health**

The Doctor of Public Health (Dr.P.H.) degree in Epidemiology signifies distinguished scholarly and practical accomplishments in the field of Epidemiology. It is primarily
designed for those who plan careers involving professional practice, teaching or research.

Special Entrance Requirements
A candidate for this degree should have a prior M.P.H. degree or equivalent preparation from a regionally accredited institution of higher education. A candidate should also demonstrate outstanding promise for scholarly accomplishment, and professional leadership for extending public health practice. In addition to the M.P.H., evidence of promise might include previous or current employment in a public health or health-related agency or service to such agencies, with supporting letters of recommendation documenting and evaluating the applicant’s achievements. The applicant may also submit copies of reports, articles, a career goal statement, or other written material believed to reflect such promise by the application deadline. GRE scores are required.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Those seeking a Dr.P.H. degree should anticipate a minimum three year program of study. All Dr.P.H. students are expected to complete a minor in Management and Leadership in addition to a public health breadth area. The following Divisional courses are strongly recommended for Dr.P.H. students majoring in Epidemiology:

- PHD 2712 Experimental Methods in Epidemiology
- PHM 2720 Epidemiologic Proposal Development
- PHD 2990 Epidemiology Seminar
- Two elective courses in Epidemiology

The Dr.P.H. dissertation must constitute a substantial contribution to the body of knowledge in public health practice with special emphasis on the field of epidemiology. All doctoral students must present their dissertation research in a public forum at the School prior to graduation. All completed dissertations will be made available to the public.

Master of Science Degree Program
The Master of Science (M.S.) in Epidemiology is a research degree designed to provide an understanding of epidemiologic concepts, theories and methodology. Adequate understanding of human diseases, including their natural history, etiology, pathogenesis, and prevention or control, may require moderate or advanced preparation in related laboratory or environmental sciences. Students are encouraged to draw upon outside resources (academic, governmental, clinical, etc.) in order to acquire knowledge and skills requisite to their specific educational goals. The M.S. program offers students the opportunity to prepare themselves for intermediate or higher positions in government, or private health agencies, or in research projects with an epidemiologic orientation.

Special Entrance Requirements
A candidate for this degree should hold a baccalaureate or professional degree in the biomedical, physical, or social sciences from a regionally accredited university or
school or have several years of practical experience in epidemiologic or related work. GRE scores are required.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Course of Study
To obtain a basic understanding of epidemiologic principles, concepts, methods, and their applications, full-time students will ordinarily complete the epidemiology course sequence in two years. Students will select one minor area of study in a public health discipline.

The following Divisional courses are strongly recommended for an M.S. student majoring in Epidemiology:
- PHM 2612 Epidemiology I
- PH 2615 Epidemiology II
- PH 2710 Epidemiology III
- PHM 2720 Epidemiologic Proposal Development
- Two elective courses in Epidemiology

Note that PH1725 and PH1726, Intermediate Biostatistics I and II, (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) are prerequisites for PH 2710 Epidemiology III.

In addition to coursework, the M.S. in Epidemiology degree program requires the successful completion of a research thesis that demonstrates an appropriate depth of knowledge in the field.

Doctor of Philosophy Degree Program
The Doctor of Philosophy (Ph.D.) in Epidemiology represents outstanding scholarly achievement: a mastery of epidemiologic concepts, theories and methodology; and a significant capacity for independent study. Students in the program prepare themselves to become independent epidemiologic investigators, and may acquire some teaching experience.

Special Entrance Requirements
Candidates for this degree should hold an M.S. or M.P.H. in Epidemiology from a regionally accredited university or college or have other accomplishments, which indicate similar readiness for doctoral study in epidemiology. GRE scores are required.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Direct Admission to the Ph.D. Program
Students with a B.A. or B.S. degree (or foreign equivalent) may be directly admitted into the Ph.D. program. A student requesting direct admission into the Ph.D. program is expected to have a bachelor’s degree that emphasizes the development of strong scientific and analytical skills. Applicants should provide evidence of solid academic achievement, including successful completion of advanced courses in a biological
science and two semesters of college-level calculus courses, as well as demonstrated oral and written communication skills.

The course of study would require completion of 72 credit hours.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Course of Study

For students with a prior master’s degree in Epidemiology or Public Health, at least three years of full-time study are generally needed to complete the degree program. Bachelor’s prepared students will typically require four years of full-time study.

The following Divisional courses are strongly recommended for a Ph.D. student majoring in Epidemiology:

- PHM 2612 Epidemiology I*
- PH 2615 Epidemiology II*
- PH 2710 Epidemiology III*
- PH 2711 Epidemiology IV
- PHD 2712 Experimental Methods in Epidemiology
- PHD 2770 NIH Proposal Development
- PHD 2990 Epidemiology Seminar

*These master’s level courses are taken only by the baccalaureate-prepared student or the student admitted with the right to petition. These course credit hours do not count toward the Ph.D. program for the master’s prepared student.

All students who pursue a Ph.D. in Epidemiology must pass the qualifying examination. The final degree requirement is the completion of an original research dissertation in an area of Epidemiology, which the doctoral candidate will present and defend in a public forum at the School. Students in the doctoral program may assist with the Epidemiology teaching program under the guidance of the faculty.

Courses, Epidemiology and Disease Control

PHM 2610 Fundamentals of Epidemiology

The Faculty in Epidemiology and Disease Control, 3 credits, a, b, cd (Available Online)

This course introduces students to principles and concepts in epidemiology through lectures, discussions, assigned readings, and exercises. Students are given the opportunity to acquire an understanding of epidemiologic principles and concepts, the vocabulary of epidemiology, methods of epidemiologic investigation, and the design, interpretation, and evaluation of epidemiologic research. The emphasis is on public health practice of epidemiology, and this course serves as the core epidemiology course for most M.P.H. students.

This is a designated core course.
PHM 2612 Epidemiology I
Du, Nettleton, and the Faculty in Epidemiology and Disease Control, 3 credits, a, b

This is a core course for students enrolled in the M.P.H. or M.S. in Epidemiology degree programs. It introduces students to principles and concepts in epidemiology through lectures, discussions, assigned readings, and exercises. Students are given the opportunity to acquire an understanding of epidemiologic principles and concepts, the vocabulary of epidemiology, methods of epidemiologic investigation, and the design, interpretation, and evaluation of epidemiologic research. The key concept of this course is to help students to learn how to think epidemiologically and to apply these epidemiologic concepts and methods to solve public health problems through research.

This is a designated core course.

Prerequisites: Consent of instructor

PH 2615 Epidemiology II
Day, Selwyn, and the Faculty in Epidemiology and Disease Control, 4 credits, a, b

This course focuses on the principles and activities necessary to carry out information collection, data implemented and managed in an ethical manner consistent with the principles of the scientific method. This course addresses practical aspects of epidemiologic research, that is, how you get it done. Systems theory, epidemiologic methods, principles of survey research, operations research methods, and computer uses in research are covered. The final product from the class is the development of an epidemiologic field Manual of Procedures for a study.

Prerequisites: PHM 2612 (or PHM 2610) or equivalent and PH 1700 (or PH 1690)

PH 2710 Epidemiology III
Symanski, Hallman, and the Faculty in Epidemiology and Disease Control, 4 credits, a, b

This course covers advanced concepts in epidemiologic methods with an emphasis on observational studies. Topics include causal inference, measures of disease frequency, measures of association, study design, precision and validity in epidemiologic studies, introduction to stratified and logistic regression analysis, concepts assessing effect modification and confounding, interpretation of epidemiologic study results and manuscript development.

Prerequisites: PHM 2612 (or PHM 2610), PH 2615, PH 1690 and PH 1700 or equivalent

PHD 2711 Epidemiology IV
Waller and the Faculty in Epidemiology and Disease Control, 4 credits, b

This course provides an opportunity to learn the basic elements of epidemiologic data analysis in a laboratory setting. Students in this course address research questions by analyzing data from a variety of study designs. Students will be expected to acquire experience with the following types of data analysis: stratified analysis, logistic regression, proportional hazards modeling and meta-analysis. The course
also covers examination of confounding and effect measure modification, strategies for model building and interpretation and presentation of results. First level Ph.D. course.

Prerequisites: PH 2710 or consent of Instructor

**PHD 2712 Experimental Methods in Epidemiology**
Hwang, Moyé, and the Faculty in Epidemiology and Disease Control, 4 credits, a

The central objective of this course is to enable students to evaluate and interpret evidence concerning preventive or therapeutic measures, especially those recommended for public health application. It concerns principles and methods of experimental studies in epidemiology and public health, from simple clinical trials to prevention trials in multiple communities. Applications span diverse areas, including cardiovascular diseases, cancer, and infectious diseases. A standard text and selected readings concerning specific experimental studies and related topics are used. Students participate actively in a seminar format, critique published reports, and undertake a collaborative project to develop a research protocol for an experimental study.

Prerequisites: PH 2710 or consent of instructor

**PHM 2720 Epidemiologic Proposal Development**
Cardenas, and the Faculty in Epidemiology and Disease Control, 3 credits, b, (Available Online)

The course defines the components of a scientific proposal, utilizing the National Institutes of Health’s (NIH) guidelines for the development of research grant applications. Proposals must be for an epidemiologic study. Students have the opportunity to learn how to develop each section of a proposal through lecture materials, reviewing and discussing examples of successful and unsuccessful proposals and finally the preparation of their own research proposal. The course concludes with a mock NIH study section, in which students serve as reviewers for their colleague’s proposals.

This course is intended for M.P.H. and M.S. students.

Prerequisites: PH 2710 or consent of instructor

**PH 2730 Epidemiology and Control of Infectious Disease**
Hwang, Murray and the Faculty in Epidemiology and Disease Control, 4 credits, b

This course is designed as an introduction to the epidemiologic aspects of infectious diseases and provides information regarding prevention and control of these diseases. At the end of the course, students have an understanding of the epidemiologic aspects of infectious diseases including incidence, distribution, and pattern of disease occurrence as well as different modes of transmission and associated risk factors. They should understand the importance of surveillance systems in detecting epidemics, the application of epidemiological methods to determine the risk and associated factors, and the significance of prevention and control programs for infectious diseases. Students gain knowledge and skills in carrying out epidemic investigations through a series of case study assignments.
Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

**PH 2731 Genetics and Infectious Diseases**
Jiang, Hwang, Brown, and the Faculty in Epidemiology and Disease Control, 2 credits, a

This course is intended for students who have not had significant training in genetics. It will cover basic genetics, medical genetic terminology, and the associated scientific and medical literature. At the end of the course, students will have an understanding of the genetic aspects of infectious diseases, including the contribution of host genetics and genes influencing susceptibility to infectious diseases. They will understand the importance of environment, host and pathogens genetic factors and their mutual interactions influence the ratio between clinical and subclinical disease. Evaluations will be based on examination given in the class and attendance.

**PHM 2740 Cardiovascular Disease Epidemiology and Prevention**
Morrison and the Faculty in Epidemiology and Disease Control, 3 credits, a

The purpose of this course is to provide an introductory overview to the field of cardiovascular disease (CVD) epidemiology. Topics for this course include the pathophysiology of CVD, CVD survey methods, trends in CVD mortality and morbidity, CVD risk factors, major strategies for CVD prevention and a summary of major CVD clinical trials. Students will gain an understanding of the impact of CVD on public health.

Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

**PHD 2740 Cardiovascular Disease Epidemiology and Prevention**
Morrison and the Faculty in Epidemiology and Disease Control, 3 credits, a

The purpose of this course is to provide an overview to the field of cardiovascular disease (CVD) epidemiology. Topics for this course include the pathophysiology of CVD, CVD survey methods, trends in CVD mortality and morbidity, CVD risk factors, major strategies for CVD prevention and a summary of major CVD clinical trials. In addition to understanding the impact of CVD on public health, PhD level students will comprehensively evaluate a novel aspect of CVD epidemiology.

Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

**PH 2745 Cancer Epidemiology**
Etzel, Pande, and the Faculty in Epidemiology and Disease Control, 3 credits, a

The overall goal of this primarily introductory level course is to review cancer causation and the epidemiology of cancer by anatomical site. The course will introduce seminal studies and current issues in cancer epidemiology and will cover basic concepts pertinent to cancer epidemiology research including biology, pathology, statistics, classic and novel risk factors, prevention, and genetics. Selected publications from epidemiologic literature provide opportunity for student-faculty discussion.

**PH 2750 Disease: Natural History, Prevention, Control**
Jiang, Piller and the Faculty in Epidemiology and Disease Control, 3 credits, a (Online only)
This course is intended for students who have not had significant training in biology. It will cover common diseases, medical terminology, and the associated scientific and medical literature. The course will consist predominantly of online “lectures,” readings and Discussion Board participation. Objectives include attaining a basic understanding of the biological basis of health and of disease processes; developing a vocabulary of medical terminology that will enhance the student’s ability to read and comprehend public health literature; and developing an understanding of common human diseases and their importance in a public health context. The grade is based upon participation, assignments, a mid-term examination, and research project.

**PHM 2760 Occupational Epidemiology**
Cooper and the Faculty in Epidemiology and Disease Control, 3 credits, cd (Online only)

There are approximately 150 million people in the U.S. workforce who are exposed to a wide range of health and safety hazards. Workplace injuries and illnesses exact a large human and economic toll on adult and child workers in the U.S. and worldwide. Many, if not most, of these adverse health outcomes are preventable. This course will describe the types and magnitude of workplace injuries and illnesses, examine the epidemiologic methods used to identify risk factors for these events, and examine the role of academia, industry, and public health practice in understanding and controlling these conditions from an epidemiologic perspective. The course is especially targeted as a special topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science and other interested students.

Prerequisites: PH 1700 (or PH 1690) and PHM 2612 (or PHM 2610)

**PHD 2760 Occupational Epidemiology**
Cooper and the Faculty in Epidemiology and Disease Control, 3 credits, cd (Online only)

There are approximately 150 million people in the U.S. workforce who are exposed to a wide range of health and safety hazards. Workplace injuries and illnesses exact a large human and economic toll to adult and child workers in the U.S. and worldwide. Many, if not most, of these adverse health outcomes are preventable. This course will describe the types and magnitude of workplace injuries and illnesses, examine the epidemiologic methods used to identify risk factors for these events, and examine the role of academia, industry, and public health practice in understanding and controlling these conditions from an epidemiologic perspective. The course is especially targeted as a special topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science, and other interested students. PhD students will have additional projects.

Prerequisites: PH 1700 (or PH 1690) and PHM 2612 (or PHM 2610)

**PHD 2770 NIH Proposal Development**
Kelder, Caetano and the Faculty in Epidemiology and Disease Control, 3 credits, a
The goals of this course are to introduce students to the process of submission, review and funding at the NIH, and to guide students in developing grant writing skills through preparing an NIH-style application. Knowledge of how the NIH works is an important part of academic life in the U.S. While there are many other funding sources for public health and medical research, the NIH is the largest, most competitive and the most prestigious. Developing grant writing skills is essential for academic success in today's competitive environment and shifting federal priorities. In academic life, without grant preparation skills your chances for promotion and tenure are reduced.

After completing this course, students should be able to understand the NIH grant review process at its various levels. Students should also be able to understand the process of developing an idea into a research project, and will be familiar with the various sections of a grant application, their format and content. If a research topic of interest has not been identified, students are encouraged to think about one as soon as possible. Course assignments will assist in making this selection.

This course is intended for Ph.D. and Dr.P.H. students.

Prerequisites: PH 2710

**PH 2780 Applied Genetic Methods in Public Health**
Morrison and the Faculty in Epidemiology and Disease Control, 3 credits, cd

This course is an introduction to statistical methods and software for analyzing measured genetic variation in human studies. The primary focus will be on analytic methods with hands on use of sample datasets and available software. Students will be refreshed on the genetic and statistical theory underlying current methodologies. We recommend that students have previous exposure to the principals of genetics and biostatistics.

**PHD 2790 Biological Basis of Emerging Diseases**
Fisher-Hoch, Restrepo, and the Faculty in Epidemiology and Disease Control, 3 credits, b

The objective of this course is to give students from disparate backgrounds the opportunity to acquire basic knowledge that will permit them to understand the principles which underlie epidemics and emergence of new diseases. In this course an emerging disease is anything from HIV or avian flu, to obesity and diabetes, and topics change each year to follow current problems or threats. Factors explored range from human and microbial genetics, molecular techniques, molecular epidemiology, economics, culture, climate and major social disruptions, such as warfare and migration. Students will be introduced to a variety of topics using real examples which they will have to research and then examine to determine causes and propose control measures. Teaching on preparation of slides, use of ITV, reference manager software and other tools will be included. Students will be taught the basics of molecular medicine sufficient to understand at least in principle the major reports on emerging diseases. In addition to weekly assignments, students will over the course of the semester prepare a proposal to investigate a problem of their choice in a format suitable for grant submission or publication. Instruction on how to develop and put their ideas into research paper format will also be included.
PH 2800 *Tropical Infectious Diseases*
Brown and the Faculty in Epidemiology and Disease Control, 3 credits, a

The course is designed as an introductory course in parasitology; a basic background in biology should be sufficient preparation. An understanding of the basic concepts of immunology would be helpful, but is not a prerequisite. The course will consist of a combination of lectures, group discussion, and homework assignments. For a number of topics, guest lecturers who have a unique perspective on the subject will be enlisted.

Particular viral and parasitic pathogens of humans have been selected for study based on their public health importance. Pathogens that are especially problematic in international settings and/or emerging or re-emerging diseases are given special attention. Key factors in the selection of topics include prevalence, morbidity and mortality, and societal impact of the microbe.

PH 2805 *Medical Microbiology*
Brown and the Faculty in Epidemiology and Disease Control, 3 credits, b (odd-numbered years)

The course is designed as an introductory course in medical microbiology; a basic background in biology should be sufficient preparation. An understanding of the basic concepts of immunology would be helpful, but is not a prerequisite. The course will consist of a combination of lectures on selected topics. For a number of topics, guest lecturers who have a unique perspective of the subject will be enlisted.

Particular bacterial pathogens of humans have been selected for study based on their public health importance. Key factors in the selection of topics include prevalence, morbidity and mortality, and societal impact of the microbe.

PH 2807 *Molecular Principles of Virology*
Hwang, 3 credits, a

All students associated with the program are encouraged to take this introductory course in virology at the earliest opportunity. We initially discuss the basic properties that unite all viruses, along with basic experimental approaches to their study. In addition, we aim to outline the properties that characterize each of the major groups of viruses, spanning the spectrum from those with small RNA genomes to those with large DNA genomes. Although emphasis will likely be placed on the animal viruses, discussion of the plant viruses may not be excluded. This course ideally prepares students with an interest in gene therapy, but who may have little background in virology.

Prerequisites: Consent of instructor

PH 2810 *Pathology and Public Health*
Piller and the Faculty in Epidemiology and Disease Control, 3 credits, b (Available Online)
This course is an overview of the pathophysiology of disease. The first third of the semester is devoted to studying pathophysiologic processes. Thereafter, for each body system, two to three diseases are examined and studied in detail, including clinical, histologic and anatomic changes that occur, as well as public health implications of each. Each student presents a final research project on a disease process or type, including the pathology and public health aspects. The final grade is based on attendance, participation, exams, and class projects.

Prerequisites: PH 2750 (or 1 semester of college biology or zoology)

**PHD 2815 Genetics and Human Disease**
Hanis, Boerwinkle, and the Faculty in Epidemiology and Disease Control, 3 credits, a

This course introduces principles and methods of human genetic analysis with special reference to the contribution of genes to the burden of disease. Although molecular, biochemical and morphogenic processes controlled by genes will be briefly surveyed, the aim of the course is to describe the analytical processes whereby genetic mechanisms are inferred and genes on chromosomes are located.

Prerequisites: Consent of instructor; general genetics and statistics

Cross-listed with UTHSC-H GSBS GS110013

**PHD 2820 Molecular and Cellular Approaches to Human Genetics**
Hixson, Bressler, Sen, and the Faculty in Epidemiology and Disease Control, 3 credits, b

This course provides a comprehensive overview of human genetics and the role of genes in human disease. The course is taught by instructors from UTSPH and M.D. Anderson Cancer Center and consists of a series of lectures from instructors and guest lecturers. While a wide range of topics are covered, many lectures focus on cancer biology and genetics.

Prerequisites: Consent of instructor. Undergraduate level biochemistry, cell biology, and genetics

Cross-listed with UTHSC-H GSBS GS110023

**PH 2830 Clinical Genetics in Epidemiology**
Daiger, Morrison, and the Faculty in Epidemiology and Disease Control, 3 credits, a

The intent of this course is for SPH students to understand the role clinical genetics plays in the practice of epidemiology, and the relationship between epidemiology and medical genetics. Emphasis will be on the practice of medical genetics as it may be encountered by professionals in public health. Instructors include faculty in the Human Genetics Center, School of Public Health, and in the Division of Medical Genetics, UT Medical School. Teaching will be by didactic classroom instruction. The subject material covers basic biology of clinical genetics, genetic diseases and birth defects as seen in a medical genetics clinic, the provision of genetic services in Texas, and public policy issues relating to the practice of medical genetics.
Prerequisites: Recent college biology or equivalent

PHD 2840 Reproductive and Perinatal Epidemiology
Waller and the Faculty in Epidemiology and Disease Control, 3 credits, a

This seminar course covers the epidemiology and natural history of pregnancy. Topics include conception, unintended pregnancy, contraception, embryogenesis, embryonic and fetal loss and complications of pregnancy. Students also become familiar with the epidemiology of common adverse pregnancy outcomes such as preterm birth, fetal growth restriction, infant death and congenital anomalies. The class consists of a combination of lectures and seminars. As a doctoral level course, this class also has a strong focus on methodologic issues pertaining to research in reproductive and perinatal epidemiology.

Prerequisites: PHM 2612 (or PHM 2610) or consent of instructor

PH 2850 Genetic Epidemiology: Association Studies
Mitchell and the Faculty in Epidemiology and Disease Control, 2 credits, b (odd-numbered years)

This introductory level course in genetic epidemiology focuses on the design of studies to identify disease-gene associations. The lectures concentrate on the two most common study designs for genetic association studies: case-control studies and case-parent trios, and address disease-gene associations, gene-environment interactions and maternal genetic effects. Students will learn about study design and data analysis through class lectures, independent readings, completion of problem sets and class discussions.

The objectives of this course are to provide the student with an understanding of complex genetic diseases; population genetics; common designs for studies of disease-gene association; approaches for evaluating gene-environment interactions; and approaches for assessing maternal genetic effects. At the conclusion of the course, students will be able to design case-control and family-based studies to detect disease-gene associations, and should have an understanding of the various statistical approaches that can be used to analyze the resulting data.

Cross-listed with UTHSC-H GSBS GS110112

PHD 2860 Advanced Design Analysis Methods in Epidemiology
Rahbar, Hossain, Rodin and the Faculty in Epidemiology and Disease Control, 3 credits, b

This course primarily covers topics related to study design and appropriate data analysis using advanced techniques. At the core, the faculty will discuss basic and generalized regression models for binary (logistic) continuous (linear) and count (Poisson) outcomes; multivariate data reduction techniques such as factors analysis and Principal Component Analysis; longitudinal models; analysis of clustered data; and select data mining methods. Whenever possible, the faculty will illustrate how to carry out data analyses in SAS or STATA or other suitable statistical packages.

Prerequisites: PHD 2711 and PHD 1830 (or PHM 1615 and PHM 1616)
**PHD 2870 Causation**  
The Faculty in Epidemiology and Disease Control, 3 credits, a

This course is intended to provide a firm foundation for scientists who intend to undertake etiological research. The course will review the history of philosophical and scientific causal reasoning with extensive examples and case studies of real and theoretical etiological problems, particularly in disease causation in an effort to understand the dilemmas that have often led scientists astray. The relationship between commonly used formal causal “criteria” such as Koch’s postulates and Hill’s viewpoints will be studied and critiqued.

**PHM 2950 Genetic Epidemiology of Chronic Disease**  
Hanis and the Faculty in Epidemiology and Disease Control, 2 credits, b

This course will serve to expose students to the evidence and logic involved in inferring the contribution of genetic mechanisms to those diseases of public health importance. Emphasis will be on developing a framework for assessing the impact of genes on common disease, but will not include detailed methodological developments or statistical techniques. The format will be a weekly two-hour session during which a single disease will be examined. In this way, students will be introduced to a broad spectrum of diseases and learn to recognize the similarities and the uniqueness inherent to each. Sessions will be comprised of lectures and discussions.

Cross-listed with UTHSC-H GSBS GS110092

**PH 2960 Seminar in Genetics and Population Biology**  
The Human Genetics Center Faculty, 1 credit, a, b

Students analyze and present individual topics or research.

Prerequisites: Consent of instructor.

Cross-listed with UTHSC-H GSBS GS110711

**PHM 2970 Foundations of Public Health Genetics**  
Hallman, Hewett-Emmett, and the Faculty in Epidemiology and Disease Control, 2 credits, a

This course is designed mainly (but not exclusively) for M.P.H. students with a limited background in biological sciences and genetics who wish to gain an appreciation of the importance and current limitations of the application of human genetics to public health approaches to identifying and ameliorating disease. The course aims to provide a background in genetics, human biology, and genomics needed to develop an appreciation of the public health role of genetics while developing sufficient depth on selected topics that illustrate different aspects of the genetic paradigm.

**PH 2980 Writing and Communicating in Science**  
Murray and the Faculty in Epidemiology and Disease Control, 3 credits, a

This course will focus on teaching students how to become effective scientific writers. Students will be given the opportunity to learn how to recognize common writing mistakes, how to reference properly, understand what constitutes plagiarism.
and how to effectively communicate to the scientific community. In-class exercises will offer the student the opportunity to develop critical editing skills. Students will prepare a two-page literature review before the beginning of the course that will be used as a learning tool for writing and editing over the course of the week.

**PHD 2990 Epidemiology Seminar**
Boerwinkle, Volcik and the Faculty in Epidemiology and Disease Control, 1 credit, a, b

The Epidemiology Seminar is open to all students but is mandatory for epidemiology doctoral students who have not yet taken their qualifying exam. The seminar is intended to hone research and presentation skills and to provide students an opportunity to present data, a research proposal, or an epidemiology-related topic to an audience of their peers and mentors. The seminar will provide students an opportunity to receive critical feedback on their research and develop professional interactions between faculty and other students. Each semester, an invited outside guest, selected by the students, will give a presentation.

**PH 2998 Special Topics in Epidemiology**
The Faculty in Epidemiology and Disease Control, 1-4 credits, a, b, cd

Special Topics in Epidemiology vary each semester. Previous topics offered:

- CITAR Seminar
- Diet and Chronic Disease
- Epidemiology of Aging
- Health of Refugees and Displaced Populations
- Injury and Violence: A Public Health Approach
- Maternal and Child Health
- Nutritional Epidemiology
- Public Health Response to Chronic Disease in the 21st Century
- Rapid Assessment Methods in Public Health
- Seminar in Child and Adolescent Health
- Vaccines and Immunization
- Injury Epidemiology
- Methods in Clinical Epidemiology
- Public Health Surveillance
- Neuroepidemiology
- Infectious Disease Journal Club

**PH 2999 Individual Study in Epidemiology**
The Faculty in Epidemiology and Disease Control, 1-9 credits, a, b, cd

A plan of study is determined for each participating student and supervised by a member of the epidemiology faculty. In general, courses of individual study are not recommended unless a student has completed the introductory course or presents evidence of experience in the field of epidemiology. This course may be repeated for credit.

**PH 9997 Practicum**
The Faculty in Epidemiology and Disease Control, 1-9 credits, a, b, cd
A practicum is determined by the student and advisor and supervised by a member of the Epidemiology and Disease Control faculty.

**PH 9998 Culminating Experience/Thesis Research**
The Faculty in Epidemiology and Disease Control, 1-9 credits, a, b, cd

Thesis research is determined by the student with approval of the student’s Advisory Committee. This course may be repeated for credit.

**PH 9999 Dissertation Research**
The Faculty in Epidemiology and Disease Control, 1-9 credits, a, b, cd

Dissertation research is determined by the student with approval of the student’s Advisory Committee. This course may be repeated for credit.

**Primary Faculty, Epidemiology and Disease Control**

*Research Interests*: Hepatitis B; hepatocellular carcinoma; AIDS; infectious disease epidemiology.

**James Belkind-Gerson**, Assistant Professor of Epidemiology, M.D.

*Research Interests*: Human genetics; bioinformatics; DNA variation; coronary heart disease; hypertension.

**Jan Bressler**, Assistant Professor. B.S., Columbia University, 1991; Ph.D., Baylor College of Medicine, 2000; M.P.H., The University of Texas School of Public Health at Houston, 2002.  
*Research interests*: Disease Control, Epidemiology, Molecular Genetics, Genetic Epidemiology, Molecular Genetics.

**Eric L. Brown**, Assistant Professor. B.S., Texas A&M University, 1989; Ph.D., University of Texas Graduate School of Biomedical Science, 1996.  
*Research Interests*: Immunology; infectious disease; mechanisms of immune evasion; vaccine development.

**Raul Caetano**, Professor (Dallas Regional Campus). M.D., School of Medical Sciences, Rio de Janeiro State University, 1969; M.P.H., University of California, Berkeley, 1979; Ph.D. University of California, Berkeley, 1983.  
*Research Interests*: Epidemiology of substance abuse; violence; drinking and alcohol-related problems among US ethnic minority groups; diagnostic procedures in alcohol abuse and dependence.

**Victor Cardenas**, Associate Professor (El Paso Regional Campus). M.D., National Autonomous University of Mexico, 1977; M.P.H., Emory University, 1990; Ph.D. Emory University, 1995.
Research Interests: Public health surveillance and field epidemiology; epidemiology of cancer; infectious diseases, chronic diseases, and injuries.

Thomas G. Cleary, Professor. B.S., St. Louis University, 1967; M.D. - Washington University, 1971; Residency in Pediatrics, St Louis Children’s Hospital 1971-4; Fellowship in Pediatric Infectious Diseases, The University of Texas Medical School 1978-9
Research Interests: bacterial gastroenteritis; pediatric diarrheal diseases; lactoferrin.

Sharon P. Cooper, Professor and Regional Dean (San Antonio Regional Campus). B.A., University of Texas at Austin, 1973; M.S., University of Oklahoma, 1975; M.S., Harvard School of Public Health, 1976; Ph.D., University of Texas at Houston, 1982. Research Interests: Occupational injury; surveillance of injury and illnesses in farm workers; working adolescents.

Stephen P. Daiger, Professor. B.S., Johns Hopkins, 1965; Ph.D., Stanford University, 1975. Research Interests: Human molecular genetics; human population genetics; medical genetics; human gene cloning; linkage mapping; retinitis pigmentosa; macular degeneration; inherited retinal diseases in humans; mutation detection; retinal disease genes RP1 and IMPDH1.

Rena Sue Day, Associate Professor. B.S., Texas Tech University, 1977; M.S., The University of Texas School of Public Health at Houston, 1982; Ph.D., The University of Texas School of Public Health at Houston, 1988. Research Interests: Epidemiology; nutrition; dietary assessment methodology; obesity, cardiovascular disease; cancer; chronic disease; dietary interventions and health promotion; physical activity; Hispanic populations; children.

Xianglin L. Du, Associate Professor. M.B., Anhui Medical University, 1984; M.S., Anhui Medical University, 1987; Ph.D., University of Manchester, 1997. Research Interests: Clinical Epidemiology of cardiovascular disease and cancer; health services and outcomes research; claims-based health care studies.

Herbert L. DuPont, Professor, Mary W. Kelsey Chair, and Director of the Center for Infectious Disease (CID). A.B., Ohio Wesleyan University, 1961; M.D., Emory University, School of Medicine, 1965. Research Interests: Worldwide study of the epidemiology; microbiology; genetic susceptibility, treatment and prevention of acute diarrhea.


D. Michael Hallman, Assistant Professor. B.A., College of Charleston, 1977; M.S.P.H., University of South Carolina, 1988; Ph.D., The University of Texas Graduate School of Biomedical Sciences at Houston, 1994. Research Interests: Genetic epidemiology of chronic disease, especially atherosclerotic disease and diabetes; genetic analysis of longitudinal data.
Craig L. Hanis, Professor. B.S., Brigham Young University, 1974; M.S., Brigham Young University, 1977; M.A., University of Michigan, 1981; Ph.D., University of Michigan, 1981.
Research Interests: Genetic epidemiology; genetics of type 2 diabetes and its complications; genomic approaches to identifying genes for common diseases.

John R. Herbold, Associate Professor (San Antonio Regional Campus). B.S., Texas A&M University, 1968; D.V.M., Texas A&M University, 1969; M.P.H., University of North Carolina, 1973; Ph.D., Ohio State University, 1981.
Research Interests: Epidemiology; environmental health; infectious disease; animal-human issues; military medicine.

Research Interests: Molecular evolution; human genetic variation; gene families.

James Hixson, Professor. B.A., The University of Texas at Austin, 1978; M.S., University of Michigan, 1980; Ph.D., University of Michigan, 1983.
Research Interests: Molecular genetics of common diseases including cardiovascular disease, obesity, and diabetes; SNP discovery and analysis in population-based studies of common diseases; allelic effects on gene expression and protein function related to common diseases and measured risk factors.

Lu-Yu Hwang, Professor. M.B.B.S., National Taiwan University, 1975.
Research Interests: Pediatrics; infectious disease; perinatal transmission; viral epidemiology; cancer epidemiology; hepatitis virus/liver cancer; HIV/AIDS, HTLV/leukemia; EBV/nasopharyngeal cancer; viral oncology.

Zhi-Dong Jiang, Assistant Professor. M.D., Beijing Medical University, 1983; M.P.H., University of Texas School of Public Health-Houston, 1994; Dr.P.H., University of Texas School of Public Health-Houston, 1998.
Research interests: Epidemiology of travelers’ diarrhea; genetic factors for acute diarrhea; enteric pathogens.

Steven H. Kelder, Associate Professor (Austin Regional Campus). B.S., Northern Illinois University, 1981; M.P.H., University of Minnesota, 1988; Ph.D., University of Minnesota, 1992.
Research Interests: School health promotion; CV/cancer disease prevention; worksite health promotion; smoking cessation; weight loss and physical activity; child and adolescent nutritional intake and exercise behavior; research design; quantitative methods.

Harold William Kohl, III, Professor (Austin Regional Campus). B.A., University of San Diego 1982; M.S.P.H., University of South Carolina 1984; Ph.D., University of Texas Health Science Center, Houston, 1993.
Research interests: Epidemiology, Physical activity and public health, development of physical activity national guidelines; physical activity for chronic disease prevention.
Xiaoming Liu, Assistant Professor. B.S., Fudan University, Shanghai, China, 1997; M.S., Fudan University, Shanghai, China, 2000; Ph.D., Graduate School of Biomedical Sciences, University of Texas, 2006.
Research Interests: theoretical population genetics; sequence-based gene mapping of complex human diseases; molecular evolution of pathogens.

Taylor J. Maxwell, Assistant Professor. B.S., Brigham Young University, 2000; Ph.D., Washington University in St. Louis, 2006.
Research Interests: Population Genetics, Quantitative Genetics, Bioinformatics, Evolutionary Biology, Human Disease Genetics.

Research Interests: Infectious Diseases (particularly viral such as Ebola; Lassa fever: HIV/AIDS), Health issues in international settings; vaccines; epidemiology and bioterrorism.

Shaper Mirza, Assistant Professor (Brownsville Regional Campus). B.S., University of Karachi, 1989; M.S., University of Karachi, 1990, Ph.D., University of Alabama at Birmingham, 2006.

Alanna C. Morrison, Associate Professor. B.S., University of Michigan, 1996; Ph.D., The University of Texas School of Public Health at Houston, 2001.
Research Interests: Elucidation of genes involved in complex diseases such as cardiovascular disease, hypertension and stroke. Identifying single nucleotide polymorphisms influencing inter-individual disease risk, linkage analyses and association studies, and development and application of novel statistical methods to evaluate genetic data.

Kristy O. Murray, Assistant Professor. B.S., Texas A&M University, 1994; B.S., Texas A&M University, 1995; DVM, Texas A&M University, 1998.
Research Interests: West Nile Virus, arboviruses, rabies virus, unexplained encephalitis, emerging infectious diseases, zoonoses.

Robert B. Ness, Dean; Professor, Epidemiology and Disease Control; M. David Low Chair in Public Health. B.Sc., University of Maryland, Honors College, 1980; M.D., Cornell University, 1984; M.P.H., Columbia University School of Public Health, 1989.
Research interests: Epidemiology of women’s health, specifically, etiology and treatment of ovarian cancer, preeclampsia, and pelvic inflammatory disease; adverse pregnancy and perinatal outcomes; links between reproductive history and cardiovascular disease; bacterial sexually transmitted infections.

Jennifer A. Nettleton, Assistant Professor. B.A., Wartburg College, 1999; Ph.D., University of Minnesota, 2003.
Research Interests: Nutrition and cardiovascular disease epidemiology; food/nutrient synergy and dietary patterns; environmental and genetic modification of diet effects; clinical dietary interventions for cardiovascular/chronic disease prevention; dietary assessment methodology.

Theresa J. Ochoa, Assistant Professor. M.D., Universidad Peruana Cayetano Heredia, Lima, Peru, 1997; Pediatrics, Universidad Peruana Cayetano Heredia, Lima,
Peru, 2001; Pediatric Infectious Diseases, University of Texas School of Medicine, Houston, TX, 2004.

Research Interests: pediatric diarrhea; pathophysiology of enteric pathogens; diarrheagenic E. coli; respiratory infections.

Linda Piller, Associate Professor. B.S., University of975; M.P.H., The University of Texas School of Public Health at Houston, 1979; M.D., The University of Texas Medical School at Houston, 1986.

Research Interests: Hypertension; ischemic heart disease; coronary heart disease; clinical trials; cardiovascular clinical trials; endpoint reporting in clinical trials; safety in clinical trials; congestive heart failure; cardiovascular pathology; cervical pathology; breast pathology.

M. Hossein Rahbar, Professor. B.S., Shiraz University, 1978; M.S., Shiraz University, 1980; Ph.D., Michigan State University, 1988.

Research Interests: Clinical Trials; Survival Analysis; Statistical and Study Design Issues in Epidemiology; Autism Spectrum Disorders; Developmental Disabilities; Global Health; Environmental Health with a focus on Toxic and Heavy Metals; Gene-Environment Interactions in relation to Autism; Data Mining; Sequential Procedures; Cost-Effectiveness Analysis; Stroke; Massive Transfusion.

Blanca I. Restrepo, Assistant Professor (Brownsville Regional Campus). B.S., Colegio Mayor de Antioquia, 1986; Ph.D., The University of Texas Health Science Center at San Antonio, 1994.

Research Interests: Tuberculosis; pathogenesis, early disease detection, host immune response, dynamics of transmission in the Texas-Mexico border. Neurocysticercosis: host-parasite interactions, immune response, granuloma formation.

Jan M. Risser, Associate Professor. B.S., Iowa State University, 1969; M.S., Texas Woman’s University, 1988; Ph.D., The University of Texas School of Public Health at Houston, 1994.

Research Interests: Sexually transmitted disease surveillance; syphilis; prevention of HIV; social determinants of health; stroke and hypertension.

Bahman Sayyar Roudsari, Assistant Professor (Dallas Regional Campus). M.D., Tehran University of Medical Sciences, 1999; M.P.H., University of Washington, 2004; Ph.D., University of Washington, 2006.

Research Interests: Epidemiology of alcoholism, health care, injury, and trauma.

Shreela V. Sharma, Assistant Professor. B.S., University of Bombay, 1996; M.A., University of Iowa, 1999; Ph.D., University of Texas School of Public Health – Houston, 2005.

Research Interests: Health promotion and health education focused towards primary prevention of chronic diseases; Nutritional and physical activity epidemiology; Design and evaluation of measurement and psychometric tools such as Ecological Momentary Assessment (EMA) to accurately measure dietary intake and physical activity behavior as well as their psychosocial correlates; Development of statistical analysis techniques for analysis of group-randomized trials.

Eva M. Shipp, Assistant Professor (San Antonio Regional Campus). B.A., University of Texas at Austin, 1997; M.S., University of Texas School of Public Health – Houston, 2000; Ph.D., University of Texas School of Public Health – Houston, 2005.
Research Interests: Occupational injury/illness among agricultural and adolescent workers; back injury; vulnerable populations.

Kerem Shuval, Assistant Professor. B.Ed, Zinman College of Physical Education & Sports Science, 1999; M.P.H., Braun Hebrew University-Hadassah School of Public Health & Community Medicine, 2002; Ph.D., Haifa University School of Public Health, 2007.
Research interests: Physical activity epidemiology and promotion, lifestyle modification, primary care, community-based research, evidence-based medicine and public health, program evaluation.

Melissa H. Stigler, Assistant Professor (Austin Regional Campus). B.S., College of William and Mary, 1991; M.P.H., University of Minnesota School of Public Health, 1999; Ph.D., University of Minnesota School of Public Health, 2003.
Research Interests: Child and adolescent health, global/international health, with special emphasis on India; tobacco prevention and cessation; obesity prevention; behavioral epidemiology.

Elaine Symanski, Associate Professor. B.S., University of Rochester, 1978; B.S., Western Washington University, 1981; M.S.P.H., University of North Carolina at Chapel Hill, 1992; Ph.D., University of North Carolina at Chapel Hill, 1996.
Research Interests: Development of quantitative methods for modeling occupational and environmental exposures; retrospective exposure assessment for workplace contaminants; investigation of health effects related to occupational and environmental exposures.

Loubna Tazi, Assistant Professor (Brownsville Regional Campus). B.S., Bordeaux II University, France, 1998; M.S., Montpellier II University, France, 1999; Ph.D., Montpellier II University, France, 2002.
Research Interests: Tuberculosis; Transmission dynamics; Drug resistant tuberculosis; Population genetics; Human susceptibility to tuberculosis; Evolution of infectious diseases (HIV, Malaria, Gonorrhea).

Kelly A. Volcik, Assistant Professor of Human Genetics. B.S., Texas A&M University, 1995; Ph.D., Graduate School of Biomedical Sciences, 2001.
Research Interests: Human genetics; genetics of common diseases; gene-environment interaction; cardiovascular disease.

Kim Waller, Associate Professor. B.A., University of California at Santa Cruz, 1975; B.S., University of California at San Francisco, 1979; M.P.H., University of California at Berkeley, 1986; Ph.D., University of California at Berkeley, 1991.
Research Interests: Preventable risk factors for birth defects; low birth weight; fetal death; birth defects; screening programs; association of serum biomarkers (measured early in pregnancy) and pregnancy outcome.

Secondary Faculty, Epidemiology and Disease Control
Benjamin C. Amick (Health Promotion and Behavioral Sciences), Irina M. Cech (Environmental and Occupational Health Sciences), Cynthia L. Chappell (Environmental and Occupational Health Sciences), George Delclos (Environmental and Occupational Health Sciences), Tommy C. Douglas (Environmental and Occupational Health Sciences), Yun-Xin Fu (Biostatistics), Robert J. Hardy (Biostatistics, Deanna M. Hoelscher (Health Promotion and Behavioral Sciences), Mohamed E. Mubasher (Biosta-
Emeritus Faculty, Epidemiology and Disease Control


William J. Schull, Professor Emeritus. B.S., Marquette University, 1946; M.S., Marquette University, 1947; Ph.D., Ohio State University, 1949.


James H. Steele, Professor Emeritus. D.V.M., Michigan State University, 1941; M.P.H., Harvard University, 1942.

Faculty of other components of The University of Texas System who participate on a regular basis in the teaching or research programs in epidemiology and disease control

Javier Adachi, Adjunct Assistant Professor (The University of Texas M.D. Anderson Cancer Center). M.D.

Christopher I. Amos, Professor (The University of Texas M.D. Anderson Cancer Center). B.A., Reed College, 1980; M.S., Louisiana State University Medical Center, 1985; Ph.D., Louisiana State University Medical Center, 1988.

Melissa L. Bondy, Professor (The University of Texas M.D. Anderson Cancer Center). B.A., The University of Texas at Austin, 1975; M.S., The University of Texas at Austin, 1982; Ph.D., The University of Texas at Austin, 1990.

Shine Chang, Associate Professor (The University of Texas M.D. Anderson Cancer Center). B.S., Brown University, 1986; M.S.P.H., University of North Carolina at Chapel Hill, 1992; Ph.D., University of North Carolina at Chapel Hill, 1995.

Deborah J. del Junco, Associate Professor (Cross Appointment) (The University of Texas Medical School at Houston). B.S., Western Illinois University, 1974; M.S., University of Utah, 1980; The University of Texas School of Public Health, Ph.D., 1988.

Michele Forman, Adjunct Professor (The University of Texas M.D. Anderson Cancer Center). Ph.D.

Robert Haley, Adjunct Professor (The University of Texas Southwestern Medical Center, Dallas). M.D., The University of Texas Southwestern Medical School at Dallas.
Guojun Li, Assistant Professor (The University of Texas M.D. Anderson Cancer Center). M.D., Tonji Medical University, 1987; M.S., North Dakota State, 1995; The University of Texas School of Public Health, 2002, Ph.D.

Margaret R. Spitz, Adjunct Professor (The University of Texas M.D. Anderson Cancer Center). M.D., M.P.H.

Louise C. Strong, Professor of Biological Sciences (The University of Texas M.D. Anderson Cancer Center). B.A., The University of Texas at Austin, 1966; M.D., The University of Texas Medical Branch at Galveston, 1970; Ph.D., The University of Texas Graduate School of Biomedical Sciences at Houston, Texas.

Stephen K. Tyring, M.D., M.P.H, Adjunct Professor of Biological Sciences. Medical Director, UTMB Center for Clinical Studies, Houston, Texas.

Qingyi Wei, Professor of Epidemiology (The University of Texas M.D. Anderson Cancer Center). M.D., Nanjing Medical College, China, 1983; M.Sc., Chinese Academy of Preventive Medicine, China, 1986; Ph.D., Johns Hopkins University, 1991.

Xi Feng Wu, Professor (The University of Texas M.D. Anderson Cancer Center). M.D., Shanghai Medical University, 1984; M.S. Zhejiang Medical University, 1987; Ph.D., The University of Texas School of Public Health at Houston, 1994.

Adjunct Faculty, Epidemiology and Disease Control

Raouf R. Arafat, M.D., M.P.H., Adjunct Assistant Professor of Epidemiology. Bureau Chief, Department of Health and Human Services, City of Houston, Communicable Disease Division.

Jean Brender, Adjunct Associate Professor. Texas A&M Health Science Center-Houston. Ph.D., University of Washington School of Public Health, 1983.

Mark A. Canfield, B.S., M.S., Ph.D., Adjunct Assistant Professor of Epidemiology. Director, Texas Birth Defects Monitoring Program, Texas Department of Health, Austin.

Thomas Giordano, M.D., Ph.D., Adjunct Assistant Professor. Baylor College of Medicine.

Paul Glezen, M.D., Adjunct Assistant Professor. Baylor College of Medicine.

Victor H. Gonzalez, M.D., Adjunct Assistant Professor. Valley Retina Institute, P.A.

Edward A. Graviss, B.S., M.S., M.P.H., Ph.D., Adjunct Associate Professor of Epidemiology. Associate Professor, Department of Pathology, Baylor College of Medicine, Houston, Texas.

Hoonmo L. Koo, Adjunct Assistant Professor. Baylor College of Medicine, Department of Infectious Diseases, Houston, Texas.
**Claudia A. Kozinetz**, B.A., M.P.H., Ph.D., Adjunct Associate Professor of Epidemiology. Research Associate Professor, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

**Peter H. Langlois**, B.S., M.S., Ph.D., Adjunct Assistant Professor of Epidemiology. Texas Birth Defects Monitoring Division, Bureau of Epidemiology, Texas Department of Health, Austin.

**Roberta K. Lee**, Dr.P.H., Adjunct Professor. The University of Missouri at St. Louis.

**R. Jeff Lewis**, Ph.D., Adjunct Assistant Professor. ExxonMobil Biomedical Sciences Ind.

**Laura E. Mitchell**, Ph.D., Adjunct Associate Professor. Texas A&M Health Science Center, Houston, Texas.

**Robert Steffen**, M.D., Adjunct Professor. The University of Zurich.

**Catherine L. Troisi**, Ph.D., Adjunct Assistant Professor of Epidemiology. Houston Department of Health and Human Services, Bureau Chief, HIV/STD Prevention, Houston, Texas.

**Nancy S. Weiss**, Ph.D., Adjunct Assistant Professor of Epidemiology. Director of Texas Cancer Registry, Texas Department of Health, Austin.
The Division of Health Promotion and Behavioral Sciences seeks to improve the public’s health through the application of social and behavioral sciences to solving the problems of human disease and disability. Lifestyle behaviors and aspects of the social environment offer important opportunities to modify the incidence, prevalence, and mortality from many diseases. The Division’s academic and research programs focus on identifying the modifiable determinants of health and disease, and developing and testing interventions to change or eliminate those determinants. Students may work with an academic advisor from among faculty members who have a primary or a secondary appointment in the Division.

The Division offers the M.P.H. and Dr.P.H. degrees in Health Promotion/Health Education and a Ph.D. degree in Behavioral Sciences.

The Division also offers a minor course of study (nine semester credit hours) for M.S., Dr.P.H. and Ph.D. students majoring in other public health disciplines. The specific courses for the student minoring in Health Promotion and Behavioral Sciences will be determined by the student’s committee with guidance from the HPBS member of the committee to meet the individual needs of the student.

The requirements include three to four courses selected from the following list. The minor should include primary theory and methods in Health Promotion and Behavioral Sciences and program evaluation and intervention development (especially for the Dr.P.H. student) and may also include a special topics course in the student’s area of interest.

Courses suggested for the minor include:
- PHM 1113 Advanced Methods for Planning and Implementing Health Promotion Programs
- PHD 1122 Health Promotion Theory and Methods: A Teaching and Learning Experience for Doctoral Students
- PHD 1130 Measurement Theory
- PHD 1420 and PHD 1421 Research Design and Analysis in Behavioral Sciences I and II
- PHD 1425 Applied Multivariate Statistics for the Behavioral Sciences
- PH 1118 Introduction to Qualitative Research Methods
- PH 1430 Systematic Review, Meta-Analysis, and Evidence-Based Public Health
- PH1260 Chicano/Mexican American Health: Exploring Its Social Dimensions
- PH 1350 Ethnicity, Race, Class & Gender: A Multicultural Public Health Perspective

Centers
Major research centers affiliated with the Division provide opportunities for students in all degree programs to work intensively with faculty. The mission of the Center for Health Promotion and Prevention Research (CHPPR) is to conduct research to develop, evaluate, and disseminate health promotion and disease prevention programs in diverse settings and populations. The mission of The University of Texas Prevention Research Center is to unite accomplished researchers and dedicated community leaders in a common goal of improving the health of children and ado-
adolescents in Texas. The mission of the Michael & Susan Dell Center for Advancement of Healthy Living is to serve as a state, national and international leader in the promotion of healthy living through: prevention and control of childhood obesity; healthy eating and physical activity; promotion of healthy living behaviors in youth; policy and environmental change; and professional education and community service.

Master of Public Health Degree Program
The program of study for the M.P.H. in Health Promotion/Health Education integrates the broad field of public health with the behavioral and social sciences. The curriculum includes intervention methods for health promotion development and evaluation in a variety of settings.

Special Entrance Requirements
An earned bachelor’s degree. Some coursework in the social or behavioral sciences and/or health promotion is preferred. Work or volunteer experience in the community or other settings is preferred. The GRE is required.

See Application Procedures and Deadline Dates for a list of required application materials and factors considered in the admission decision.

Course of Study
The following Divisional courses are expected for an M.P.H. student majoring in Health Promotion/Health Education:

- PHM 1111 and PHM 1112 Health Promotion Theory and Methods I and II
- PHM 1113 Advanced Methods for Planning and Implementing Health Promotion Programs
- PHM 1120 Introduction to Program Evaluation
- PHM 1433 Research Seminar in Health Promotion and Behavioral Sciences (at least one semester)

Additional coursework is expected in research methods, ethics in research and public health, and social and behavioral science content courses.

Doctor of Public Health Degree Program
The Dr.P.H. degree in health promotion/health education is designed to train students for leadership roles as public health professionals in governmental and non-governmental agencies, health departments, or for work in the research or academic setting. Students receiving a Dr.P.H. are expected to contribute to and apply scientific discoveries in public health settings.

Special Entrance Requirements
Candidates for this Dr.P.H. degree should hold an earned master’s degree or equivalent in public health with a substantial behavioral sciences component. Leadership experience through paid employment or volunteer work is preferred. Applicants are asked to submit a writing sample that demonstrates competence in written communication for academic work. Theses, publications or other academic work are preferred. The applicant should be the sole or first author on the submitted work. The GRE is required, and a combined score over 1200 is preferred.
Course of Study
The student will complete a course of study focused on the social and behavioral aspects of public health and the development and evaluation of health promotion interventions.

The following Divisional courses are recommended for a Dr.P.H. student majoring in Health Promotion/Health Education:

- PHD 1113 Advanced Methods for Planning and Implementing Health Promotion Programs
- PHD 1121 Advanced Program Evaluation
- PHD 1122 Health Promotion Theory and Methods: A Teaching and Learning Experience for Doctoral Students
- PHD 1123 Health Promotion Theory and Methods II—Doctoral level
- PHD 1227 Behavioral Science Theories for Health Promotion: An Advanced Course
- PHD 1420 and PHD 1421 Research Design and Analysis in Behavioral Sciences I and II
- PHM 1433 Research Seminar in Health Promotion and Behavioral Sciences (at least one semester)
- PHD 1434 Research Seminar in Health Promotion and Behavioral Sciences for Doctoral Students
- PHD 1435 Health Promotion/Behavioral Sciences Doctoral/Post-Doctoral Research Seminar (all semesters after admission to candidacy)

The course of study must be approved by the academic advisor. The student will complete a dissertation as agreed upon with the dissertation committee and will focus on social and behavioral aspects of public health or the development and evaluation of health promotion interventions.

Doctor of Philosophy Degree Program
The Ph.D. in Behavioral Sciences focuses on the aspects of public health and the development and evaluation of health promotion interventions. The Ph.D. program provides training in social and behavioral science theory and methods as applied to public health, and is designed to provide students with the skills necessary to succeed in academic and research positions. The emphasis in this degree program is preparation for independent research and teaching.

Special Entrance Requirements
Candidates for the Ph.D. will hold an earned master’s degree or equivalent in a social or behavioral science, such as psychology, sociology, anthropology, education, or communications. Applicants are asked to submit a writing sample that demonstrates competence in written communication for academic work. Theses, publications or other academic work are preferred. The applicant should be the sole or first author on submitted work. The GRE is required, and a combined score over 1200 is preferred.

Course of Study
The following Divisional courses are recommended for a Ph.D. student majoring in Behavioral Sciences:
• PHD 1113 Advanced Methods for Planning and Implementing Health Promotion Programs
• PHD 1121 Advanced Program Evaluations
• PHD 1122 Health Promotion Theory and Methods: A Teaching and Learning Experience for Doctoral Students
• PHD 1227 Behavioral Science Theories for Health Promotion: An Advanced Course
• PHD 1420 and PHD 1421 Research Design and Analysis in Behavioral Sciences I and II
• PHM 1433 Research Seminar in Health Promotion and Behavioral Sciences (at least one semester)
• PHD 1434 Research Seminar in Health Promotion and Behavioral Sciences for Doctoral Students
• Advanced theory and methods course(s) (to be determined by advisor)
• PHD 1435 Health Promotion/Behavioral Sciences Doctoral/Post-Doctoral Research Seminar (all semesters after admission to candidacy)

The course of study must be approved by the academic advisor. The student will complete a dissertation as agreed with the dissertation committee and will focus on social and behavioral aspects of public health.

Courses, Health Promotion and Behavioral Sciences

PHM 1110 Social and Behavioral Aspects of Community Health
Taylor, Byrd, Fernandez-Esquer, Ross, Perry, McAlister, Shegog, Barroso, Vaeth, Tiro, 3 credits, a, b, c (Available Online)

This course focuses on health problems and issues and public health methods that have a major social or behavioral component. It is intended for the student with little background in the behavioral sciences. The course will enable students to describe one or two core theoretical perspectives from each of the social science disciplines of psychology, sociology, and anthropology, and their application to public health. The course will cover the major social and behavioral science models used in health promotion and disease prevention. The course will also cover existing social inequalities in health status related to race, social class, and gender, and the critical intersection between social risk factors, behavioral risk factors, and the development and implementation of public health interventions. The problems considered in this course will vary from year to year, but include topics with social and behavioral risks.

This is the designated core course for non-health promotion majors.

PHM 1111 Health Promotion Theory and Methods I
Hoelscher, Byrd, Reinger, 3 credits, a

This course introduces students to the application of selected behavioral science theories and concepts in health education and health promotion programs directed toward individuals and groups. Concepts emphasized are drawn from the Health Belief Model, the Theory of Reasoned Action, Trans-Theoretical Model, and Social Cognitive Theory with some attention to numerous additional theories and perspectives. Teaching-learning techniques include lecture, demonstration, and problem-based
learning case studies. At a regional campus, PHM 1111 can take the place of PHM 1110 as the core course for non-health promotion majors.

This course is a designated core course for Health Promotion and Behavioral Sciences majors when taken with PHM 1112.

**PHM 1112 Health Promotion Theory and Methods II**
Byrd, Reininger, McAlister, Evans, 3 credits, a, b

In this course students are introduced to the application of health education and health promotion intervention theory and methods directed toward change in organizations, communities, and governments. Topics include organizational change, mass media, community organizations, diffusion of innovations, community development, social action, and political action. Students are provided opportunities to demonstrate knowledge and gain experience in applying theory, in designing interventions, and in developing programs of intervention to affect programs, policies, and environmental conditions.

This course is a designated core course for Health Promotion and Behavioral Sciences majors when taken with PHM 1111.

**PHM 1113 Advanced Methods for Planning and Implementing Health Promotion Programs**
Bartholomew, Fernandez, Markham, Parcel, 4 credits, a, b

The purpose of this course is to integrate and extend knowledge of behavioral science theory into planning models for health promotion programs that include conducting a needs assessment, determination of priorities, setting goals, stating objectives, designing interventions and developing an implementation plan. The teaching methods used in the course emphasize group process skills through modeling and guided practice applied to the planning process. Case studies of health promotion program planning from school, health care, worksite, and community settings are included. Student evaluations include written examinations over course content, a written health promotion project plan, and participation in class and group assignments.

Prerequisites: PH1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.), PHM 2610, and PHM 1111

**PHD 1113 Advanced Methods for Planning and Implementing Health Programs (Doctoral)**
Bartholomew, Fernandez, Markham, Parcel, 4 credits, a, b

The purpose of this course is to integrate and extend knowledge of behavioral science theory into planning models for health promotion programs that include conducting a needs assessment, determination of priorities, setting goals, stating objectives, designing interventions and developing an implementation plan. In addition to the class project of choosing a health problem and developing an intervention plan, doctoral students will function in group leadership roles, and prepare a concept outline and abstract as part of preparation of class papers for publication. Further, doctoral students will present their projects to the class. The teaching methods used in the course emphasize group process skills through modeling and guided practice applied to the planning process. Case studies of health promotion
program planning from school, health care, worksite, and community settings are included. Student evaluations include written examinations over course content, a written health promotion project plan, and participation in class and group assignments.

Prerequisites: PH1725 and 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.), PHM 2610, and PHM 1111

PH 1115 Health Survey Research Design
The faculty in Health Promotion and Behavioral Sciences, 3 credits, cd (not offered after Summer 2010)

This course presents the methods for designing and conducting health surveys. Emphasis is placed on problem conceptualization, measurement, and questionnaire design in the context of a total survey design framework. Examples of face-to-face, telephone, and mail surveys are presented. Readings, assignments, and class lectures and discussions are intended to facilitate the preparation of a survey research prospectus and questionnaire.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.), PHM 2610 or equivalent

PH 1118 Introduction to Qualitative Research Methods
McCurdy, 4 credits, a

This course is designed to familiarize students who have little or no experience in conducting qualitative research with the perspectives, methods, and techniques of its practitioners. The course covers the underpinnings of qualitative research, some of the major qualitative research traditions, methods of data collection used in the conduct of qualitative inquiries, and preliminary analysis of narrative or text data. Part I provides the students with a broad overview of qualitative research traditions and techniques as they begin to conceptualize and design their own research project. Part II covers the conduct of fieldwork. Students work in small groups or independently to carry out a field-based research project. Part III covers qualitative analysis and presents the students with the opportunity to learn preliminary coding and axial coding techniques. Project and methodological practice reports, based on the fieldwork experience, are required in this course.

PH 1119 Qualitative Analysis
McCurdy, 3 credits, b

The purpose of this course is to provide the basic tools for analyzing ethnographic and other forms of qualitative data. Different analytical approaches are explored and examined. Students will explore the use of different types of analysis that are appropriate to the data project’s overarching theoretical approach and the topical focus of the study from which it was produced. Students will learn the basics of ATLAS.ti, a software program for coding textual and visual data. Preferably, students will analyze data collected in PH1118 or in another project conducted after they took that course. The final paper will be the write up of their results. Other coursework includes lectures, instruction and work with ATLAS.ti, discussions, and intensive group work on other data students will analyze as part of a team.
Prerequisites: PH 1118 or consent of the instructors

**PHM 1120 Introduction to Program Evaluation**  
Mullen, Peskin, Gay, 3 credits, a, b (Hybrid ITV-online)

This course introduces students to the theory and application of program evaluation, emphasizing a range of evaluation goals and designs. Class exercises, small group and whole class discussions, and lectures focus on practical tools for conducting field evaluations that are focused on three levels: critique of the program concept and design; program implementation and process; and program impact and outcomes. Stakeholders are identified, and methods for involvement are emphasized to promote use of study findings. The validity framework from Shadish, Cook, and Campbell is also used in judging the strength of conclusions about causal relationships and in generalizing findings from particular evaluations to target constructs and to other people, settings, times, interventions, and outcomes. Each student prepares a proposal for the evaluation of a program or policy of his or her choosing. Sections of the proposal are written and revised during the semester based on further learning and feedback from the instructor and other students.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) or PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.), PHM 2610, and PHM 1111, PHM 1112, or PHM 1110

**PHD 1121 Advanced Program Evaluation**  
Mullen, Peskin, Gay, 3 credits, a (Hybrid ITV-online)

This course covers methods to determine whether and how a health-related program works in a particular context and how likely it is to work in other contexts. The course's goal is to prepare students to apply the principles and techniques of evaluation science to the design and conduct of three levels of evaluation: 1) Program Design & Concept: Description and critique of a) the problem and the causal factors targeted for intervention and b) the intervention approach(es) selected to address the problem using logic models, theory and evidence; 2) Program Process: Assessment of program context, reach, dose, fidelity, implementation, cost, and mechanisms of action using management information systems, special audits, and other data collection techniques; 3) Program Outcome: Estimating program efficacy and effectiveness using quasi-experimental and experimental designs, informed by considerations regarding the validity of causal conclusions drawn from the particular study and the validity of generalizing those findings to other interventions, outcomes, populations, settings, and times. Skills and knowledge for each level include how to frame evaluation questions and involve stakeholders, select suitable study designs, and apply appropriate analytic approaches.

Prerequisites: PHM 2610 and PHD 1420 and PHD 1421 or consent of the instructor
**PHD 1122 Health Promotion Theory and Methods: A Teaching and Learning Experience for Doctoral Students**
Bartholomew, Hoelscher, Vernon, 3 credits, a

This course provides doctoral students in Health Promotion and Behavioral Sciences with an in-depth overview of the application of selected behavioral science theories and concepts used in health education and health promotion programs directed toward individuals and groups. The objectives for this class are to: (1) apply the theories covered in class to development of interventions for health problems; (2) develop group leadership and teaching skills; (3) monitor and improve scientific writing skills. For this class, doctoral students participate in PHM 1111, Health Promotion Theory and Methods as problem-based learning group leaders. In this role, they receive instruction and feedback on their group leadership and teaching skills. They meet one hour per week outside the PHM 1111 class to discuss the problem-based learning case studies and their group experiences. They cover each theory in class with the same readings as the master’s students. They then build on this work by reading the 8-10 papers on each theory chosen by their group members, and they grade the group member critiques. Concepts emphasized are drawn from the Health Belief Model, the Theory of Reasoned Action, the Theory of Planned Behavior, The Trans-Theoretical Model, and Social Cognitive Theory, with some attention to additional theories and perspectives.

Prerequisites: Enrollment in a Doctoral Program in Health Promotion and Behavioral Sciences

**PHD 1123 Health Promotion Theory and Methods II—Doctoral level**
Byrd, Reininger, 3 credits, b

This doctoral level course will involve the student in the development of an NIH style proposal using Community Based Participatory Research methods. The course will cover community assessment coalition building, choosing community partners, ethical issues of community work and important methodological issues of CBPR. See PHD 1122.

**PH 1125 The Principles and Practice of Data Management in Behavioral Sciences Research**
Diamond, 3 credits, d (odd-numbered years)

This course is designed to provide the student with the skills required to manipulate data from various sources in order to address the many different types of research questions that arise in behavioral sciences research. SPSS statistical program is used in this class, but the logic and procedures that are covered are directly transferable to other major statistical packages. The class covers such basic principles as maintaining careful documentation, data cleaning and error checking, merging and adding files from multiple sources, extracting strategic records from complex file structures, and accessing data from sources, such as the internet, administrative databases, mainframe “flat files” and relational databases. The course is “hands-on,” and students have the opportunity to gain practice linking research questions to data structure and modifying that structure as needed to address those questions. In general students have the opportunity to learn to deal with many of the problems and challenges associated with the use of the numerous secondary data sources available to public health.
and behavioral sciences researchers. The course is held in the computer lab and includes a mixture of lectures, demonstrations, and practices.

Prerequisites: Basic research methods and PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) or PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) or consent of the instructor

PHD 1128 Advanced Qualitative Methods
Williams, 3 credits, b (odd-numbered years)

The course is intended to familiarize the student with the philosophy of scientific inquiry as it is applied to both deductive and inductive research. The initial section of this course is an exploration of the philosophy of science as applied to deductive and inductive inquiry. In this section of the course, students compare and contrast the meanings of observation, measurement, and explanation, among other concepts used in inductive and deductive inquiry. The student has the opportunity to gain a critical understanding of the differences and similarities between the two scientific methods and the contributions each can make to scientific knowledge. The course is intended to critically examine the principles of inductive inquiry from the perspective of practitioners working in the areas of health promotion and disease prevention research. Students have the opportunity to examine and analyze methods most commonly used in health promotion and disease prevention research. Students critique examples of qualitative research that they have identified in the literature. Critiques are presented to the class for discussion and further assessment. In addition, students have the opportunity to apply their knowledge of qualitative design and inductive methods by developing and writing a research plan.

Prerequisites: PH 1118 or consent of the instructor

PHD 1130 Measurement Theory
Swank, 3 credits, b

This course introduces the student to basic aspects of psychometric theory with an emphasis on the development of valid and reliable questionnaires. The course covers classical test theory, generalizability theory, common scaling methods, and Item Response Theory (IRT). The course format is a combination of lectures, class discussions, computer labs, and assignments.

Prerequisites: PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.)

Faculty from The University of Texas Medical School at Houston teach this course.

PHD 1132 Latent Variable Models and Factor Analysis
Diamond, 3 credits, b

This course offers the skills and understanding necessary to use and apply several statistical techniques related to Latent Variable Analysis. The course covers Exploratory and Confirmatory Factor Analysis, Path Analysis, Structural Equation Modeling, and Latent Growth Curve Modeling. Students have the opportunity to test the factorial validity of an instrument (questionnaire or test), invariant factorial structure of an
instrument, validity of a causal structure, and analyze dichotomous and polytomous variables. Emphasis is placed on understanding the relationship of latent variable models to other multivariate techniques. The course focuses on the application of these methods in public health and on understanding research studies that use these methods. The student has the opportunity to become familiar with different programs developed to assess these models. The course format is a combination of lectures, class discussions, computer labs, and assignments.

Prerequisites: PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) and completion of an applied multivariate statistics course is strongly encouraged.

**PH 1224 Disparities in Health in America: Working Toward Social Change**
Fernandez, 3 credits, a, cd

More than twenty-five years of research demonstrate that there are wide disparities in health throughout America. Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist when specific population subgroups are compared. It is now known that the distribution of health is not at random, but that health is systematically distributed according to different levels of social advantage. This course will examine the social and societal factors that are fundamental in creating disparities in health. In addition, the course will focus on the formulation of public policy objectives to reduce and ultimately eliminate health disparities.

**PHD 1225 Contemporary Social and Cultural Theory**
Linder, 3 credits, b

This course introduces students to a variety of post-classical social theorists and to the “cultural turn” in social theory. Different schools of thought and representative theorists are chosen for each semester, ranging from critical theorists, such as Adorno and Habermas, and French (post) structuralists, such as Barthes and Foucault, to American (post) Marxists, such as Jameson and Butler. Emphasis is placed upon understanding the selected theoretical perspectives and attending to how they construct public health concepts, expertise, and modes of intervention. Applications to student research will also be featured.

**PHD 1227 Behavioral Science Theories for Health Promotion: An Advanced Course**
Fernandez-Esquer, Williams, 3 credits, b

This doctoral level course focuses on theories that advance the understanding of health behavior and are the basis for health behavior interventions. It provides an overview of the philosophy of science, an in depth exploration of theory and public health and introduces theory and theory testing. It also presents emerging social science theories of strategic importance to health behavior research. This course complements Research Design I and II. The course elaborates and expands on critical issues presented in PHM 1110 and PHM 1111 and emphasizes understanding the role of theory in the behavioral sciences and behavioral science research.

Prerequisites: PHM 1110 or PHM 1111 and PHM 1112, PH 1725 and PH 1726 (PH 1725 and PH 1726-Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) are required. This course is for
advanced masters or doctoral students with a background in the behavioral sciences

**PHM 1230 Social and Behavioral Aspects of Occupational and Environmental Health**
Amick, 3 credits, a

This course covers the role of social and behavioral science theories in explaining and understanding the causes of occupational and environmental health problems and in designing intervention strategies to resolve problems. Students have the opportunity to use social and behavioral science theories and methods to solve occupational safety and health and environmental health problems. The course also covers how Employee Assistance Programs work as well as the role of worker’s compensation in occupational health.

**PHM 1231 Advances in Medical Nutrition Therapy**
The Faculty of Health Promotion and Behavioral Sciences, 4 credits, a

This is an advanced course focusing on the assessment and nutritional management of persons with conditions requiring medical nutrition therapy in general medicine (diabetes, cardiovascular, gastrointestinal) and critical care (surgery, renal, oncology, enteral, and parenteral nutrition). Specialized nutritional needs and principles of clinical management are covered. Grades are based on competency examinations, case studies, and presentations.

Prerequisite: Approval of instructor

**PHM 1232 Public Health Nutrition Practice**
Hoelscher, Evans, 3 credits, b

This course presents an overview of the roles, responsibilities, skills and career opportunities of the public health nutritionist. Topics include: review of nutrition education literature; development of behaviorally-based nutrition education materials; identification of community problems, needs, and resources; evaluation of program effects; nutrition policy; and the effects of culture on food consumption. Applications of national dietary goals to various population groups are presented.

**PHM 1233 Public Health Nutrition**
The Faculty of Health Promotion and Behavioral Sciences, 3 credits, a

This course covers nutrition issues that affect the public health of developed countries, specifically the United States. Topics covered include dietary guidelines for populations; dietary assessment techniques; diet and chronic disease relationships; communication of nutrition issues to the public; and emerging issues in public health nutrition, such as biotechnology and gene/nutrient interactions. Biologic mechanisms will be discussed as well as epidemiologic relationships between diet and disease.

**PHM 1234 Advances in Specialty Nutrition Practice**
Hedberg, 2 credits, b (even-numbered years)

This is an advanced course required for Dietetic Internship students that provides the student exposure to selected areas of specialty dietetics practice, including
lectures from practicing dietetic specialists. Information for professional dietetic practice will also be covered, including Review for the Registration Examination for Dietitians, Licensure Acts, and preparation of a Professional Development Portfolio.

Open only to dietetic interns concurrently enrolled in Public Health Practicum: Dietetic Internship Supervised Practice Rotation.

**PH 1235 Social and Behavioral Aspects of Physical Activity and Public Health**
Taylor, 3 credits, b

The purpose of this course is to present, review, and discuss the extensive scientific literature on health-related physical activity. The course covers behavioral science theories, physical activity research, and public health interventions to promote physical activity.

**PH 1236 Issues in Aging**
Spike, 3 credits, b (even-numbered years)

This survey course focuses on biological, psychological, and social theories of aging and contextual issues that surround the provision of health and social services to the elderly. Students will participate in an interdisciplinary group project and a variety of field experiences designed to acquaint them with the broad spectrum of issues in aging.

**PH 1237 Obesity, Nutrition, & Physical Activity**
Hoelscher, Barroso, Springer, 1 credit, a

The goal of the course is to provide a forum in which current research papers in obesity, nutrition and physical activity can be reviewed and critiqued. Topics will vary and will be driven by the current published literature. In addition, students will learn about on-going research activities in obesity, nutrition and physical activity in the Texas Medical Center. Seminars will be set up in an informal manner, with faculty leading the first session and students assuming the lead later in the semester. Discussions will focus on issues related to study design, analysis, interpretation of results, and relationship to the current body of knowledge.

**PH 1238 Adolescent Sexual Health**
Tortolero, 3 credits, a

This course explores issues and controversies related to adolescent sexual health in the United States. This course will provide a broad perspective on what is adolescent sexual health, sexuality education, what the research indicates is effective and how young people are affected by its implementation, advocacy for adolescent sexual health. Topics covered include prevalence of adolescent pregnancy, STIs, HIV; sex in the media; sexuality through the life span; sexual response cycle; sexual diversity; effective programs; answering hard questions; adolescent cognitive development; Texas law; contraceptives; and healthy relationships.
**PH 1239 Theories of Child and Adolescent Development**  
Caughey, 3 credits, b

This course is geared to doctoral students although enrollment is open to masters students as well. The purpose of the course is to provide students with a foundation in historical and contemporary theories of developmental science and explores how these theories facilitate our understanding of normative development from infancy through adolescence. In addition, the course will utilize developmental theories to examine the factors contributing to public health problems affecting children and youth as well as the development and implementation of public health interventions serving these populations.

**PH 1240 Mental Health of Children and Adolescents**  
Roberts, 3 credits, a, b

The purpose of this course is to provide students an overview of the mental health of children and adolescents in the United States. The focus is on assessing the current state of knowledge and reviewing the central research questions and strategies regarding the epidemiology of child and adolescent psychiatric disorders. The requirements include reading materials assigned for class, participating in class discussions, making a class presentation, and writing a term paper. Each student selects major epidemiologic studies of mental disorders among children and/or adolescents, or prevention of mental health problems among children and/or adolescents. Students report on the design and results of the research. The presentations are descriptive and evaluative. The presentation is written as a formal scientific report for course credit.

**PH 1242 AIDS in Africa: Global Socioeconomic and Political Contexts**  
McCurdy, Ross, 3 credits, b

In this seminar students examine the social, cultural, political, and economic contexts in which ideas, practices beliefs, and actions that surround individuals, families, and communities’ experiences of HIV/AIDS emerge. Drawing from reports, articles, ethnographies, the internet, and videos, the different ways that people respond to the global threat of HIV/AIDS are considered. This is an intensive reading and writing seminar designed to expand students understanding of the myriad factors that work to produce specific and general responses to HIV/AIDS policies and programs at the local, state, and translocal levels. Students learn about the range of dynamic cultural and social practices, local economic and political situations, and beliefs and concerns that men and women are producing throughout the world today as they negotiate and transform gendered and generational roles and obligations within their communities. Students learn about the different ways that members of specific international communities respond to the global threat and reality of HIV/AIDS in their lives and about HIV/AIDS interventions.

**PH 1247 History of Public Health**  
McCurdy, 3 credits, b

Using an historical perspective, this course examines the development of organized public responsibility for the creation and maintenance of a healthy population. Public health emerged in response to and is closely related to the changing status and development of nation states. We will examine how power, agency, class, race
and gender infuse public health concerns and intertwine with social, political and economic factors. Case studies will examine: 1) the environmental conditions that set the stage for nineteenth century epidemics of cholera, typhoid, yellow fever and other epidemic diseases; 2) the Bacteriological Revolution and the impact of shifts in scientific knowledge and practice upon the development of public health; 3) the urban industrial environment and tuberculosis; 4) the creation of international and development organizations (e.g., Rockefeller, UNICEF, WHO, and the World Bank) and public health programs and policies; 5) the global eradication campaign against malaria; and 6) the more recent grassroots and state responses to HIV/AIDS.

**PH 1250 Genital, Sexual, and Reproductive Public Health**
Ross, 3 credits, b

This course integrates the basic biology, epidemiology, behavioral science, and health promotion interventions of genital and reproductive aspects of public health. The course covers bacterial and viral sexually transmissible diseases (including HIV); cancers of the genital and reproductive system in men and women; contraception and abortion; sexual dysfunction; sexual violence; and the sexual behaviors associated with public health problems (with emphasis on cultural and social variation). The emphasis of this course is on the design and analysis of health promotion approaches to sexual, genital and reproductive public health problems given their biological, epidemiological, and policy implications. Each student prepares and presents a proposal for an intervention study based on biological and epidemiological analysis of the issue. It would be helpful but not essential if students have taken, or are taking, a basic Health Promotion class or equivalent.

**PH 1260 Chicano/Mexican American Health: Exploring its Social Dimensions**
Balcazar, 3 credits, a, b

The purpose of the course is to describe, discuss, analyze and interpret research literature on Chicano/Mexican American health. The course will focus on topics about the social relationships, cultural and economic conditions, and other social determinants of health (including system factors) that relate to the distribution of disease/health among Mexican origin populations and that concern public health practice. Research will be examined within disciplines of epidemiology health promotion and behavioral sciences, environmental health and public policy. Research will also be examined within historical and contemporary contexts.

**PHM 1320 Ethics in Public Health and Health Care**
Spike, 3 credits, a (odd-numbered years)

This course provides a systematic overview of major ethical issues pertaining to health care, delivery, health promotion, disease prevention and health policy from a public health perspective. The course will include both a survey of ethical issues in public health as well as important ethical issues in health care to which public health can contribute. Readings will include the APHA “Ethics and Public Health: A Model Curriculum,” case studies, and other works. Students learn to recognize the primary features of an ethical problem in health care; become familiar with the language and discourse of health care ethics; recognize and analyze the social and cultural dimensions of ethical dilemmas in health care; and formulate a process for preventing and/or resolving ethical conflicts.
PHM 1325 Research Ethics for Public Health  
Spike, 3 credits, b

This course examines social, cultural and ethical dimensions of health research and research process, with implications for future public health investigators. Case-based discussions deal with topical areas in the history of research, ethical issues in study design and implementation, and the political and economic contest of the research endeavor. The course will include four broad categories of topics: use of animals in clinical research, use of humans in clinical research, ethical issues in qualitative, social, and psychological research and special issues about the scientific method (including integrity in research). Course participants become familiar with the language and discourse of ethics and develop an ethical framework for planning and conducting investigations.

PHD 1330 Scientific Writing for the Behavioral Sciences  
Williams, 3 credits, b (even-numbered years)

The goal of the course is to provide the student with the basic writing skills needed to write a competent scientific proposal or a manuscript that clearly presents the information needed to communicate study design and/or research findings. The course begins with using words correctly and precisely. Writing sentences is the second skill presented. The sentence building skills are communicating the core message of a sentence, avoiding noun clusters, simplifying sentences, and building parallel sentences. The course teaches students to construct well-crafted paragraphs that clearly and precisely present scientific ideas. Using these basic skills, the course instructs students on the parts of a research manuscript, the essential elements of the text, and the presentation of supporting information.

PH 1350 Ethnicity, Race, Class & Gender: A Multicultural Public Health Perspective  
Fernandez-Esquer, 3 credits, c

This seminar-style course will explore contemporary perspectives on ethnicity, race, social class and gender, and the way these social identities are portrayed in the public health literature, particularly in health disparities. The course will also review basic social science definitions of culture, multiculturalism, and social identity. Students are expected to demonstrate in an oral presentation and in two take-home examinations how concepts learned in class may be used to understand, review, and critique public health research conducted in the U.S. and around the world.

PH 1410 Addictive Behavior  
Walters, 3 credits, a

Alcohol and other drug use is ubiquitous in the United States, and leads to significant personal, familial, social and economic consequences. Substance abuse is especially likely to affect members of disadvantaged groups, which further complicates their ability to cope with stressful life circumstances. Although substance use disorders are prevalent and identifiable, public health professionals often fail to identify and intervene with their substance-using clients. As a result, many opportunities to reduce the suffering of these persons and their families are lost. This course provides public health students with an introduction to the epidemiology, etiology, prevention and treatment of alcohol and other drug use disorders. As a
course with a behavioral science emphasis, practical application is emphasized, both through classroom discussions and out-of-class assignments.

**PH 1418 Practice in Health Behavior Change**
Walters, 3 credits, b

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 psychological theories of behavior change, with an emphasis on brief interventions such as motivational interviewing that have proven effective in counseling, health care, and other public health settings. Through a mixture of didactic presentation, role-play, discussion, and personal exploration, the course focuses on interventions for six of the leading health indicators as identified by *Healthy People 2010*—smoking, alcohol and other drug use, physical activity, obesity, risky sexual behavior, and injury and violence. In addition to theory, students will learn specific skills for interacting with patients around health behavior changes in multiple settings.

**PHD 1420 Research Design and Analysis in Behavioral Sciences I**
Diamond, Williams, Amick, Vernon, 4 credits, b (odd-numbered years)

This course focuses on linking research questions common in behavioral sciences research to appropriate analytic methods. It focuses on the philosophy of science, paradigms of inquiry, analytic methods that are appropriate for assessing group differences and those that are used for assessing relationships and making predictions. There is an emphasis on the ability to understand the benefits and limitations of particular research designs to answer specific questions, read and understand scientific journal articles that make use of these methods, appropriate use of statistical software for conducting these analyses, interpret output from this software, and professionally present the results from analyses in oral and written form.

Prerequisites: PH 1690, PH 1700, or the equivalent

**PHD 1421 Research Design and Analysis in Behavioral Sciences II**
Diamond, Williams, Amick, 4 credits, a (even-numbered years)

This course expands on the material covered in PHD 1420 and extends the focus to: analyses that assess measurement reliability, validity and latent structure; methods that can be used to group either people or objects; and procedures that assess differences between groups and/or change over time. There is an emphasis on reading and understanding scientific journal articles that make use of these methods, using of statistical software for conducting the analyses, interpreting the output from this software, and professionally present the results from analyses in oral and written form.

Prerequisites: PHD 1420

**PHD 1423 Society and Health**
Amick, Gimeno 3 credits, b

This course provides an overview of the society and health field. It explores how broad social, cultural, and economic inequalities in society affect health. This course
is designed to provide students with a way of thinking about public health from the population health perspective. Despite spending more money on health care than any other country in the world, the United States has some of the poorest health indicators of any developed country. Why is this? Some would argue it is the wide and widening social and economic inequalities in American society. The course explores some of the major explanations for this observation. Why is it that countries like Costa Rica with few economic resources can have an average life expectancy greater than the United States? This is explored in the context of how societies function. How does society get ‘under the skin’ to affect health, illness and disease? The society and health course considers these and other questions and addresses the policies that can be considered to mend these inequalities.

**PH 1424 Social Epidemiology/Social Justice**
Amick, Gimeno, Linder, 2 credits, a, b

This course considers the current knowledge in the areas of social epidemiology and social justice. It is a reading seminar covering topics ranging from social capital, globalization, and the political economy to topics of cultural context, multi-level analysis, and emerging issues in the social spread of infectious diseases. The course also considers principles of social justice and their relevance to addressing inequalities and health disparities. A goal of the course is to develop an understanding of the connections between social epidemiology and social justice in the context of current research in both areas.

**PHD 1425 Applied Multivariate Statistics for the Behavioral Sciences**
Diamond, 3 credits, a

This course is designed for behavioral researchers who will use multivariate methods to address research questions. Topics will include multiple regressions, multivariate analysis of variance and covariance, discriminate function analysis, canonical correlation, and other relevant multivariate methods. The emphasis will be on a conceptual understanding of these methodologies and their assumptions, implementation using standard statistical packages, and interpretation of output. Students should be familiar with the elements of research design and have completed a basic statistical sequence that covered univariate methods and hypothesis testing.

**PHD 1426 Methods for the Analysis of Change: Applied Longitudinal Analysis**
Chen, 3 credits, b

This course is designed for behavioral researchers who are interested in answering questions related to change over time. Topics will include growth curve analysis, survival analysis, latent transition analysis, time series analysis, and other procedures that are designed to answer questions related to change. The emphasis will be on a conceptual understanding of these methodologies and their assumptions, implementation using standard statistical packages, and interpretation of output. Students should be familiar with the elements of research design and have completed statistical classes that covered both univariate and multivariate methods.
**PH 1430 Systematic Review, Meta-Analysis, and Evidence-Based Public Health**  
Mullen, 3 credits, b

This course introduces the methods of systematic review and meta-analysis, including formulating questions, criteria for relevance and rigor in selecting primary studies, search strategies, coding protocols, tables and other formats for presenting data, qualitative and quantitative representations of effect sizes from individual primary studies, and analyses of groups of studies to estimate an average effect size and to explain variation. The course also introduces students to the methods and products of the U.S. (Clinical) Preventive Services Task Force and Evidence-based Practice Centers and to the newer U.S. Community Preventive Services Task Force.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) and PHM 2610 or equivalent

**PHM 1433 Research Seminar in Health Promotion and Behavioral Sciences**  
Vernon, Faculty in Health Promotion and Behavioral Sciences, 1 credit, a, b

This seminar will provide opportunities to learn about faculty and student research in health promotion and behavioral sciences. Faculty and students will present aspects of planned, ongoing, and completed research. There will be opportunity for discussion and feedback. The seminar encourages presentation of projects in process for which investigators are seeking constructive criticism. All students in the Health Promotion and Behavioral Sciences Division must enroll for the Division Seminar at least one semester during their degree program. It is strongly recommended that they do so early in their coursework in order to learn more about the kinds of health promotion research engaged in by the faculty at the School and neighboring institutions.

**PHD 1434 Research Seminar in Health Promotion and Behavioral Sciences for Doctoral Students**  
Vernon, Faculty in Health Promotion and Behavioral Sciences, 2 credits, a, b

The lab will build on the first hour of the research seminar (PHM 1433) in health promotion and behavioral sciences. Students will discuss and critique readings related to the seminar topic. Through this experience students are expected to develop skills in critical thinking and an ability to critique the literature in health promotion and behavioral sciences.

Prerequisite: PHM 1433 simultaneously

**PHD 1435 Health Promotion/Behavioral Sciences Doctoral/Post-Doctoral Research Seminar**  
Bartholomew, Mullen, Fernandez, Markham, Vernon, and Swank, 2 credits a, b, cd

This seminar course affords the opportunity for doctoral students and post-doctoral fellows to improve their skills and increase scientific productivity in the formulation of research proposals and journal publications and presentations at scientific meetings. Participants present their work-in-progress. The seminar provides opportunities to involve mentors (advisers, dissertation supervisors, committee members)
and to practice mentoring and teaching with other class members. This course may be repeated for credit.

Prerequisites: Doctoral student or post-doctoral fellow in Health Promotion and Behavioral Sciences or consent of the instructor

Faculty from The University of Texas Medical School at Houston participate in this course.

**PH 1498 Special Topics in Health Promotion and Behavioral Sciences**
The Faculty in Health Promotion and Behavioral Sciences, 1-4 credits, a, b, cd

Special topics courses in areas of faculty research are periodically offered.

**PH 1499 Individual Study in Health Promotion and Behavioral Sciences**
The Faculty in Health Promotion and Behavioral Sciences, 1-9 credits, a, b, cd

A plan of study is determined for each participating student and supervised by a member of the Health Promotion and Behavioral Sciences faculty. This course may be repeated for credit.

**PH 5300 Overview of Maternal and Child Health**
Caughy, 3 credits, a

The purpose of this course is to provide students with an overview of the health status of women, infants, children, and adolescents in the United States, the structure of health care services for women and children, and the development and implementation of interventions to improve the health of MCH populations. Overview of Maternal and Child Health is open to MCH Certificate students as well as to degree-seeking students who are not enrolled in the MCH Concentration. MCH Concentration students should take the MCH Core Training Seminar. Overview of Maternal and Child Health will not count as an elective for MCH Concentration students.

Prerequisite: PHM 2610

**PH 5301 I (a) and II (b) Maternal and Child Health Core Training Seminar**

I (a) Caughy, Waller, 3 credits

II (b) Caughy, Peskin, 3 credits

The MCH Core Training Seminar sessions will provide an opportunity for intensive instruction and discussion of topics specific to Maternal and Child Health as well as hands-on experiences in community-related projects. The scope of the MCH Core Training Seminar curriculum is centered on life span development, from perinatal/infant health to child/adolescent and women’s health. MCH students will receive instruction on utilizing data sources specific to MCH such as vital records and other routine data sources as well as hands-on experience in extracting data, analyzing data, and interpreting results.

Prerequisites: Student must be enrolled in the MCH Concentration. Must enroll in the fall, 5301 I (a), followed by spring enrollment 5301 II (b).
PH 5302 I (a) and II (b) Maternal and Child Health Fellowship Training Seminar
I (a) Caughy, Waller, 2 credits
II (b) Caughy, Peskin, 2 credits

The purpose of these afternoon sessions is for MCH Fellows to develop mastery of content covered in the MCH Core Training Seminar morning session by exploring MCH practice from a team perspective. In addition to leadership training, which explores each of the MCH leadership competencies experientially, the afternoon sessions of the MCH Core Training Seminar will allow the trainee cohorts to experience a shift from a “big group process” in the morning to a “team process” in the afternoon.

Prerequisites: Only MCH Fellows will be admitted to the course. Students must enroll in the fall semester of the seminar first, 5302 I (a), followed by enrollment in the seminar in the spring, 5302 II (b).

PH 9997 Practicum
The Faculty in Health Promotion and Behavioral Sciences, 1-9 credits, a, b, cd

A practicum is determined by the student and advisor, and supervised by a member of the Health Promotion and Behavioral Sciences faculty.

PH 9998 Culminating Experience/Thesis Research
The Faculty in Health Promotion and Behavioral Sciences, 1-9 credits, a, b, cd

Thesis research is determined by the student with approval of the student’s advisory committee.
This course may be repeated for credit.

PH 9999 Dissertation Research
The Faculty in Health Promotion and Behavioral Sciences, 1-9 credits, a, b, cd

Dissertation research is determined by the student with approval of the student’s advisory committee.

Primary Faculty, Health Promotion and Behavioral Sciences
Benjamin C. Amick III, Professor. B.A., University of Maryland, 1978; B.S., University of Maryland, 1978; Ph.D., Johns Hopkins University, 1986.
Research Interests: Social epidemiology and health disparities; work organization and health; worksite injury prevention and control; work stress, labor markets, disability; epidemiology of musculoskeletal injuries; ergonomics and organizational change.

Research Interests: Latino health, Hispanic paradox, acculturation, family variables and health outcomes, development of culturally-competent Latino community outreach programs, use of lay health workers, health disparities and border health.

L. Kay Bartholomew, Associate Professor. B.A., Austin College, 1974; M.P.H., The University of Texas School of Public Health at Houston, 1978; Ed.D., University of Houston, 1990.
Research Interests: Self-management of pediatric chronic disease; health education/promotion intervention.

Cristina S. Barroso, Assistant Professor (Brownsville Regional Campus). B.S., University of Michigan, 1991; M.P.H., The University of Texas School of Public Health at Houston, 1998; Dr.P.H., The University of Texas School of Public Health at Houston, 2005.
Research Interests: Physical activity; nutrition; genetic epidemiology of chronic diseases (gene-environment interactions; design and analysis of health promotion interventions (e.g., school-based interventions); use of mass media to promote health promotion interventions; health disparities.

Michael S. Businelle, Assistant Professor (Dallas Regional Campus). B.S., University of Southwestern Louisiana, 1996; E.M.P., University of Louisiana, 2001; M.A., Louisiana State University, 2003; Ph.D., Louisiana State University, 2007.

Theresa L. Byrd, Associate Professor (El Paso Regional Campus). B.S.N., University of Arizona, 1978; M.P.H., University of California at Los Angeles, 1986; Dr.P.H., The University of Texas School of Public Health at Houston, 1994.
Research Interests: Health promotion and behavior change; maternal and child health; community organization and development; border health; cancer prevention/early detection.

Margaret O. Caughy, Associate Professor (Dallas Regional Campus). B.S., Texas A&M University, 1986; M.Ed., University of Maryland, 1989; Sc.D., Johns Hopkins University, 1992.
Research Interests: Child development, parenting, poverty, maternal and child health, neighborhood research; social inequalities in health and development.

Chin-Hsing Chen, Assistant Professor. B.S., National Tsing-Hua University, M.B.A., State University of New York; Ph.D., University of Minnesota.
Research Interests: Healthcare financing and utilization; structural design and integration in health care delivery system; decision analysis of health plan/healthcare provider choice; planning, implementation and evaluation of health promotion/education programs; cost-benefit and cost-effectiveness analysis; social determinant of health and health disparities; Geographic Information Systems (GIS) applications in community health promotion.

Pamela M. Diamond, Assistant Professor. M.A., Texas Woman's University 1986; Ph.D., The University of Texas at Austin, 1992.
Research Interests: Interface between criminal justice and mental health policy, psychiatric epidemiology, community reintegration for female offenders, and the use of latent variable models in public health research.

Soledad Lilliana Escobar-Chaves, Assistant Professor. B.A., Universidad del Valle, 1984; M.P.H., The University of Texas, School of Public Health at Houston, 1998; Dr.P.H., The University of Texas, School of Public Health at Houston, 2002.
Research Interests: Latino populations; impact on adolescent and child health and well-being; obesity, HIV, STD and pregnancy prevention. Design and analysis of health promotion interventions (school- and community-based interventions).
Alexandra E. Evans, Associate Professor (Austin Regional Campus). B.S., Texas A&M University, 1988; M.P.H., The University of Texas School of Public Health at Houston, 1990; Ph.D., The University of Texas at Austin, 1997. 
Research Interests: Child and adolescent health promotion through interventions with parents and schools; obesity prevention.

Maria E. Fernandez, Assistant Professor. B.A., University of Maryland, 1989; B.S., University of Maryland, 1989; M.A., University of Maryland, 1992; Ph.D., University of Maryland, 1995. 
Research Interests: Cancer control, Hispanic populations, informed decision-making health promotion planning and evaluation, health informatics, health communications.

Maria E. Fernandez-Esquer, Associate Professor. A.A., Marymount College of Virginia, 1977; B.A., Loyola University-New Orleans, 1979; M.A., University of Arizona, 1986; Ph.D., University of Arizona, 1989. 
Research Interests: AIDS and cancer prevention; perception of risk; ethnic differences in health beliefs and behaviors.

Jennifer L. Gay, Assistant Professor (Brownsville Regional Campus). B.A., University of South Carolina, 2001; M.S., University of Nevada – Las Vegas, 2002; Ph.D., University of South Carolina Arnold School of Public Health, 2008. 
Research Interests: Physical activity in adolescents and adults; motivation theories; environmental and contextual influences on health behaviors; latent variable modeling; growth and maturation issues in physical activity.

Ann-Marie Hedberg, Assistant Professor and Director Dietetic Internship. B.S., Nutrition, University of Delaware, 1978; M.S., The University of Texas Graduate School of Biomedical Sciences at Houston, 1982; Dr.P.H., The University of Texas School of Public Health at Houston, 1997. 
Research Interests: Obesity prevention program design and evaluation, interprofessional teaching methods, Outcome and effectiveness evaluation of nutrition interventions.

Deanna M. Hoelscher, Professor (Austin Regional Campus). B.S., Texas A&M University, 1983; M.A., The University of Texas at Austin, 1985; Ph.D., The University of Texas at Austin, 1991. 
Research Interests: Child nutrition and physical activity; child and adolescent obesity; prevention of chronic disease (cardiovascular disease, type 2 diabetes, obesity, osteoporosis); school-based health promotion programs; assessment of diet and physical activity; gene-diet interactions.

Darla E. Kendzor, Assistant Professor (Dallas Regional Campus). B.A., University of Illinois, 2000; M.A., Louisiana State University, 2005; Ph.D., Louisiana State University, 2007.

Christine M. Markham, Assistant Professor. B.A., Temple University, 1985; M.A., University of Pennsylvania, 1990; Ph.D., The University of Texas School of Public Health at Houston, 2002. 
Research Interests: Adolescent and child health, including HIV, STD and pregnancy prevention, substance use prevention, chronic disease management, influence of parental factors, qualitative research, outcome, and process evaluation.
Alfred L. McAlister, Professor (Austin Regional Campus). B.A., The University of Texas at Austin, 1972; Ph.D., Stanford University, 1976. 
*Research Interests*: Tobacco policy; violence prevention; peace and conflict; health disparities; advocacy and mass communication; international health.

*Research Interests*: substance abuse; STDs; HIV/AIDS; women’s health; underserved and vulnerable populations; violence; ethnography; history of health and medicine, East Africa; global health.

Patricia Dolan Mullen, Professor. A.B., University of California at Berkeley, 1966; M.L.S., University of California at Berkeley, 1970; M.P.H., University of California at Berkeley, 1971; Dr.P.H., University of California at Berkeley, 1975.  
*Research Interests*: Health promotion for disadvantaged women, including incarcerated women; transtheoretical model of behavior change and motivational interviewing; preventing alcohol, tobacco and other drug-exposed pregnancies; contraception and STD/HIV risk reduction; informed decision making for cancer and other screening tests; training and career development programs; evaluation methods; systematic review and meta-analysis.

Guy S. Parcel, Professor (Austin Regional Campus). B.S., Indiana University, 1965; M.S., Indiana University, 1966; Ph.D., Pennsylvania State University, 1974.  
*Research Interests*: School health promotion; child and adolescent health; health behaviors.

Cheryl L. Perry, Professor (Austin Regional Campus). B.A., University of California at Los Angeles, 1971; M.A., University of California at Davis, 1973; Ph.D., Stanford University, 1980.  
*Research Interests*: Child and adolescent health behavior change through school, family, and community interventions, with a focus on promoting healthy eating and physical activity, and preventing tobacco, alcohol, and other drug use and violence among young people.

Melissa F. Peskin, Assistant Professor. B.A., The University of Texas at Austin, 1997; M.S., The University of Texas School of Public Health at Houston, 2000; Ph.D., The University of Texas School of Public Health at Houston, 2004.  
*Research Interests*: Child and adolescent health, specifically in HIV, STD, and pregnancy prevention, violence, bullying, cyberbullying; intervention development and program evaluation.

Ronald J. Peters, Jr., Associate Professor. B.S., Virginia Commonwealth University, 1991; M.S., Medical College of Virginia, 1993; Dr.P.H., The University of Texas School of Public Health at Houston, 1998.  
*Research Interests*: Sexual risk-taking behavior; design and analysis of drug use studies among youth and incarcerated populations; and cultural and economic aspects of health behaviors in underserved communities.

Nalini Ranjit, Professor of Health Promotion and Behavioral Sciences. Ph.D., Cornell University, 1999.
Research interests: Social epidemiology of cardiovascular risk, the evaluation of policy measures and interventions on population health, and the relationship of psychosocial variables to health, consumption of sugar sweetened beverages.

Belinda Reininger, Associate Professor (Brownsville Regional Campus). B.S., The University of Texas at Austin, 1988; M.P.H., The University of Texas School of Public Health at Houston, 1991; Dr.P.H., The University of Texas School of Public Health at Houston, 1994. Research Interests: Evaluation research; community based health promotion; health disparities.

Robert E. Roberts, Professor. B.A., Texas A&M University, 1962; B.S., Texas A&M University, 1962; M.A., University of Kentucky, 1963; Ph.D., University of Kentucky, 1968. Research Interests: Cross-cultural research; psychiatric epidemiology; adolescent mental health; affective disorders; suicide, sleep disorders, obesity, and mental health.


Ross Shegog, Assistant Professor. B.S., University of Sydney, 1983; Diploma in Nutrition and Dietetics, University of Sydney, 1985; Diploma in Biomedical Communications, University of Texas, 1990; M.P.H., The University of Texas School of Public Health at Houston, 1992; Ph.D., The University of Texas School of Public Health at Houston, 1997. Research Interests: Application of instructional and/or decision-support technology in health promotion and disease prevention including pediatric asthma management; prevention and cessation of adolescent and young adult tobacco use; prevention of HIV, STD, and pregnancy in middle school children.

Jacquelyn Slomka, Assistant Professor. B.S.N., The Ohio State University, 1972; M.A., University of Michigan, 1980; Ph.D., University of Michigan, 1986. Research Interests: Research ethics; ethics and public health; culture and health care, health care of older adults.

Andrew E. Springer, Assistant Professor (Austin Regional Campus). B.A. Wittenberg University, 1985; M.P.H. The University of Texas School of Public Health at Houston, 1995; Dr.P.H, The University of Texas School of Public Health at Houston, 2000. Research Interests: Child and adolescent health promotion; childhood obesity prevention and physical activity; socio-ecological influences of adolescent health behavior; health promotion in Latino populations.

Wendell C. Taylor, Associate Professor. A.B., Grinnell College, 1972; M.S., Eastern Washington University, 1974; Ph.D., Arizona State University, 1984; M.P.H., The University of Texas School of Public Health at Houston, 1989.
Research Interests: Worksite health promotion; Physical activity; Environmental Justice; Health promotion and disease prevention in underserved populations.

Susan R. Tortolero, Associate Professor. B.S., University of Houston, 1985; M.S., The University of Texas School of Public Health at Houston, 1989; Ph.D., The University of Texas School of Public Health at Houston, 1994. 

Research Interests: Adolescence; children; sexual risk taking, STDs, pregnancy, substance use, violence mental health; depression; Hispanics; prevention research.

Patrice A. Caetano Vaeth, Assistant Professor of Health Promotion and Behavioral Sciences (Dallas Regional Campus). B.A., University of California, Santa Cruz, 1983; M.P.H., University of California, Berkeley, 1989; Dr.P.H., University of California, Berkeley, 1995. 

Research Interests: Ethnic and gender disparities in health; the social and behavioral determinants of chronic disease.

Sally W. Vernon, Professor. B.A., University of Oklahoma, 1968; M.A., New York University, 1971; Ph.D., The University of Texas School of Public Health at Houston, 1980. 

Research Interests: Cancer prevention and control for breast, cervical and colorectal cancers; informed decision making for prostate cancer testing; psychosocial issues in cancer genetic testing; measurement of psychosocial constructs; reliability and validity of self-report cancer screening behaviors.

Scott T. Walters, Associate Professor (Dallas Regional Campus). B.A., Biola University, 1993; M.A., San Diego State University, 1996; Ph.D., University of New Mexico, 2002. 

Research Interests: College student health and substance abuse prevention, motivational theories of change, mailed and computerized interventions for substance abuse, brief negotiation in medical settings, religious and spiritual aspects of psychology.

Mark Williams, Professor. B.G.S., University of Iowa, 1976; M.A., University of Nebraska, 1979; Ph.D., University of Iowa, 1983. 

Research Interests: HIV/AIDS prevention; STD prevention; antiretroviral medication compliance; drug abuse; minority health.

Emeritus Faculty, Health Promotion and Behavioral Sciences 

D. Blair Justice, Professor Emeritus. B.A., The University of Texas at Austin, 1948; M.S., Columbia University, 1949; M.A., Texas Christian University, 1963; Ph.D., Rice University, 1966. 

Research Interests: Spirituality and health, stress, coping and disease.

Secondary Faculty, Health Promotion and Behavioral Sciences 

Elizabeth R. Baumler (Biostatistics), R. Sue Day (Epidemiology and Disease Control), Steven H. Kelder (Epidemiology and Disease Control), Stephen H. Linder (Management, Policy and Community Health), Thomas A. Mackey (Environmental and Occupational Health Sciences), Maureen Sanderson (Epidemiology and Disease Control) and Melissa H. Stigler (Epidemiology and Disease Control).
Faculty of other components of The University of Texas System who participate on a regular basis in the teaching or research programs, Health Promotion and Behavioral Sciences

Karen Basen-Engquist, Associate Professor (The University of Texas M.D. Anderson Cancer Center). B.A., Saint Olaf College, 1982; Ph.D., The University of Texas at Austin, 1989; M.P.H., The University of Texas School of Public Health at Houston, 1990.

Ira Bernstein, Ph.D., Professor Department of Clinical Sciences, The University of Texas Southwestern Medical Center, Dallas, Texas.


Paul M. Cinciripini, Professor (The University of Texas M.D. Anderson Cancer Center). B.S., Pennsylvania State University, 1974; M.S., Auburn University, 1976; Ph.D., Auburn University, 1978.

Lorenzo Cohen, Assistant Professor (The University of Texas M.D. Anderson Cancer Center). B.A., Reed College, 1987; M.S., Uniformed Services University of the Health Sciences, 1993; Ph.D., Uniformed Services University of Health Sciences, 1994.

Lawrence D. Cohn, Associate Professor (The University of Texas at El Paso). B.A., Boston University, 1972; Ph.D., Washington University.

Joan C. Engebretson, Professor (cross appointment) (The University of Texas School of Nursing). B.S.N., St. Olaf College, 1965; M.S., Texas Woman's University, Houston, 1979; Dr.P.H. The University of Texas School of Public Health at Houston, 1992.

Nell H. Gottlieb, Professor (The University of Texas at Austin). B.A., Emory University, 1966; M.A., Emory University, 1968; Ph.D., Boston University, 1980.


Amy Jo Harzke, M.Div., M.P.H., Dr.P.H., Adjunct Assistant Professor (The University of Texas Medical Branch at Galveston). B.A., The University of Texas at Austin, 1992; M.Div., Harvard Divinity School, 1996; M.P.H., The University of Texas School of Public Health at Houston, 2002; Dr.P.H, The University of Texas School of Public Health at Houston, 2007.

Osvaldo F. Morera, Adjunct Assistant Professor (The University of Texas at El Paso). B.S., Ohio State University, 1988; M.A., University of Illinois at Urbana-Champaign, 1993; Ph.D., University of Illinois at Urbana-Champaign, 1997.

Sharon K. Ostwald, Professor (cross appointment) (The University of Texas School of Nursing at Houston). B.S., Wheaton College, 1964; M.S., University of Minnesota, 1976; Ph.D., University of Minnesota, 1986.

Patricia A. Parker, Ph.D., Adjunct Assistant Professor, Department of Behavioral Sciences, Division of OVP, Cancer Prevention and Population Sciences, The University of Texas M. D. Anderson Cancer Center, Houston, Texas.
Susan K. Peterson, Assistant Professor (The University of Texas M.D. Anderson Cancer Center). B.S., University of Michigan, Ann Arbor, 1984; M.P.H., University of Michigan School of Public Health at Houston, Ann Arbor, 1986; Ph.D., The University of Texas School of Public Health at Houston, 2001.

Navkiran K. Shokar, Associate Professor (The University of Texas Medical Branch at Galveston).

Jeffery P. Spike, B.A., M.A., Ph.D., Cross Appointment Professor, The McGovern Center for Health, Humanities, and the Human Spirit at The University of Texas Medical School at Houston.

Paul Swank, Professor (cross appointment) (The University of Texas Medical School at Houston). B.A., Adams State College, 1973; M.S., Colorado State University, 1977; Ph.D., University of Northern Colorado, 1979.

Jasmin A. Tiro, Assistant Professor (The University of Texas Southwestern Medical Center). B.A., Rice University, 1997; M.P.H., Emory University, Rollins School of Public Health, 1999; Ph.D., The University of Texas School of Public Health at Houston, 2006.


Jingping Xu, Research Scientist (The University of Texas M.D. Anderson Cancer Center). M.P.H., The University of Texas School of Public Health at Houston, 1999; Ph.D., The University of Texas School of Public Health at Houston, 2005.

Adjunct Faculty, Division of Health Promotion and Behavioral Sciences

Deborah Banerjee, Ph.D., Adjunct Assistant Professor. Houston Department of Health and Human Services, Houston, Texas.

Thomas Baranowski, A.B., M.A., Ph.D., Adjunct Professor, Children’s Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

Anne Bowen, Ph.D., Adjunct Professor, Clinical Psychology at the University of Wyoming and Visiting Research Fellow, Rural Center for AIDS/STD Prevention Studies at Indiana University in Bloomington, Indiana.

Nancy F. Butte, B.S., M.P.H., Ph.D., R.D., Adjunct Professor, Children’s Nutrition Research Center, Department of Pediatrics at Baylor College of Medicine, Houston, Texas.

Miriam Chacko, M.D., Adjunct Professor, Department of Pediatrics at Baylor College of Medicine and Medical Director at Baylor Teen Health Clinics

Karen W. Cullen, B.S., M.S., Dr.P.H., Adjunct Associate Professor, Associate Professor, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.
Ekere J. Essien, M.D., M.P.H., Dr. P.H., Adjunct Assistant Professor, Research Scientist, Research Centers in Minority Institutions Program, College of Pharmacy and Health Sciences, Texas Southern University, Houston, Texas.

Anthony J. Greisinger, M.A. Ph.D., Adjunct Assistant Professor, Vice President, Kelsey Research Foundation, Houston, Texas.

Jo Anne Grunbaum, Ed.D., Adjunct Professor, Health Scientist, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, Atlanta, Georgia.

Mary Hamra, Ph.D., Adjunct Professor. Functional Biology Department, West Virginia School of Osteopathic medicine, Lewisburg, West Virginia.

Nicole B. Hare, Dr.H.S., Adjunct Assistant Professor, Wellness Director for the City of Houston, Houston, Texas.

Albert C. Hergenroeder, M.D., Adjunct Professor, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

Martin Hobdell, B.D.S. M.A., Ph.D., Adjunct Professor, London University, Department of Epidemiology, London, England.

Mark W. Kline, M.D., Adjunct Professor, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

Alden S. Klovdahl, Ph.D., Adjunct Professor, Professor. School of Social Sciences, The Australian National University, Canberra, Australia.

Gerjo Kok, M.A., Ph.D., Adjunct Professor, Professor of Statistics and Chairman of the Department of Health Education, The University of Limburg, The Netherlands.

Trudy Krause, B.S., Dr.P.H., Adjunct Instructor, Dynamic Health Strategies, Houston, Texas.

Kimberly Lopez, Ph.D., Adjunct Assistant Professor, Director of Strategic Partnerships in Community Health Practices for St. Luke’s Episcopal Health Charities, Houston, Texas.

Carol Leler Mansyur, Ph.D., Adjunct Faculty/Instructor, Research Associate, Department of Family and Community Medicine, Baylor College of Medicine, Houston, Texas

Jeanne Martin, Ph.D., R.D., F.A.D.A., L.D., Adjunct Associate Professor. Retired from The University of Texas School of Public Health at Houston. Former Director of Dietetic Internship with the Human Nutrition Center, Wimberley, Texas.

Nancy Murray, Adjunct Assistant Professor. B.A., University of Southern California, 1972; M.A., University of Southern California, 1975; Dr.P.H., The University of Texas School of Public Health at Houston, 1996.

Research Interests: Child and adolescent health promotion through interventions with parents and schools; adolescent smoking cessation; physical activity.
Aanand D. Naik, M.D., Adjunct Assistant Professor. Health Services Research Section, Health Communication and Decision Making Program, Baylor College of Medicine, Houston, Texas.

Theresa A. Nicklas, M.P.H., Dr.P.H., Adjunct Professor, Children’s Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

Jane Peranteau, Ph.D., Adjunct Assistant Professor, Associate Executive Director at St. Luke’s Episcopal Health Charities, Houston, Texas.

David Plummer, M.D., Ph.D., Adjunct Professor, University of the West Indies, Ph.D.


Lena Schonnesson, B.A., M.A., Ph.D., Adjunct Associate Professor. Karolinska Institute, Soder Hospital, Stockholm, Sweden.


Marianna M. Sockrider, M.D., Dr. P.H., Adjunct Associate Professor. Associate Professor, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

Deborah Thompson, Ph.D., Adjunct Faculty. Scientist/Nutritionist with USDA/ARS, Baylor College of Medicine, Houston, Texas.

Jeannette Truxillo, Ph.D., Adjunct Assistant Professor. Director, Research and Evaluation, Harris County Department of Education, Houston, Texas.

Constance M. Wiemann, Ph.D., Adjunct Associate Professor. Director of Research, Section of Adolescent Medicine & Sports Medicine, Department of Pediatrics, Baylor College of Medicine, Houston, Texas.
MANAGEMENT, POLICY AND COMMUNITY HEALTH

The Division of Management, Policy and Community Health (MPACH) provides instruction in the fields of health economics, health services research, health policy, health law, health management and administration, health planning, community health practice, public health leadership, population health, organization management, health disparities, economic and social determinants of health, global issues in pregnancy and perinatal health, and health and economic development.

The Division offers the M.P.H. and Dr.P.H. programs in three areas: Community Health Practice, Healthcare Management, and Health Services Organization. A Ph.D. program is offered in Management and Policy Sciences.

The Division also offers a minor course of study (nine semester credit hours) for M.S., Dr.P.H. and Ph.D. students majoring in other public health disciplines. Students are expected to take at least one course in each of the following areas:

- Health Economics/Health Services Research,
- Health Policy,
- Healthcare Management.

The Division of Management, Policy and Community Health is home to two Centers. The mission of the Center for Health Services Research (CHSR) is to conduct research and provide technical assistance and training in the organization, financing, and outcomes of health services, systems, and policies. The mission of the George McMillan Fleming Center for Healthcare Management is: to collaborate with other prominent University of Texas schools to provide innovative healthcare research and education on healthcare management, finance, and organization; and to bring together leading healthcare executives, researchers, and students to enable change in health delivery and organizational effectiveness.

Master of Public Health Degree Programs

The M.P.H. in Community Health Practice focuses on the application of public health sciences at the community level. Faculty and students are concerned with the assessment of population health, the planning, implementation and evaluation of health programs in community settings, and appraisal of community-level effects of health policies and programs. The teaching program emphasizes systematic analysis and appropriate use of quantitative and qualitative health data. Students can develop and enhance their skills by examining community health issues in the classroom and the community.

The M.P.H. in Health Services Organization emphasizes the planning, management, and evaluation of health service systems, services, technologies, and policy. The curriculum includes health economics, decision analysis, health services research, public health and legislative processes, survey research, outcomes research, quantitative methods, evaluation research, health disparities and vulnerable populations, health administration, economic and social determinants of health, utilization of health services, and ethical and legal aspects of public health.

The M.P.H. in Healthcare Management is designed to provide students with a solid foundation in management in an interdisciplinary public health environment and a basis for understanding key managerial functions within the broad spectrum of
public health systems. A distinctive characteristic of this healthcare management degree program is recognition of the importance of linking private-sector healthcare institutional management with public-sector healthcare management and related community initiatives.

Special Entrance Requirements
A student entering the M.P.H. program should hold an undergraduate and/or graduate degrees in one of a variety of areas, including the social and behavioral sciences, business, the biological and medical sciences, law, and/or quantitative methods.

Course of Study
The M.P.H. in Community Health Practice focuses on the application of public health sciences at the community level. Faculty and students are concerned with the understanding and assessment of population health, the planning, implementation, and evaluation of health programs and policies and the translation of findings into policies and programs. The program emphasizes systematic analysis and appropriate use of quantitative and qualitative data. Students develop and enhance their skills of evidence-based public health by examining health issues in the classroom and community.

The following courses are strongly recommended for an M.P.H student majoring in Community Health Practice:
- PHM 3630 Health Program Planning, Implementation, and Evaluation
- PHM 3640 Community-Based Health Assessment
- PHM 3922 Economic and Social Determinants of Health
- PHD 3926 Health Survey Research Design
  OR
- PH 2615 Field Epidemiology II
- Four elective courses in Community Health Practice (from a defined set of courses)

The following Divisional courses are strongly recommended for an M.P.H. student majoring in Health Services Organization:
- PH 3920 Health Services Delivery and Performance
- PHM 3910 Health Economics
- PH 3915 Methods for Economic Evaluation of Health Programs
- PH 3940 Healthcare Outcomes and Quality Research
- PH 3815 Health Policy Analysis
- PH 3810 Health Policy in the United States or PH 3818 Texas Health Policy: Emerging Issues and New Approaches
- Two management courses (PH 3720 Healthcare Finance, PH 3736 Healthcare Payment Systems and Policy, PH 3998 Federal Healthcare Programs)

The following Divisional courses are strongly recommended for an M.P.H. student majoring in Healthcare Management:
- PH 3744 Organizational Behavior in Healthcare Organizations
- PH 3747 Healthcare Operations Management
- PH 3720 Healthcare Finance
- PH 3745 Organizational Theory and Management
- PH 3738 Legal Issues in Healthcare
PH 3746 Quality Management and Improvement in Healthcare
PH 3735 Healthcare Strategic Management
One elective course in Management, Policy, and Community Health Community Health (from a defined set of courses)

The practicum and culminating experience should have a community health practice, health services organization or healthcare management focus, respectively.

Doctor of Public Health Degree Program
The Doctor of Public Health (Dr.P.H.) program in the Division of Management, Policy and Community Health offers interdisciplinary training for students who wish to practice at an advanced level or pursue academic careers in public health. The student may choose the Community Health Practice or the Health Services Organization program focus.

Special Entrance Requirements
Admission to the Dr.P.H. program requires a prior M.P.H. degree or its equivalent. Applicants with public health work experience and applicants who have completed coursework in quantitative methods or who can provide evidence of quantitative abilities are preferred. The GRE is recommended.

Course of Study
The program is designed to allow the student’s academic Advisory Committee the flexibility to determine the student’s scope of study based on the student’s academic objectives and prior education and experience.

The following courses are strongly recommended for a Dr.P.H. student majoring in Community Health Practice:
- PHD 3922 Social and Economic Determinants of Health (3 credit hours)
- PHD 3630 Health Program Planning, Implementation, and Evaluation (3 credit hours)
- PHD 3640 Community-Based Health Assessment (4 credit hours)
- Four electives in Community Health Practice (from a defined set of courses)
- PHD 3970 Dissertation proposal development in Management, Policy, and Community Health(taken after admission to candidacy)
- PHD 3980 Doctoral Seminar(at least one semester following admission to candidacy)

All Dr.P.H. students in Community Health Practice are expected to have completed PHM 3620 Principles and Practice of Public Health (or equivalent), PH 1725 and PH 1726 Intermediate Biostatistics I and II (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) or equivalent, and to have a background in the disciplines of public health. The practicum and dissertation research should have a Community Health Practice focus.

The following courses are strongly recommended for a Dr.P.H. student majoring in Health Services Organization:
- PH 3720 Healthcare Finance
- PHD 3910 Health Economics or PH 3915 Methods for Economic Evaluation of Health Programs
- PHD 3930 Econometrics in Public Health
- PH 3940 Healthcare Outcomes and Quality Research
The Doctor of Philosophy Degree Program
The Doctor of Philosophy (Ph.D.) program in the Division of Management, Policy and Community Health provides depth in three tracks: health economics/health services research; health policy and law; and health management. Depth is achieved by electing advanced specialty courses in one or more of these areas. Students interested in careers in these areas may pursue advanced study that leads to original research and culminates in the award of the Ph.D. degree.

Special Entrance Requirements
Admission to the Ph.D. program requires a post-baccalaureate degree in the social sciences, policy, law, management or public health. Applicants with backgrounds in more than one relevant subject are preferred. The program also requires advanced knowledge of quantitative methods; applicants with strong math and/or statistics backgrounds are preferred. The GRE is recommended.

Course of Study
Students choose a major area of study one minor area of study and a public health breadth area. The minor area of study may come from one of the three designated tracks or from another public health discipline, while the public health breadth area must come from a public health discipline outside the Division.

Students majoring in Management, Policy and Community Health are expected to take at least one course from each of the three tracks. Courses cannot be double counted for the major and minor area of specialization.

The following Divisional courses are recommended for Ph.D. students specializing in Health Economics/Health Services Research:
- PH 3915 Methods for Economic Evaluation of Health Programs
- PHD 3930 Econometrics in Public Health
- PHD 3910 Health Economics
- PHD 3935 Advanced Health Economics
- PH 3940 Health Care Outcomes and Quality Research
- PHD 3945 Advanced Health Services Research Methods
- One elective course in the Policy/Law Core
- One elective course in the Management Core
• PHD 3970 Dissertation proposal development in Management, Policy, and Community Health (taken after admission to candidacy)
• PHD 3980 Doctoral Seminar (at least one semester following admission to candidacy)

The following Divisional courses are recommended for Ph.D. students specializing in **Policy and Law:**
• Five courses from the list below:
  ✓ One or two courses on policy processes and policymaking institutions (PHD 3810; PHD 3812; PH 3818; PH 3825)
  ✓ One or two courses on approaches and methods (PH 3815; PH 3826; PHD 3830; PHD 3835; PHD 3850)
  ✓ One or two courses on a policy content area (e.g., PH 3855; PH 3860; PH 3998)
• A doctoral level course in policy from a political science department (e.g. at University of Houston, Rice)
• One course from the Health Economics/Health Services Research Core
• One course from the Management Core
• PHD 3970 Dissertation proposal development in Management, Policy, and Community Health (taken after admission to candidacy)
• PHD 3980 Doctoral Seminar (at least one semester following admission to candidacy)

The following Divisional courses are recommended for Ph.D. students specializing in **Health Management:** (7)
• PH 3720 Healthcare Finance
• PH 3735 Healthcare Strategic Management
• PH 3736 Healthcare Payment Systems and Policy
• PH 3747 Healthcare Operations Management
• Two Organization courses (PH 3744 Understanding Organizational Behavior in Health Services Organizations, PHD 3745 Organizational Theory and Management, PHD 3750 Organizational Psychology)
• One elective course in the Health Economics/Health Services Research core
• One elective course in the Policy/Law core
• PHD 3970 Dissertation proposal development in Management, Policy, and Community Health (taken after admission to candidacy)
• PHD 3980 Doctoral Seminar (at least one semester following admission to candidacy)

Students typically take two years of coursework in preparation for the qualifying examination; however, the actual time required in coursework will depend on a student’s level of preparation before admission and the judgment of the student’s qualifying examination committee.

All Ph.D. students are expected to have completed PH 1725 and PH 1726 Intermediate Biostatistics I and II (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) or equivalent, and to have a background in the disciplines of public health. All students are also expected to be registered for at least one semester of PH 3980 Doctoral Seminar after admission to candidacy.
Dissertation research in the chosen area of study (i.e. major) should culminate in the completion and presentation, in written form, of an original research project.

Courses, Management, Policy and Community Health

**PHM 3620 Principles and Practice of Public Health**  
The Faculty in Management, Policy and Community Health, 3 credits, cd

This course illustrates how the health of populations is promoted and protected by organized public health practice. Students are acquainted with current evolving concepts and performance of public health practice and are introduced to essential public health services performed by public health agencies. Students will learn expectations of the effective and efficient performance of agencies and the competencies required of individual public/community health workers. Representatives from community/public health programs will participate in class presentations along with faculty. This is a designated M.P.H. core course.

**PHM 3630 Health Program Planning, Implementation and Evaluation**  
Lloyd, Urrutia-Rojas, 3 credits, b

This three-credit pass/fail course will introduce Masters of Public Health students to the fundamental concepts and techniques of planning, implementing, and evaluating public health programs. The course will cover concepts that are relevant to evaluation of health, and social and behavioral interventions in the community settings. These will include program/intervention, implementation and impact evaluation concepts, models/designs, methods, indicators, and data collection, analysis and interpretation strategies. Design and application of evaluations will include both quantitative and qualitative research methods.

**PHD 3630 Health Program Planning, Implementation and Evaluation**  
Lloyd, Urrutia-Rojas, 3 credits, b

This is an advanced three-credit pass/fail doctoral level course. Students will be required to apply evaluation techniques that involve the application of quantitative and qualitative evaluation methods, as well as to synthesize the principles and methods of community health, program design, implementation and evaluation. This course will cover concepts that are relevant to evaluation of health, and social and behavioral interventions in the community settings. These will include program/intervention, implementation and impact evaluation concepts, models/designs, methods, indicators, and data collection, analysis and interpretation strategies. The students will be directed to provide leadership and to collaborate effectively with community agencies to achieve the goals of public health programs.

**PHM 3640 Community-Based Health Assessment**  
Moore, Urrutia-Rojas, 4 credits, b

This is a four-credit master’s level course that covers a variety of concepts which are especially relevant to community diagnosis such as: statistics on health status, health resources, health needs and health problems; systematic collection, assembly, analysis, and interpretation of data related to the characteristics, the resources,
and the health of the community. Students will identify and apply the concepts and components of the community-based assessment process, as well as the steps and procedures involved in assessing the community needs including qualitative and quantitative methods. Students will work in partnership with selected local agencies to provide a service through collaboratively develop a plan for assessment and implementation of a selected community, group, or the agency population of interest.

Prerequisites: Introductory course to Biostatistics or consent of instructor.

The master level course is a designated M.P.H. core course.

**PHD 3640 Community-Based Health Assessment**
Moore, Urrutia-Rojas, 4 credits, b

This is a course designed for doctoral students in Community Health Practice that focus in community assessment, one of the core functions of public health that facilitates problem solving and policy development. Students will apply the concepts and components of the community-based assessment process, including qualitative and quantitative methods; will demonstrate mastery of methods for rapidly assessing community health problems, understand their policy context, and the resources available for their solution. Students will identify and analyze the role of social, economic, and environmental factors in the origin of community health needs, determine the who, what, where, why, and how of community social and health data, the community demands, needs, and problems, as well as the resources available. In the process of implementing a community-based assessment, doctoral students will work in partnership with community agencies demonstrating attributes of leadership in public health and determining strategies to identify and involve stakeholders in the assessment and systems change processes.

**PH 3650 Demographic Methods for Public Health Practitioners**
Bradshaw, 4 credits, cd

This course will comprise an overview of demographic methods commonly sued by professionals in public health practice and research. The course is an interactive graduate level electronic seminar. Participants will be introduced to age, sex, ethnicity, and cause specific death rates; period rates and cohort rates; methods of standardization of rates and proportions and selection of standards; the life table and some of its uses; common fertility and reproductivity rates; uses of data from the birth certificate; mobility data and measures; and population estimates and projections.

**PHM 3670 Public Health Policy and Practice**
The Faculty in Management, Policy and Community Health, 3 credits, b (even-numbered years)

This course focuses on the practice of policy analysis in the real world of resource and time constraints and political cross pressures. Faculty and students will work with community leaders, program administrators, outside researchers, experts, and policymakers at the national, state, and local level in developing collaborative research projects related to public health and health care policy issues. Guest lecturers from a number of organizations and institutions will play an important part,
offering an opportunity for students to interact with possible future employers. Topics will vary from year to year and will relate to the evolving policy agenda and the interests and specialization of the professors involved.

**PHM 3710 Administration and Public Health**  
The Faculty in Management, Policy and Community Health, 3 credits, a, b

This course covers the elements and effective practice of management and administration. It includes the investigation of organizational environments, strategic decision-making and control, policy and program development, and selected aspects of behavior in organizations.

This is a designated M.P.H. core course.

**PHM 3715 Introduction to Management and Policy Sciences**  
The Faculty in Management, Policy and Community Health, 3 credits, a, b, c

This course surveys theory and practice in the management and policy sciences applied to the field of public health. Topics include: public health in the U.S. health system/ legal bases of public health; public policy institutions and decision-making processes; methods of policy analysis, public sector institutions, management and decision-making; and private sector health care institutions, management and decision making.

This is a designated M.P.H. core course.

**PH 3720 Healthcare Finance**  
Mikhail, Gammon, 3 credits, a

This course offers students the opportunity to improve their understanding and use of financial concepts and principles in the health care industry. Managerial and financial accounting, as well as financial analysis and strategic planning, are covered. Financial management under prospective payment and capitation systems, as well as product costing and pricing, will be emphasized.

**PH 3725 Health and Safety Program Management**  
Felknor, Emery, 3 credits, b

This course draws on concepts from sociology, political science and anthropology, and is designed to provide students with the opportunity to master the analytical tools necessary to understand and function efficiently within organizations. The course will include exposure to management theory and its application to current health and safety programs. Using “real world” health- and safety-based examples, students will be challenged to apply the concepts presented in this class to anticipate, recognize, evaluate, and control a variety of managerial problems. Students will have ample opportunity to participate in class discussions, simulations, and group exercises. Guest lecturers from a wide array of health and safety management settings add dimension to the course material presented. This course is designed for students in the Industrial Hygiene programs or for those students with a strong interest in the area of health and safety program management.
This is a designated M.P.H. core course.

**PH 3735 Healthcare Strategic Management**  
Mikhail, 3 credits, b

The purpose of PH3735, Healthcare Strategic Management, is to provide students with an overview of the basic concepts and principles of strategic planning. These concepts and principles are presented in the context of healthcare organizations and the overall strategic management of such organizations. In addition, basic principles of community-based health planning are examined and the potential linkages between organizational strategic planning and community health planning are explored.

**PH 3736 Healthcare Payment Systems and Policy**  
Morgan, Rosenau, 3 credits, b

This course provides a review of current US healthcare payments systems in the form of insurance plans or other forms of group coverage that is offered to eligible populations. Each healthcare payment system will be examined in depth to reveal the policies that serve as the foundation of the program; the authority, the economics, the targeted population, and the current challenges. As our nation discusses healthcare “reform,” it is critical to understand existing policies that establish the operations of public, private, and commercial health coverage. This course provides the framework for a comprehensive understanding of current approaches, significant limitations, and potential impact of proposed “reform” initiatives.

**PH 3738 Legal Issues in Healthcare**  
Hacker, 3 credits, a

An understanding of select areas of law is necessary to work effectively in the administration of health care. Students will consider during this semester a matrix of the several kinds of transactions in health care with the legal considerations affecting these transactions. On completion of this course, students should be able to explain the role of law in the American health care system, including explaining how the federal government oversees the reimbursement of costs incurred by health care providers, describing the Texas regulatory and payment system, describing licensure, accreditation, and hospital/physician issues affect administration of health care, and explaining how environmental laws and antitrust laws affect the administration of health care.

**PH 3744 Understanding Organizational Behavior in Health Services Organizations**  
DelliFraine, 3 credits

This course will assist students in developing a framework for thinking about health care organizations and their complexity. The specific emphasis will be health services organizations. The primary goals of this course are to apply relevant theories to a range of organizational problems and attain competencies (knowledge, skills, attitudes, and behaviors) needed to be an effective leader and manager in health services organizations. Topics covered include management skills such as leadership, teamwork, organizational change, and performance improvement.
**PHD 3745 Organizational Theory and Management**  
Horwitz, 3 credits, b  

The focus of this class is on providing students with an in-depth understanding of important managerial paradigms and a background examination of the course organizational theory, from which effective managerial techniques are developed. The primary objectives are to expose students to theories of the firm based on the traditions of economics, management, and philosophy, and industrial/organizational psychology; to provide a forum for the discussion and critical analysis of these theoretical issues; to familiarize students with past and current managerial techniques for the effective management of business environments in general and health care settings in particular; to foster a thorough integration and understanding of the linkages between managerial and organizational theories; and to provide students with the direction needed to expand their own interests and abilities for promulgating research in the fields of management and organizational theory in the future. This is not a “how-to” course in management; rather, the objective is to improve the managerial ability of students by providing the foundation for critical analyses of situations that may be encountered in the workplace.

**PHM 3746 Quality Management and Improvement in Healthcare**  
DelliFraine, 3 credits, b  

The goal of this course is to provide students with requisite knowledge and skills for managing quality improvement and patient safety efforts in health care organizations. The various perspectives on the challenges of providing safe and reliable health services are covered. Operational approaches to quality improvement adapted from industry are examined and practiced in cases and exercises. Students learn to identify key aspects of systems and work flows. They employ currently used analytic tools to analyze quality-related systems problems and identify potential solutions. Finally, the course will assist students in improving management skills in the affective realm.

**PH 3747 Healthcare Operations Management**  
Langabeer, 3 credits, a  

Management is fundamentally about two things: developing a strategy and executing daily. In this course we will be discussing these topics, and how agencies and organizations can use more advanced methods to improve healthcare processes. Specific focus will be on reducing cycle times (e.g., patient wait times), measuring productivity, streamlining process flows, tracking outcomes and performance metrics, and generally improving health management processes.

**PHM 3750 Organizational Psychology**  
Moore, 4 credits, a  

Selected topics from the field of organizational psychology are explored using an experiential learning model as the vehicle. Emphasis is on increasing interpersonal skills and competencies central to supervisory and managerial roles. Three levels of analysis (i.e., intrapersonal, interpersonal and organizational) are considered in each beha-
vioral simulation. Individualized performance contracts are negotiated to provide the basis for evaluation.

**PHD 3750 Organizational Psychology**  
Moore, 4 credits, a

This course is taught at the doctoral level. Selected topics from the field of organizational psychology are analyzed using an experiential learning model as the vehicle. Emphasis is on increasing interpersonal skills and competencies central to supervisory and managerial roles. Three levels of analysis (i.e., intrapersonal, interpersonal and organizational) are considered in each behavioral simulation. Individualized performance contracts are negotiated to provide the basis for evaluation.

**PHD 3810 Health Policy in the United States**  
Rosenau, 3 credits, a

The purpose of this course is to teach students to appraise health policy in the U.S. and evaluate its strengths and weaknesses. Principal policy making institutions, processes, and ideas that shape health policy at the federal level will be assessed and criticized.

**PHM 3810 Health Policy in the United States**  
Rosenau, 3 credits, a

The purpose of this course is to provide an overview of health policy in the U.S. The principal institutions, processes, and ideas shaping health policy at the federal level will be described and explained. Health policy questions will be illustrated using substantive topics of importance to public health.

**PHM 3811 Health Systems of the World**  
Low, Rosenau, Homedes, 3 credits, b

The course will examine, in detail, health care systems in 15 countries as examples of the different approaches taken by policy-makers to meet the challenges inherent in keeping their populations healthy. Students will learn to appraise and evaluate national health care systems, explain how the health care systems in these countries developed over time, describe each country’s current health system, resources and funding, and demonstrate comparative global challenges to health across the 15 countries.

**PHD 3812 Comparative Healthcare Systems: Policy Challenges and Economic Perspectives**  
Rosenau, Swint, 3 credits, b (odd-numbered years)

This course is in a doctoral seminar format, and examines economic, political, and other pertinent aspects of eight to ten national health care systems in an effort to better understand the range of options available for health care reform efforts. In the past the course has covered Australia, Canada, Chile, China, Costa Rica, France, Germany, Japan, Mexico, the Netherlands, New Zealand, Sweden, Russia, South Korea, Taiwan, the U.K., the U.S. and Vietnam.
**PH 3815 Health Policy Analysis**  
Begley, 3 credits, a

This course introduces both qualitative and quantitative methods for analyzing public health policy. Multiple approaches to inquiry and argument that are relevant to decision-making in political settings are covered. Emphasis is on the context of public policy making and its bearing on the conduct and fate of analyses. Applications to various public health problems are presented.

**PH 3818 Texas Health Policy: Emerging Issues and New Approaches**  
Begley, Warner, 3 credits, b

The course analyzes major issues, new programs, and legislation in state health policy. The legislative process, state budget, and role and responsibility of health and human service agencies are discussed. Policy analysis concepts and methods are introduced and applied. When the legislature is in session, topics reflect proposed legislation. Issues addressed by interim studies are emphasized in semesters between legislative sessions. Topics typically addressed include: Medicaid/CHIP changes/reform; healthcare regulation, behavioral health, long-term care, medical education, rural and border health, disease prevention and control, and health promotion. Students are introduced to the latest policy debates on each topic through selected readings and informed speakers.

**PH 3825 Public Health Law**  
Hacker, 3 credits, b

Public health law defines the extent to which the state can interfere with private interests when protecting the health of the population. In this course students will study, through constitutional and statutory analysis, how the balance between these interests is determined. Because administrative agencies are used extensively to regulate matters that affect the public health, students will examine the legal characteristics of these governmental entities. The use of the common law to establish public health policy and remedies for public health problems will be considered.

**PH 3826 Introduction to Administrative Law**  
Hacker, 3 credits, a

Administrative agencies are important in the practice of public health. Numerous administrative agencies have been created by the U.S. Congress or various state legislatures to act as agents of the executive branch and carry out activities that are intended to protect the public's health. This course considers the laws and legal principles that govern the activities of these entities. Students will study statutes, regulation, and case law affecting selected public health agencies and will delve into the workings of a local regulatory agency.

**PHD 3830 Ethics and Policy**  
Linder, 3 credits, b

This course focuses on the application of ethics, values, and moral reasoning to problems and issues in public health. It offers a careful overview of approaches to moral theory and modes of assessment to develop students’ skills in reasoning and evaluation. Special attention will be given to justice and equity as key moral claims.
in public health. Practical examples will be used to illustrate moral arguments, criteria, and modes of reasoning connected with health promotion, disease prevention, and health care delivery.

**PH 3835 Ethics for Management, Policy and Community Health**  
Rosenau, 3 credits, b (even-numbered years)

This course examines ethical dimension of health issues in the community, hospitals, long-term care facilities, and health insurance companies. Students will learn to be self-conscious about ethical issues in the areas of access to health services, costs of health care, payment of health services, responsibility for quality of health services, and conflict of interest issues. Ethical choices of health system policy makers, the ethical implications regarding community health practice, the balancing off of corporate interest and patient claims are also considered.

**PHD 3850 Translating Research into Policy**  
Linder, 3 credits, a

The purpose of this course is to examine the challenges and strategies for bridging the gap between research and practice. Students will understand the role of translating research into a form that meets users’ needs and the challenges of disseminating translated information to the appropriate audience. In prevention and population health research, users include the community of practitioners and health policy makers as well as the public.

**PH 3855 Climate Change Policy**  
Linder, 3 credits, b

The purpose of this course is to introduce students to the issues and controversies surrounding public policy to mitigate global climate change. The course will follow the developments at COP 15 in Copenhagen, the progress of bills in the U.S. Congress intended to reduce greenhouse gas emissions, and will consider EPA’s regulatory initiatives and policies adopted in the states. The course will assess the full range of political positions, the role of science, and the impact of propaganda and advocacy on the climate change debate. The format will include lectures, film, group discussion, and written assignments.

**PH 3860 Pharmaceutical Politics and Policy**  
Rosenau, 3 credits, b

This course will introduce students to pharmacy policy, an essential aspect of public health. The approval process and the categorization of drugs is considered. The policy process of development, distribution, marketing and consumption of pharmaceuticals is studied. Domestic medication policy, the global market place and cross border issues will be discussed. Conflict of interests, normative choices, and ethical dilemmas of pharmaceutical policy will be studied.
**PHM 3910 Health Economics**  
The Faculty in Management, Policy and Community Health, 3 credits

This course covers the theory of microeconomic analysis and its application to health and health services. It emphasizes the use of theory to understand problems of organization, delivery, and financing of health services; discrepancies in health levels among members of society; and the choices available to society regarding these issues.

**PHD 3910 Health Economics**  
Lairson, Swint, 3 credits, b

This course covers the theory of microeconomic analysis and its application to health and health services. It emphasizes the use of theory to understand problems of organization, delivery, and financing of health services; discrepancies in health levels among members of society; and the choices available to society regarding these issues. In addition to the course requirements for Master's students, each doctoral student will be required to prepare a paper that identifies and discusses the major policy and research issues in one of the areas of health economics that is introduced in the course, critically reviews the relevant published research in this area, and synthesizes their view of the state of this research and suggests what types of research might not be most fruitful; e.g. as one might wish to pursue in a dissertation.

**PH 3915 Methods for the Economic Evaluation of Health Programs**  
Lairson, Swint, 3 credits, a

This course covers the concepts and methods for the economic analysis of health care decision alternatives. Topics will include cost-benefit, cost-effectiveness and cost-utility analysis, and other methods of decision analysis. It emphasizes the application of these methods to the evaluation of alternative health programs.

**PH 3920 Health Service Delivery and Performance**  
Morgan, Begley, 3 credits, b

This course reviews major policy issues in health care services delivery in the United States and introduces students to fields of inquiry concerned with analysis and evaluation of the health care system. The issues of effectiveness, efficiency, and equity of health care are explored as indicators of system performance. Basic analytical concepts and methodologies used in health policy analysis and program evaluation are introduced.

**PHM 3922 Economic and Social Determinants of Health**  
Franzini, Low, 3 credits, b

This course introduces the concept of population health and studies the reason for health disparities between countries as well as socioeconomic and racial/ethnic groups within countries. It takes an approach to health that identifies the social factors, such as inequalities in income and opportunities, and racial/ethnic disparities that influence the health of populations. The course presents an overview of these concepts and is intended as the introductory course for students interested in
the topic. The course examines population health by exploring economic, social and cultural factors, identifying systematic variation in these factors leading to health disparities, exploring how economic, social and cultural conditions affect individual risk factors, human behavior and biology and assessing economic social and policies.

This is a designated M.P.H. core course.

**PHD 3922 Economic and Social Determinants of Health**  
Franzini, Low, 3 credits, b

This doctoral level course illustrates the concept of population health and analyzes the reason for health disparities within and between countries, focusing on socioeconomic and racial/ethnic disparities. It takes an approach to health that identifies the social factors, such as inequalities in income and opportunities, and racial/ethnic disparities that influence the health of populations. The course examines population health by exploring economic, social and cultural factors, identifying systematic variation in these factors leading to health disparities, exploring how economic, social and cultural conditions affect individual risk factors and human behavior and biology. The course also relates the methods used in health disparities research and assesses relevant economic and social policies.

**PHD 3926 Health Survey Research Design**  
Felknor, 4 credits, a

This course presents the methods for designing and conducting health surveys. Emphasis will be placed on problem conceptualization, measurements, and questionnaire design in the context of a total survey design framework. Examples of face-to-face, telephone, mail, and internet surveys will be presented.

Prerequisites: PH 1610 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, course becomes PH 1600 Biostatistics I.) and PHM 2610 or equivalent

**PHD 3930 Econometrics in Public Health**  
Franzini, 3 credits, a

This course has two learning objectives: to develop skill in quantitative methods for the analysis of complex models and to understand and critically evaluate public health research using econometric methods. This course consists of 11 units, including: multicollinearity; autocorrelation and heteroscedasticity; specification tests; random and fixed effect models; endogeneity and instrumental variables; simultaneous equation models; and selection models.

Prerequisites: PH 1725 and PH 1726 (Not offered after Summer 2010. Beginning Fall 2010-Summer 2011, both courses become PH 1700 Biostatistics II.) or similar statistical background

**PHD 3935 Advanced Health Economics**  
Lairson, Franzini, Swint, 3 credits, a (odd-numbered years)

This course is in a doctoral seminar format and focuses on the applications of microeconomic analysis to questions dealing with the production of health, the de-
mand for health services, the production and supply of health services, market equilibrium, social health insurance, and government regulation of health sector activities.

Prerequisites: PH 3910 (or its equivalent) and consent of instructor

PH 3940 Health Care Outcomes and Quality Research
Rowan, 3 credits, a

This course introduces students to measurement and evaluation issues associated with patient-centered outcomes and quality of care studies, an increasingly important component of present-day health services research. The focus will be application of measurements, rather than development. Topics that will be covered in this class include development of the outcomes framework, outcomes measures, risk adjustment of health outcomes, technical and practical issues with measurement and estimation, and empirical examples of health care outcomes research. Outcome and quality measures that will be covered include generic and condition-specific health status measures, satisfaction, patient trust, and patient adherence.

PHD 3945 Advanced Health Services Research Methods
Begley, Rowan, 3 credits, b

This course is discusses the application of quantitative methods in health services research. The major elements of designing and conducting an empirical study will be covered with emphasis on specification of research questions and design, measures, use of primary and secondary data sources, and issues in multivariate analysis. Examples of the use of different methods in the literature will be reviewed and sample datasets will be available for homework assignments.

PHD 3970 Doctoral Dissertation Proposal Development in Management, Policy and Community Health
Morgan, 3 credits, a

The focus of the course is the development and critique of a dissertation research proposal for Division Ph.D. and Dr.P.H. students.

PHD 3980 Management Policy and Community Health Doctoral Seminar
Franzini, 1 credit, a, b

This is a seminar course for doctoral students in Management Policy and Community Health who are currently working on their dissertation. The seminar is a venue for students to present and discuss their work in a supportive environment of peers and faculty. Faculty may also present ongoing research.

Prerequisites: Management, Policy and Community Health doctoral students (Dr.P.H. or Ph.D.) near or post-qualifying exams

PH 3998 Special Topics in Management, Policy and Community Health
The Faculty in Management, Policy and Community Health, 1-4 credits, a, b, cd
Topics vary from semester to semester and provide in-depth study of various public health issues. Previous topics have included:

*Advanced Health Services Research Methods*
*Community Mental Health*
*Demographic Data for Public Health Practitioners*
*Decision Analysis in Healthcare*
*Design, Health and Environment*
*Diversity in the Modern Organization*
*Hospital Law*
*Mental Illness, Issues and Policy*
*Obesity and Public Health*
*Politics of Community Health*
*Quality Management and Improvement in Healthcare*
*Qualitative Policy Analysis*
*Quantitative Methods for Management Research*
*Federal Healthcare Programs*
*Law at Line*
*Law and Science*
*Management and Behavior of Environmentally Sustainable Organization*
*Case Applications in Healthcare Finances*

**PH 3999 Individual Study in Management, Policy and Community Health**
The Faculty in Management, Policy and Community Health, 1-9 credits, a, b, cd

A plan of study is determined for each participating student and supervised by a member of the Management, Policy and Community Health faculty. This course may be repeated for credit.

**PH 9997 Practicum**
The Faculty in Management, Policy and Community Health, 1-9 credits, a, b, cd

A practicum is determined by the student and advisor, and supervised by a member of the Management, Policy and Community Health faculty.

**PH 9998 Culminating Experience/Thesis Research**
The Faculty in Management, Policy and Community Health, 1-9 credits, a, b, cd

Thesis research is determined by the student with approval of the student’s advisory committee. This course may be repeated for credit.

**PH 9999 Dissertation Research**
The Faculty in Management, Policy and Community Health, 1-9 credits, a, b, cd

Dissertation research is determined by the student with approval of the student’s advisory committee. This course may be repeated for credit.
Primary Faculty, Management, Policy and Community Health

Charles E. Begley, Professor. B.S., Northern Arizona University, 1969; M.A., The University of Texas at Austin, 1972; Ph.D., The University of Texas at Austin, 1978.
Research Interests: Economic evaluation of health policy and programs particularly regarding Medicaid, Medicare, state and local safety net, neurological diseases, and breast cancer.

Benjamin S. Bradshaw, Professor (San Antonio Regional Campus). B.A., The University of Texas at Austin, 1956; M.A., The University of Texas at Austin, 1960; Ph.D., Brown University, 1968.
Research Interests: Demography; minority populations; U.S.-Mexico border health issues.

Research Interests: Health economics; urban economics; managed care; insurance demand.

Research Interests: Organization Theory and Behavior, Safety-Net Hospitals, Tele-medicine and Rural Health and Innovation and Change.

Sarah A. Felknor, Associate Professor. B.A., Tufts University, 1978; M.S., American University of Washington, 1988; Dr.P.H., The University of Texas School of Public Health at Houston, 1997.
Research Interests: Occupational health and safety management; workplace risk assessment; injury surveillance systems; organizational safety climate; worker safety training; program evaluation; public health systems in Latina America.

Luisa Franzini, Associate Professor. B.S., London School of Economics, 1977; M.S., London School of Economics, 1978; Ph.D., London School of Economics, 1983.
Research Interests: Health economics and econometrics; economic and social determinants of health; racial/ethnic health disparities and minority health; income inequality; cost effectiveness and cost-utility analysis; cost of medical education.

Carl S. Hacker, Associate Professor. B.S., College of William and Mary, 1963; Ph.D., Rice University, 1969; J.D., University of Houston Law Center, 1987.
Research Interests: Public health law; environmental law; behavior of environmentally sustainable organizations; modeling vector populations; effect of pollutants on ecosystems.

Nuria Homedes, Associate Professor (El Paso Regional Campus). M.D., Autonomous University of Barcelona, 1979; Dr.P.H., The University of Texas School of Public Health at Houston, 1990.

*Research Interests:* Workers’ compensation; occupational health trends and costs; effects of managerial and policy interventions on employee safety; industrial/organizational psychology.

John K. Kehoe, Associate Professor. B.A., with Honors, Northwestern University, M.A., St. Louis University, Ph.D., Harvard University.

*Research Interests: Leadership and teaching*

David R. Lairson, Professor. B.B.A., University of Kentucky, 1970; M.A., University of Kentucky, 1971; Ph.D., University of Kentucky, 1975.

*Research Interests:* Health care economics; economics of health promotion/disease prevention with special interest in cancer; economic evaluation of health care technology.


*Research Interests:* Governance and Management in Hospitals and Health Systems and Information Technology and Financial Management in Healthcare.

Stephen H. Linder, Professor. B.A., University of Massachusetts, 1972; M.A., University of Iowa, 1973; Ph.D., University of Iowa, 1976.

*Research Interests:* Policy studies; social theory; media studies; climate change and health.

Linda E. Lloyd, Associate Professor. M.S.W., Wilfrid Laurier University, 1976; M.B.A., Radford University, 1981; Ph.D., University of Texas at Austin, 1989.

*Research Interests:* Public health practice, health disparities, injury prevention, cancer control, women’s health.


*Research Interests:* Hospital industry structure; strategic planning; healthcare finance; technology assessment.

Frank I. Moore, Associate Professor (San Antonio Regional Campus). B.A., Oklahoma State University, 1960; M.S. Oklahoma State University 1962; Ph.D., University of Oklahoma, 1968.

*Research Interests:* State health policy; health professions supply and requirements; leadership development in public health; rural health care delivery.

Robert O. Morgan, Professor. B.A., University of Texas at Austin, 1975, Ph.D., University of Texas at Austin, 1983.


Beth E. Quill, Associate Professor. B.A., Emmanuel College, 1979; M.P.H., The University of Pittsburgh, 1982.
Research Interests: Public health management leadership and practice; organizational change; child health; vulnerable populations.

Pauline Vaillancourt Rosenau, Professor. B.A., University of California at Berkeley, 1965; M.A., University of California at Berkeley, 1966; Ph.D., University of California at Berkeley, 1972; M.P.H., University of California at Los Angeles, 1992. Research Interests: Public health policy; health system reform in industrialized countries (especially in the U.S. and Canada); comparative health policy; health system performance; competition; private/public partnerships for health services; pharmacy policy; and the social determinants of health.

Paul Rowan, Assistant Professor. B.A., University of Texas, Austin, Texas, 1987; M.Ed., University of Houston, Houston, Texas, 1993; M.A., University of Alabama, 1998; M.P.H., University of Alabama at Birmingham, Birmingham, Alabama, 2002; Ph.D., Clinical Psychology, University of Alabama. Research Interests: The influence of psychological factors upon health care outcomes. organization of health care systems for detecting and treating psychological difficulties.

Beatrice J. Selwyn, Associate Professor. B.S., Vanderbilt University, 1964; M.S., Tulane University, 1970; Sc.D., Tulane University, 1974. Research Interests: Perinatal and pediatric epidemiology; international health; health survey methodology; rapid epidemiologic assessment methods; studies of the future of public health.

J. Michael Swint, George McMillan Fleming Professor. B.A., California State University, 1968; M.A., Rice University, 1970; Ph.D., Rice University, 1972. Research Interests: Economic evaluation of public health and health care interventions and health care policy alternatives; comparative health care systems; health care system reform; health and economic development.

Ximena Urrutia-Rojas, Associate Professor. B.S., University of Concepcion, Chile, S.A. 1972; M.P.H. University of Texas School of Public Health at Houston, 1989; Dr.P.H., University of Texas School of Public Health at Houston, 1995. Research Interests: Childhood obesity; and related risk for metabolic disorders; intervention programs that aim to prevent and reverse obesity and chronic diseases in minority children and their families, with an emphasis on Latinos.

David C. Warner, Professor (Austin Regional Campus). B.A., Princeton University, 1963; M.P.A., Syracuse University, 1965; Ph.D., Syracuse University, 1969. Research Interests: Health finances; health economics; health policy; diabetes policy; border health; cross border utilization; mental health finance; health planning; national health insurance.

Emeritus Professors, Management, Policy and Community Health

Lu Ann Aday, Professor Emerita, Lorne Bain Distinguished Professor in Public Health and Medicine. B.S., Texas Tech University, 1968; M.S., Purdue University, 1970; Ph.D., Purdue University, 1973.

M. David Low, Professor Emeritus. M.D., Queen’s University (Canada), 1960; M.S., Queen’s University, 1962; Ph.D., Baylor College of Medicine, 1966.

Secondary Faculty, Management, Policy and Community Health
Xianglin Du (Biostatistics), Jay H. Glasser (Biostatistics), Asha S. Kapadia (Biostatistics), Jan M. H. Risser (Epidemiology), and Jacquelyn Slomka (Health Promotion and Behavioral Sciences).

Faculty of other components of The University of Texas System who participate on a regular basis in the teaching or research programs in Management, Policy and Community Health
Christine A. Brosnan, Associate Professor (The University of Texas School of Nursing at Houston). B.S.N., Georgetown University, 1965; M.S.N., The University of Texas Medical Branch at Galveston, 1981; Ph.D., University of Texas, 1996.

Scott B. Cantor, Associate Professor (The University of Texas M.D. Anderson Cancer Center). B.A., Yale University, 1981; S.M., Harvard University, 1987; Ph.D., Harvard University, 1991.

Theresa L. Carroll, Professor (The University of Texas School of Nursing at Houston). B.S.N., Mt. Mercy College, 1968; M.N., University of Pittsburgh, 1974; Ph.D., University of Pittsburgh, 1982.

Larry M. Gentilello, Adjunct Professor (The University of Texas Southwestern Medical School, Dallas). M.D., Albert Einstein College of Medicine, 1982.

Deanna E. Grimes, Professor (The University of Texas School of Nursing at Houston). B.S.N., Mercy College, 1962; M.P.H., The University of Texas School of Public Health at Houston, 1975; Dr.P.H., The University of Texas School of Public Health at Houston, 1988; M.S.N., The University of Texas School of Nursing at Houston, 1991.

Leticia Lantican, Adjunct Associate, Professor Emeritus, (The University of Texas School of Nursing at El Paso). B.S.N., University of California, 1962; M.S.N., University of California, 1968; M.A., University of Philippines, 1979; Ph.D., University of Philippines, 1980.

Lincy Lal, Ph.D., Pharm.D., Adjunct Assistant Professor, Pharmacoeconomic Research Specialist, The University of Texas M.D. Anderson Cancer Center, Houston, Texas.

Jeanne M. Lambrew, Ph.D., Adjunct Associate Professor. Associate Professor, The University of Texas, at Austin, Texas.

Charles E. McConnel, Adjunct Professor (The University of Texas Southwestern Medical Center, School of Allied Health Sciences). M.A., San Francisco State University, 1967; Ph.D., University of Southern California, 1970.

Lesley-Anne Miller, Adjunct Assistant Professor. Pharmacoconomics Research Specialist, The University of Texas M.D. Anderson Cancer Center, Houston, Texas.
Paul E. Pepe, Adjunct Professor (The University of Texas Southwestern Medical School). M.D., University of California, San Francisco, 1976; M.P.H., The University of Texas School of Public Health at Houston, 1995.

Howard Prince, II, Ph.D., Adjunct Professor, Professor, The University of Texas at Austin LBJ School of Public Affairs.

Cielito Reyes-Gibby, Dr.P.H., Associate Professor, The University of Texas M.D. Anderson Cancer Center.


Charlotte C. Sun, Assistant Professor (The University of Texas M.D. Anderson Cancer Center). B.A., Rice University, 1988; M.P.H., Boston University, 1993; Dr.P.H., The University of Texas School of Public Health at Houston at Houston, 2001.

Sandra Upchurch, Associate Professor (The University of Texas School of Nursing at Houston). B.S.N., Capital University, 1969; M.S., Texas Woman’s University, 1981; Ph.D., Texas Woman’s University, 1993.

Lynn H. Vogel, Ph.D., Adjunct Professor. Vice President and Chief Information Officer, The University of Texas M.D. Anderson Cancer Center, Houston, Texas.

Karen J. Williams, Ph.D., Adjunct Assistant Professor, Assistant Professor, The University of Texas Medical Branch, Clinical Sciences Branch, Galveston, Texas.

Yan Xing, M.D., Ph.D., M.D.A.C.C., Adjunct Assistant Professor, Assistant Professor, Surgical Oncology and Biostatistics, The University of Texas M.D. Anderson Cancer Center, Houston, Texas.

John Zeber, Ph.D., Adjunct Assistant Professor, Assistant Professor, The University of Texas Health Science Center at San Antonio (Psychiatry), San Antonio, Texas.

Adjunct Faculty, Management, Policy and Community Health

Steven A. Abrams, M.D., Adjunct Professor, Professor, Baylor College of Medicine, Houston, Texas.

Patricia G. Bray, B.S., M.A., Ph.D., Adjunct Assistant Professor. Executive Director, St. Luke’s Episcopal Charities, Houston, Texas. 


Stacy Byfield, Ph.D., M.P.H., Adjunct Assistant Professor. Research Pharmacoeconomics Specialist, M.D. Anderson Cancer Center, Houston, Texas.

Janice Courmier, M.D., M.D.A.C.C., Adjunct Assistant Professor, Assistant Professor, Surgical Oncology, M.D. Anderson Cancer Center, Houston, Texas.
Rick A. Danko, B.S., M.P.H., Dr.P.H., Adjunct Assistant Professor. Director, Center for Policy and Innovation, Texas Department of State Health Services, Houston, Texas.

James T. Downes, Jr., B.A., J.D., M.P.H., Adjunct Assistant Professor. Assistant County Attorney, Harris County Attorney’s Office, Houston, Texas.

Miguel A. Escobedo, B.S., M.D., M.P.H., Adjunct Professor. Regional Director, Texas Department of State Health Services, El Paso, Texas.

David J. Fine, B.A., M.H.A., Adjunct Professor. President and CEO, St. Luke’s Episcopal Hospital, Houston, Texas.

Carol Galeener, Ph.D., Adjunct Assistant Professor, retired.

Thomas P. Giordano, M.D., M.P.H., Adjunct Assistant Professor, Senior Scientist, Michael E. DeBakey VA Medical Center, Houston, Texas.

Louis J. Goodman, B.S., M.P.A., Ph.D., Adjunct Associate Professor. Texas Medical Association, Houston, Texas.

Fernando Guerra, M.D., Adjunct Professor, Director of Health, San Antonio Metropolitan Health District, San Antonio, Texas.

H. Mark Guidry, B.A., M.D., M.P.H., Adjunct Associate Professor. Executive Director, Galveston County Health District, Galveston, Texas.

Kirk C. Harlow, Dr.P.H., Adjunct Associate Professor, Associate Professor of Health and Public Administration, Midwestern State University, Wichita Falls, Texas.

Scott J. Hickey, Ph.D., Adjunct Associate Professor, Clinical Psychologist, M.H.M.R.A., Houston, Texas.

Sujin K. Horwitz, Ph.D., Adjunct Assistant Professor, Consultant, Houston, Texas.

Virginia Kennedy, Ph.D., Adjunct Associate Professor, Retired.

Salma Khuwaja, Dr.P.H., Adjunct Assistant Professor, Epidemiologist Supervisor, Houston Dept. of Health and Human Services, Houston, Texas.

David Latini, Ph.D., Adjunct Assistant Professor, Assistant Professor, Baylor College of Medicine, Houston, Texas.

Hardy Loe, M.D., M.P.H., Consultant, Houston, Texas.

Dianne B. Love, Ph.D., Adjunct Associate Professor, University of Houston, Clear Lake, Texas.

Sondip Mathur, B.A., M.A., Ph.D., Adjunct Assistant Professor, Assistant Professor, Texas Southern University, Houston, Texas.

Herminia Palacio, M.D., M.P.H., Adjunct Professor. Executive Director, Harris County Public Health and Environmental Services, Houston, Texas.
Debra Patt, M.D., M.P.H., Adjunct Assistant Professor, Medical Oncologist and Hermtologist, Texas Oncology Cancer Center, Austin, Texas.

Rebecca L. Ramos, M.A., M.P.H., Adjunct Professor (El Paso Regional Campus). U.S.-Mexico Border Health Association, Division Director, Training and Technical Assistance Division, El Paso, Texas.

Lynn Schroth, R.N., Dr.P.H., Adjunct Professor. Chief Executive Officer, Methodist Hospital System – Methodist International, Houston, Texas.

Umair A. Shah, M.D., M.P.H., Adjunct Assistant Professor. Deputy Director, Harris County Public Health & Environmental Services, Houston, Texas.

Frederic E. Shaw, M.D., J.D., Adjunct Associate Professor. Medical Officer and Director, Centers for Disease Control, Atlanta, Georgia.

Rabih Suki, B.S., M.P.H., Ph.D., Adjunct Assistant Professor. HealthCare Research Associates, Houston, Texas.

Stephen Williams, M.P.A., M.E., Adjunct Associate Professor. Director, Houston Department of Health and Human Services, Houston, Texas.

INTERDIVISIONAL COURSES AND PROGRAMS

Interdivisional Courses
This interdivisional course is for all M.P.H. students new to the school and is designed for students in the first semester of enrollment. Students in other degree programs are also welcome to enroll. The course will be offered to all campuses.

Global Health Concentration
The Concentration in Global Health is intended for students interested in exploring how globalization is affecting the determinants of health, the health status of the population, and the capacity of nation states to deal with the determinants of health and disease. Global Health recognizes that many of the solutions to today’s public health challenges are beyond the capacity of national institutions. The challenges have to be addressed through international collaboration and negotiation as well as through local nongovernmental organizations and grassroots action.

The goal of the Global Health concentration is to prepare students for positions that involve public health decision-making and research in a changing world. It encourages those in the Global Health Concentration to become “global systems thinkers.”

In this concentration, students are provided the opportunity to relate their knowledge of public health to the larger trends and issues that affect all societies, including the transnational interactions of peoples, cultures, economies and policies, the globalizing influences of communication media, technological and environmental changes and their effect on the epidemiologic transition of diseases and the susceptibility of populations, the growing impact of non-governmental organizations and local grassroots movements, and the search for world order, law, and human rights.

Students in any Division, in any degree program, and at any campus may elect to add this concentration to their course of study. First, students apply to and are admitted into one of the School’s five Divisions and one of four degree programs. The concentration expands on the customary degree program, providing an integrated multidisciplinary approach. To elect the Global Health Concentration (GHC) requires completion of a request form approved by the student’s academic advisor, the GHC Director, and a member of the GHC faculty who agrees to serve on the student’s Advisory Committee.

Course of Study
The concentration involves the completion of a minimum of 12 credit hours in qualified courses, which include, but are not limited to the courses listed in the global health concentration program below. The practicum must be in a global health setting, and the thesis or dissertation topic must be relevant to global health. The student’s advisory committee determines if the student has met the requirements of the concentration. Students in this concentration are required to complete PH 5610 and participate in the Global Health Seminar (PH 5612).

Courses, Global Health Concentration
Courses recognized as addressing Global Health issues are listed below. Detailed descriptions of the courses can be found below or in the Division where the instructor holds a primary appointment.
PH 5610 Global Health Overview
Homedes, and the Faculty in Global Health, 3 credits, a

This course will present an overview of the issues that are affecting the living conditions and the health status of low income country residents, and the local and global responses to these problems. Throughout the semester students will develop an understanding of global and international health through the discussion of sub-themes, including the different meanings of globalization; population and demographics; assessment, health indicators, and epidemiology; immunizations, communicable and emerging diseases; war, conflict, refugees, migration and displacement; health systems; cultural differentiation; maternal and child health; food security and nutrition; trade agreements, agriculture and pharmaceuticals; environmental health and pollution; urban health and the development of mega-cities; and economic development.

This course is required for students enrolled in the Global Health concentration.

PH 5612 Global Health Seminar
Faculty in Global Health Concentration, 1 credit, a b

This weekly seminar is presented by faculty, students, and Visiting Professors, and varies in subject matter, depending on current events as well as the special expertise and experience of presenters.

This course is required for students enrolled in the Global Health concentration.

PH 5613 Critical Cinema for Public Health
The Faculty in Global Health Concentration, 2 credits, a, b

A series of documentaries and Big Screen movies revolving around public health topics will be shown and discussed. The range of topics presented will include health disparities, health systems, culture – behavior and health, environmental health themes, globalization, addictions, mental health, food production, research ethics and methods, violence, surveillance and control of epidemics. All movie presentations will be followed by a class discussion.

PH 5998 Special Topics in Global Health
The Faculty in Global Health Concentration, 1 credit, a, b, cd

The following elective courses offer opportunities to focus on a variety of Global Health issues. The courses offered may vary from year to year.

PHM 1115 Health Survey Research Design
PHM 1233 Public Health Nutrition
PH 1242 AIDS in Africa: Global Socioeconomic and Political Contexts
PH 1250 Genital, Sexual and Reproductive Public Health
PH 1350 Ethnicity, Race, Class & Gender: A Multicultural Public Health Perspective
PH 1410 Addictive Behavior
PH 2125 Medical Geographic Information Systems
PHM 2230 Water Environment
PHM 2290 Immunology
PH 2730 Epidemiology and Control of Infectious Diseases
PH 2800 Public Health Microbiology I
PH 2805 Public Health Microbiology II
PHD 3812 Comparative Healthcare Systems: Policy Challenges and Economic Perspectives
PH 3823 Global Issues in Pregnancy and Perinatal Health
PHM 3922 Economic and Social Determinants of Health
PH 5613 Critical Cinema for Public Health
PH 5615 Public Health and Human Rights

Divisional Special Topics Courses
Demography and Public Health
Rapid Assessment Methods in Public Health
Emerging Infectious Diseases
Vaccinology
Design, Health and Environment
Program Evaluation
Sampling

Faculty, Global Health Concentration

Biostatistics:
Jay Glasser, Ph.D., Asha Kapadia, Ph.D., Dejian Lai, Ph.D.

Environmental and Occupational Health Sciences:
Irina Cech, Ph.D., Cynthia Chappell, Ph.D., George Delclos, M.D., M.P.H., Ph.D.

Epidemiology and Disease Control:
Palmer Beasley, M.D., Raul Caetano, M.D., M.P.H., Ph.D., Victor Cardenas, M.D., Ph.D., Sue Day, Ph.D., Herbert DuPont, M.D., Susan Fisher-Hoch, M.D., Craig Hanis, Ph.D., Lu-Yu Hwang, M.D., Joseph McCormick, M.D., Kristi O. Murray, D.V.M., Ph.D., James Steele (Professor Emeritus), D.V.M., M.P.H., Kim Waller, Ph.D.

Health Promotion and Behavioral Sciences:
Hector Balcazar, Ph.D., Cristina Barroso, Dr.P.H., Alfred McAlister, Ph.D., Sheryl McCurdy, Ph.D., Belinda Reinger, M.P.H., Dr.P.H., Robert Roberts, Ph.D., Michael Ross, Ph.D., M.P.H., M.H.P.Ed., Jackie Slomka, Ph.D., Mark Williams, Ph.D.

Management, Policy and Community Health:
Sarah Felkner, Dr.P.H., Luisa Franzini, Ph.D., Carl S. Hacker, Ph.D., J.D., Nuria Homedes, M.D., Dr.P.H., Frank Moore, Ph.D., Pauline Rosenau, Ph.D., Beatrice J. Selwyn, Sc.D., J. Michael Swint, Ph.D.

Health Disparities Concentration
A concentration in Health Disparities is a program of study added by degree-seeking students (M.P.H., M.S., Dr.P.H., Ph.D.) to their degree plans in addition to requirements for public health breadth, majors and minors. The Concentration can be taken in addition to any major field of study at the University of Texas School of Public Health. The Concentration will enable public health trained individuals to focus practice and/or research activities on the recognition, description and elimination of disparities.
Health disparities have been defined as differences in “the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates”\(^1\). Health disparities exist across race/ethnic groups, geographic residence, gender, age, and disability status. Determinants of health disparities are multifactorial and include cultural factors, socioeconomic factors, racism/discrimination, and political factors.

Public health and health care practitioners and researchers play a critical role in the identification and amelioration of health disparities. The University of Texas School of Public Health builds upon extensive faculty expertise and existing courses to provide focused training in health disparities for SPH students and other professionals. Students in any Division, in any degree program, and at any SPH campus may elect to add this concentration to their course of study. First, students apply to and are admitted into one of the five Divisions and one of the four degree programs. The concentration expands on the customary degree program, providing an integrated, multidisciplinary approach. To elect the Health Disparities Concentration requires the completion of a request form approved by the student’s academic advisor, the Health Disparities Concentration Coordinator and a faculty member of the Health Disparities Concentration who agrees to serve on the student’s Advisory Committee.

**Course of Study**
The concentration involves the completion of a minimum of 14 credits in qualified courses listed in the Health Disparities Concentration program below. Students in degree programs requiring participating in a practicum should have an experience that is related to health disparities and the thesis or doctoral dissertation topic must be relevant to health disparities. The student’s advisory committee determines if the student has met the requirements of the concentration. A list of suggested courses recognized as addressing Health Disparities Concentration is listed below. Detailed descriptions of the courses can be found in the Division where the course is offered. Health Disparities Program coordinators will periodically review eligible courses and will make the list available online.

The Health Disparities Concentration will comprise 14 hours or 4 courses plus 2 semesters of the Health Disparities Core Seminar. A student who has not had a previous course in epidemiology will take the PHM 2610 course in epidemiology prior to beginning the disparities courses.

**Health Disparities Core Seminar**
Faculty in the Health Disparities Concentration will hold a Core Seminar for 1 hour credit in both Fall and Spring Semester. This seminar will be open to all SPH students. However, students who are enrolled in the Concentration will be required to enroll in the course two semesters.

**Courses, Health Disparities**
Students in the Health Disparities Concentration must complete at least two courses (6 credits) selected from the list below.

- PH 1423 Society and Health (3 credits)
- PH 3922 Economic and Social Determinants of Health (3 credits)

PH 1498 Disparities in America: Working toward Social Change (3 credits)

**Elective Courses, Health Disparities**
A least 6 credit hours of electives must be chosen from the list of primary elective courses for the Health Disparities Concentration.

PH 1350 Ethnicity, Race, Class & Gender: A Multicultural Public Health Perspective
PH 1424 Social Epidemiology/Social Justice
PH 2125 Medical Geographic Information systems
PH 2998 Cancer Epidemiology in Geoethnic
PH 3640 Community-based Health Assessment
PH 3998 Demographic Methods for Public Health Practitioners
PH 1260 Chicano/Mexican American Health: Exploring Its Social Dimensions
PH 3998 Federal Healthcare Programs
PH 1498 Obesity, Nutrition, and Physical Activity Practice
PH 2740 Cardiovascular Disease Epidemiology and Prevention
PH 3810 Health Policy in the United States
PH 3998 Healthcare Payment Systems and Policy
PH 3818 Texas Health Policy: Emerging Issues and New Approaches
PH 2998 Injury Epidemiology
PH 3920 Health Services Delivery and Performance
PH 1230 Public health Nutrition Practice
PH 2498 Contemporary Issues in Environmental and Occupational Health
PH 2190 Environmental and Occupational Health Policy
PH 3998 US-Mexico Border Health Issues
PH 3998 Demographic Data for Public Health Professionals
PH 1498 Behavioral Journalism: Theory, History, and Application
PH 1113 Advanced Methods for Planning and Implementing Health Promotion Programs
PH 1225 Contemporary Social and Cultural Theory

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**Faculty, Health Disparities Concentration**

**Biostatistics:** Keith Burau, Ph.D.

**Environmental and Occupational Health Sciences:** Irina Cech, Ph.D., David Gimeno, Ph.D., Kenneth Sexton, Sc.D., Kerem Shuval, Ph.D., M.P.H.

**Epidemiology and Disease Control:** Palmer Beasley, M.D., Harold Kohl, Ph.D., Alanna Morrison, Ph.D., Lisa Pompeii, Ph.D.

**Health Promotion and Behavioral Sciences:** Benjamin C. Amick, Ph.D., Hector Balcazar, Ph.D., Cristina Barroso, Dr.P.H., Margaret O. Caughey, Sc.D., Alexandra Evans, Ph.D., M.P.H., Maria E. Fernandez, Ph.D., Maria Fernandez-Esquer, Ph.D., Deanna Hoelscher, Ph.D., Alfred McAlister, Ph.D., Andrew Springer, Dr.P.H.

**Management, Policy and Community Health:** Chuck Begley, Ph.D., Benjamin Bradshaw, Ph.D., Shelton Brown, Ph.D., Luisa Franzini, Ph.D., David Lairson, Ph.D., David Low, M.D., Ph.D., Robert Morgan, Ph.D., Pauline Rosenau, Ph.D.
Leadership Studies Concentration

The Concentration in Leadership Studies (LSC) is intended for students interested in exploring how leadership theories and concepts apply to public health challenges. Specifically, the course will explore how the development of leadership capabilities at the individual, institution and system level can create changes that improve population health and well being. Leadership studies recognize that many of the solutions to today’s public health problems are beyond traditional institutions and conventional strategies. Modern public health challenges need innovative approaches and the collaboration of institutions, professionals and communities. Organizational, professional and individual change requires an understanding of change dynamics and the ability to lead others toward a common purpose.

The goal of the Leadership Studies Concentration is to prepare students educated in leadership principles so they can face public health challenges as knowledgeable professionals ready to engage in change for improved health outcomes through research and practice. The Leadership Studies Concentration encourages students to think in terms of the future of public health.

In this concentration, students are provided the opportunity to develop their personal and professional leadership attributes and to apply these to current public health issues in research and practice. Further, students explore the literature on leadership studies to gain an understanding of its theories, principles and research. Students will also relate their knowledge of public health to leadership approaches that generate change and health improvement in communities, organizations and society.

Students in any Division, in any degree program, and at any SPH campus may elect to add this concentration to their course of study. First, students apply to and are admitted into one of the five Divisions and one of the four degree programs. The concentration expands on the customary degree program, providing an integrated, multidisciplinary approach. To elect the Leadership Studies Concentration requires the completion of a request form approved by the student’s academic advisor, the LSC Coordinator, and a faculty member of the Leadership Studies Concentration who agrees to serve on the student’s Advisory Committee.

Course of Study

The concentration involves the completion of a minimum of 12 credits in qualified courses, which include, but are not limited to the courses listed in the Leadership Studies Concentration below. Students in degree programs requiring participating a practica should have an experience that is leadership related and the thesis or doctoral dissertation topic must be relevant to leadership. The student’s advisory committee determines if the student has met the requirements of the concentration. Students in this concentration are required to complete PH 5200 and PH 5210. A list of suggested courses recognized as addressing Leadership Studies are listed below. Detailed descriptions of the courses can be found in the Division where the course is offered.
Courses, Leadership Studies Concentration

**PH 5200 Foundations of Leadership in Public Health**
Tortolero and Faculty in Leadership Studies Concentration, 3 credits, a

This is an introductory course in public health leadership for students in all academic programs. The purpose of the course is to expose students to the theories and principles of effective leadership, present leadership challenges and discover personal attributes of leadership in public health practice and research. Students will begin to develop life-long learning skills through self-development, experiential learning and discussion of leadership approaches. Content areas will include complexity theory, change management, vision and mission development, ethics, collaborative leadership, effective communication, team-building and dialogue, decision-making, conflict and negotiation, leadership evaluation, advocacy and strategic planning. Students are expected to participate in class discussion, complete assigned readings and exercises and give a presentation at the end of the semester. As an on-going leadership project, students will initiate the development of a professional portfolio highlighting their work in public health leadership.

This course is required for students enrolled in the Leadership Studies Concentration.

**PH 5210 Leadership Luminaries in Public Health**
Quill, Selwyn, Bray and Faculty in Leadership Studies Concentration, 1 credit, b

This seminar is designed to explore how leaders in public health become leaders. This course complements other leadership courses and provides an excellent observation of professional leadership development. The course will feature five public health leaders from a variety of disciplines, organizations and levels who will give an hour presentation as a colloquium speaker. They will share how they developed as a leader, and what challenges they faced in advancing their perspectives. In addition, a panel of community leaders will reveal their experiences in making a difference through community leadership. Following the presentations, students will meet with the leaders for a dialogue on leadership. Students will be required to read selected literature, attend all presentations and classes, complete discussion questions after each presentation and participate in a dialogue with the leaders.

This course is required for students enrolled in the Leadership Studies Concentration.

**PH 5215 Advanced Leadership Studies in Public Health**
Selwyn, Quill and Faculty in Leadership Studies Concentration, 3 credits, cd

This doctoral level course is available to students in all disciplines who have had previous leadership courses or leadership training. The purpose of the course is to synthesize, apply and evaluate leadership theories, concepts and emerging perspectives; to analyze personal, professional, organizational and system leadership dynamics in a rapidly changing and complex world; and to discern the implications of leadership research on the practice of leadership in public health research and practice settings. The course content will examine in depth the nature of leadership as it is observed, experienced, practiced and developed. The course is designed to create
a learning community among the students and faculty. The teaching approach uses an experiential method called “Case-in-Point” that emphasizes student and faculty interaction with the class as the unit of leadership analysis. Three themes of reflection, critical thinking and communication support the examination of leadership dilemmas, patterns, behaviors and outcomes. Discussions of leadership cases through peer consultation, practice in leading, and dialogue with leaders strengthen the students’ capabilities to apply leadership theories, concepts and perspectives to careers in research and practice. Other topics to be addressed include leadership studies research; complex adaptive systems and sustainability; culture and change; ethics; power influence and politics; creating and sharing a vision; and futures studies.

**PH 5298 Special Topics in Leadership Studies**
The Faculty in Leadership Studies, 1-4 credits, a, b, c, d

The following suggested elective courses are some of the courses that offer opportunities to focus on a variety of issues in leadership. The courses offered may vary from year to year.

PH 5215 Advanced Leadership Studies
PH 1320 Ethics and Health Care
PH 1325 Research Ethics for Public Health
PH 1426 Social Epidemiology and Social Justice
PH 1423 Society and Health
PH 1350 Ethnicity, Race, Class & Gender: A Multicultural Public Health Perspective
PH 3830 Ethics and Policy
PH 3850 Translating Research into Policy
PH 3750 Organizational Psychology (San Antonio)
PH 3922 Economic and Social Determinants of Health
PH 5610 Global Health Overview Course

**Special Topics**
Public Health Risk Communication
Social Epidemiology
Ethnicity and Health
Health and Human Rights
Organizational Behavior (Houston)
Management and Behavior of Environmentally Sustainable Organizations

**Faculty, Leadership Studies Concentration**

**Biostatistics:** Jay Glasser, Ph.D.

**Environmental and Occupational Health Sciences:** Irina Cech, Ph.D., Robert Emery, Dr.P.H., Kenneth Sexton, Sc.D., Lawrence Whitehead, M.P.H., Ph.D.

**Epidemiology and Disease Control:** Melissa Stigler, M.P.H., Ph.D.

**Health Promotion and Behavioral Sciences:** Cristina Barroso, Dr.P.H., Paula Cuccaro, Ph.D., Maria Fernandez-Esquer, Ph.D., Sheryl McCurdy, Ph.D., Susan Tortolero, Ph.D.
Management, Policy and Community Health: Gail Bray, Ph.D., Jami DelliFraine, Ph.D., Carl S. Hacker, Ph.D., J.D., Luisa Franzini, Ph.D., Nuria Homedes, M.D., Dr.P.H., Kim Kehoe, Ph.D., Linda Lloyd, Ph.D., Frank Moore, Ph.D., Beth Quill, M.P.H., (Coordinator), Pauline Rosenau, Ph.D., Beatrice Selwyn, Sc.D.

Maternal and Child Health Concentration
The Concentration in Maternal and Child Health (MCH) is intended for graduate-level students interested in furthering their skills in the development and delivery of programs and services for women, infants, children and adolescents. The training program is designed to equip students with skills to professionally promote and enhance the health of women, children and their communities on a local, state, federal and international level, while working as advocates in health care organizations, academic institutions and other public and private organizations. The MCH concentration is available to strengthen the capacity of the public health work force to meet the diverse needs of MCH populations via accessible and customized public health education and training. An in-depth diverse curriculum in maternal and child health fills a critical deficit in public health education and prepares graduates to work in areas of public health practice related to women and children and to interface more effectively with community and governmental programs.

Students in any Division, in any degree program, and at any SPH campus may elect to add this concentration to their course of study. First, students apply to and are admitted into one of the five Divisions and one of the four degree programs. The concentration expands on the customary degree program, providing an integrated, multidisciplinary approach. To elect the MCH Concentration requires the completion of a request form approved by the student’s academic advisor, the MCH Program Director and a faculty member of the MCH Concentration who agrees to serve on the student’s Advisory Committee.

Course of Study
The concentration involves the completion of a minimum of 12 credits in qualified courses, which include, but are not limited to the courses listed in the Maternal and Child Health Concentration. Students in degree programs requiring a practica should have an experience that is MCH-related. In addition, the thesis or doctoral dissertation topic must be relevant to maternal and child health. The student’s advisory committee determines if the student has met the requirements of the concentration. Students in this concentration are required to complete PH 5301 I (a) and II (b), the two-semester MCH Core Training Seminar. The Core Training Seminar should be taken in sequence during a single academic year, with the fall semester completed first. A list of suggested courses recognized as MCH electives are listed below. Detailed descriptions of the courses can be found in the Division where the course is offered.

Courses, Maternal and Child Health Concentration

PH 5300 Overview of Maternal and Child Health

This course will not count as an elective for MCH Concentration students.

PH 5301 I (a) and II (b) Maternal and Child Health Core Training Seminar
This course is required for students enrolled in the MCH Concentration. It must be taken in sequence, with the fall course (PH 5301 I) taken first.

The following suggested elective courses are some of the courses that offer opportunities to focus on a variety of issues in leadership. The courses offered may vary from year to year.

PH 1113 Advanced Methods for Planning and Implementing Health Promotion Programs
PHM 1120 Introduction to Program Evaluation
PH 1239 Theories of Child and Adolescent Development
PH 1240 Mental Health of Children & Adolescents
PH 1418 Practice in Health Behavior Change
PH 1423 Society and Health
PH 2615 Field Research Methods
PH 3740 Community-Based Health Assessment
PH 3730 Health Program Planning, Implementation & Evaluation
PH 3922 Economic & Social Determinants of Health

**Special topics**
PH 1498 Current Topics in Obesity, Nutrition & Physical Activity
PH 1498 Seminar in Child and Adolescent Health
PH 2998 Perinatal Epidemiology
PH 2998 Nutritional Epidemiology
PH 2998 Vaccines & Immunization Programs
PH 2998 Current Child Health Issues
PH 2998 Ethnicity & Health Care
PH 2998 Child & Adolescent Health Care
PH 3998 Obesity & Public Health

* Availability of electives will vary from semester to semester; students should consult SPH Semester Course Schedule.


* Alternative electives can be selected with written approval of MCH Director

**Maternal and Child Health Trainee Fellowship Program**
The MCH Trainee Fellowship Program is open to students enrolled in the MCH Concentration or in the MCH Certificate Program (see page 28) who are interested in a year-long intensive training experience in maternal and child health. The MCH Trainee Fellowship Program will take a cohort of professionals from Medicine, Nursing, Nutrition, Public Health and Social Work, and develop them as a team of interdisciplinary professionals committed to MCH. The fellowship program is currently open to students located in Dallas or Houston or at Grand Valley State University in Michigan. Trainee Fellows are required to take an additional four credit hours of Fellowship Training Seminar in addition to the MCH Core Training Seminar. The MCH Fellowship Training Seminar, 5302 I (a) and II (b), should be taken in sequence, fall semester first, at the same time that the student is completing the MCH Core Training Seminar, 5301 I (a) and II (b). The MCH Trainee Fellowship program will include a Conductive Leadership Curriculum as well as experiential placements working on MCH-related projects and programs with local and state agencies.

PH 5301 I (a) and II (b) Maternal and Child Health Core Training Seminar
This course is required for students selected for MCH Trainee Fellows.

PH 5302 I (a) and II (b) Maternal and Child Health Fellowship Training Seminar

This course is required for students selected for MCH Trainee Fellows.

Approximately 8-12 Fellowships are available to trainees in the Dallas and Houston area, and participants in the MCH Training Fellowship program will be selected through a competitive application process. Partial tuition support is available for students who are selected for an MCH Training Fellowship.

Faculty, Maternal and Child Health

Epidemiology and Disease Control: Steve Kelder, M.P.H., Ph.D., Laura Mitchell, Ph.D., Roberta B. Ness, M.D., M.P.H., Kim Waller, Ph.D.

Health Promotion and Behavioral Sciences: Margaret Caughey, Sc.D. (Coordinator), Melissa Peskin, Ph.D., L. Kay Bartholomew, Ed.D., M.P.H., Theresa Byrd, Dr.P.H., Alexandra Evans, Ph.D., Ann-Marie Hedberg, Dr.P.H., Christina Markham, Ph.D., Deanna Hoelscher, Ph.D., Pat Mullen, M.P.H., Dr.P.H., Guy Parcel, Ph.D., Cheryl Perry, Ph.D., Belinda Reininger, M.P.H., Dr.P.H., Ross Shegog, Ph.D., Andrew Springer, Dr.P.H., Susan Tortolero, Ph.D.

Management, Policy & Community Health: Luisa Franzini, Ph.D., Beth Quill, M.P.H., Beatrice Selwyn, Sc.D.
REGIONAL CAMPUSES

The UTSPH has a system of five regional campuses that serve the major population centers and border areas of the state. These campuses in Austin, Brownsville, Dallas, El Paso and San Antonio are integral parts of the UT School of Public Health at Houston and provide onsite public health education to local populations. Degree and non-degree programs are designed to enhance the public health workforce’s ability to respond widely to the needs of the Texas population.

Each campus has 10-12 onsite faculty led by a regional dean. Educational programs and administration of the School, headquartered in Houston, are integrated across all campuses. Thus, regional campus faculty and students regularly interact with the Houston main campus and other regional campuses. Each regional campus is well equipped with state-of-the-art communication systems so that students and faculty are full participants in the same class with those at other sites. The UTSPH provides courses and learning experiences at each campus and across campuses through a variety of distance education modalities, including interactive TV, webcam, and online offerings.

Students are admitted to a specific campus and complete all or the bulk of their educational program at that site. However, students are encouraged to engage in research with faculty at any site and may relocate, if warranted.
The Austin Regional Campus  
*Regional Dean: Cheryl L. Perry, Ph.D.*

The Austin Regional Campus ([http://www.sph.uth.tmc.edu/austin/default.aspx](http://www.sph.uth.tmc.edu/austin/default.aspx)) was established in March 2007 to offer graduate level courses leading to the Master of Public Health degree. Since that time, other degree programs have been approved. The University of Texas at Austin serves as the host institution for the campus. The campus is currently housed at 313 E. 12th Street, Suite 220, in downtown Austin but will expand to a location on or near the UT-Austin campus.

### Degree and Non-Degree Programs

The Austin Regional Campus offers public health education, including the Certificate in Public Health (non-degree program), the M.P.H., Dr.P.H. in Health Promotion/Health Education, and Ph.D. in Epidemiology programs. These doctoral degree programs are described under the Division listings.

Special areas of interest at the Austin Regional Campus include child and adolescent health promotion, obesity prevention with children, tobacco and alcohol use prevention, and community-based policy and programs to support children’s health.

### Centers

The campus also houses the Michael & Susan Dell Center for Advancement of Healthy Living, which serves as a state, national, and international leader in the promotion of healthy living through prevention and control of childhood obesity; healthy eating and physical activity; promotion of healthy living behaviors in youth; policy and environmental change; and professional education and community service.

Members of the Austin Regional Campus faculty are Shelton Brown, Sandra Evans, Ron Harrist, Deanna Hoelscher, Steve Kelder, Bill Kohl, Alfred McAlister, Guy Parcel, Cheryl Perry, Nalini Ranjit, Bruce Rodda, Andrew Springer, Melissa Stigler and David Warner. Faculty Associates include Donna Nichols.

### Adjunct Faculty, Austin Regional Campus

**John B. Bartholomew**, Ph.D., Adjunct Associate Professor (Austin Regional Campus). Associate Professor, Department of Kinesiology and Health Education, The University of Texas at Austin.

**Margaret E. Briley**, Ph.D., Adjunct Professor (Austin Regional Campus). Professor, Department of Human Ecology, The University of Texas at Austin.

**Rick Danko**, Dr.P.H., Adjunct Assistant Professor (Austin Regional Campus). Director, Centers for Program Coordination, Policy, and Innovation, Texas Department of State Health Services.

**Elizabeth Edmundson**, Ph.D., Adjunct Associate Professor (Austin Regional Campus). Associate Professor, Department of Kinesiology and Health Education, The University of Texas at Austin.
Leanne H. Field, B.A., M.S., Ph.D., Adjunct Associate Professor (Austin Regional Campus). Distinguished Senior Lecturer, School of Biological Sciences, The University of Texas at Austin.

Vincent P. Fonseca, M.D., M.P.H., Adjunct Associate Professor (Austin Regional Campus). Texas State Epidemiologist, Texas Department of State Health Services, Austin, Texas.

Louis J. Goodman, Ph.D., Adjunct Assistant Professor of Public Health (Austin Regional Campus). Executive Vice President/CEO, Texas Medical Association, Austin, Texas.

Philip P. Huang, M.D., M.P.H., Adjunct Associate Professor (Austin Regional Campus). Health Authority, Austin Travis County Health & Human Services.

Kay Tabor Kimball, Ph.D., Adjunct Assistant Professor (Austin Regional Campus). Consultant, Austin, Texas.

Jeanne M. Lambrew, B.A., M.S.P.H., Ph.D., Adjunct Associate Professor (Austin Regional Campus). The University of Texas at Austin.

Eric A. Miller, M.S.P.H., Ph.D., Adjunct Assistant Professor (Austin Regional Campus). Manager, Epidemiology Texas Cancer Registry, Cancer Epidemiology and Surveillance Branch, Texas Department of State Health Services, Austin, Texas.

Keryn Pasch, M.P.H., Ph.D., Adjunct Assistant Professor (Austin Regional Campus). Assistant Professor, Department of Kinesiology and Health Education, The University of Texas at Austin.

Mike Pratt, M.D., M.P.H., Adjunct Associate Professor (Austin Regional Campus). Physical Activity and Health Branch, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.

Vance Rabius, Ph.D., Adjunct Assistant Professor (Austin Regional Campus). Evaluation Manager, National Cancer Information Center, American Cancer Society, Austin, Texas.

Scott A. Strassels, Ph.D., Pharm.D., Adjunct Assistant Professor (Austin Regional Campus). Assistant Professor, College of Pharmacy, The University of Texas at Austin.

Elizabeth Vandewater, Ph.D., Adjunct Professor (Austin Regional Campus). Associate Professor, Department of Sociology, The University of Texas at Austin.

Donald P. Wilcox, J.D., Adjunct Assistant Professor of Public Health (Austin Regional Campus). Vice President and General Counsel, Texas Medical Association, Austin, Texas.
The Brownsville Regional Campus  
Regional Dean: Joseph B. McCormick, M.D.

The Brownsville Regional Campus was established in 2001 on The University of Texas at Brownsville and Texas Southmost College Campus (UTB/TSC) in the Lower Rio Grande Valley (LRGV) to offer graduate level courses leading to the Master of Public Health degree. Since that time, other degree programs have been added. The campus is less than a mile from the Mexico border and is part of the Regional Academic Health Center (RAHC). The Brownsville Regional Campus is housed in a 26,000 square foot building with classrooms, computer research laboratories, offices, and a commons.

Degree and Non-Degree Programs
The Brownsville Regional Campus offers public health education, including the Certificate in Public Health (non-degree program), the M.P.H., Dr.P.H. in Health Promotion/Health Education, and Ph.D. in Epidemiology programs. These doctoral degree programs are described under the Division listings.

The campus’ research and community outreach programs focus on the health problems and their solutions in the border area. Special areas of interest include obesity and diabetes and their interaction with infectious diseases such as tuberculosis, and with cancer. Students in Brownsville also have a great opportunity to gain invaluable experience in International Health with numerous bi-national programs with Mexican organizations and studies in adjacent areas of Mexico.

Centers
The Hispanic Health Research Center is housed on the Brownsville Regional Campus. The purpose of the Center is to conduct research into strata of diseases prevalent in Hispanic populations.

Members of the Brownsville faculty are Cristina Barroso, Susan Fisher-Hoch, Jennifer Gay, Joseph McCormick, Shaper Mirza, Belinda Reininger, and Blanca Restrepo.
The Dallas Regional Campus
Regional Dean: Raul Caetano, M.D., M.P.H., Ph.D.

The Dallas Regional Campus was established in 1998 to offer graduate level courses leading to the Master of Public Health degree. Since that time a doctoral degree program has been approved. The academic program is carried out in partnership with The University of Texas Southwestern Medical Center at Dallas, and the Campus is housed at The University of Texas Southwestern School of Health Professions.

Degree and Non-Degree Programs
The Dallas Regional Campus offers public health education, including the Certificate in Public Health (non-degree program), the M.P.H., and Ph.D. in Epidemiology programs. These degree programs are described under the Division listings.

The academic curriculum offers interactive video courses that connect the Dallas campus with other UTSPH campuses as well as in-person instruction by the Dallas faculty. In addition, members of the Dallas public health community as well as UT Southwestern faculty serve in a formal advisory capacity to the program. The program takes advantage of the outstanding educational and research activities that are characteristic of the UTHSC-H and UT Southwestern campuses.

The programs offered by the Dallas Regional Campus emphasize the particular health problems of the large metropolitan area of the Dallas/Fort Worth metroplex, as well as issues relating to populations and communities in the north Texas and east Texas regions. The Ph.D. program in Epidemiology focuses on advanced knowledge and skills in epidemiology with an emphasis on population-based cancer epidemiology.

Members of the Dallas Regional Campus faculty are Raul Caetano, Margaret Caughy, Flora Dallo, Robert Harris, Mohamed Mubasher, Bahman Roudsari, Arnold Schecter, Kerem Shuval, Patrice Vaeth, and Scott Walters.

Adjunct Faculty, Dallas Regional Campus
John Carlo, M.D., M.S.E., Adjunct Assistant Professor of Public Health (Dallas Regional Campus). Dallas County Health and Human Services.

Glenn Flores, A.B., M.D., Adjunct Professor of Public Health (Dallas Regional Campus). Medical School of Wisconsin.

Larry M. Gentilello, M.D., Adjunct Professor (Dallas Regional Campus). The University of Texas Southwestern Medical School, Dallas.

Charles Haley, M.D., M.S., Adjunct Professor of Public Health (Dallas Regional Campus). TrailBlazer Health Enterprises, LLC, Dallas.

Robert Haley, M.D., Adjunct Professor (Dallas Regional Campus). The University of Texas Southwestern Medical Center, Dallas.

Myron C. Harrison, M.D., M.P.H., Adjunct Associate Professor (Dallas Regional Campus). Senior Health Adviser, Exxon Mobil Corp., Dallas.
Charles E. McConnel, M.A., Ph.D., Adjunct Professor (Dallas Regional Campus). The University of Texas Southwestern Medical Center, School of Allied Health Sciences.

Paul E. Pepe, M.D., M.P.H., Adjunct Professor of Public Health (Dallas Regional Campus). The University of Texas Southwestern Medical School, Dallas.

Elizabeth Race, M.D., M.P.H., Adjunct Assistant Professor of Public Health (Dallas Regional Campus). The University of Texas Southwestern Medical Center.

Shahid Shafi, M.B.B.S., M.P.H., Adjunct Assistant Professor of Public Health (Dallas Regional Campus). The University of Texas Southwestern Medical Center.

Timothy W. Strawderman, B.S., M.P.A., Ph.D., Adjunct Assistant Professor of Public Health (Dallas Regional Campus). The University of Texas Southwestern Medical Center, Dallas.

Adjoint Faculty, Dallas Regional Campus

Ira Bernstein, Ph.D., Adjoint Professor of Behavior Sciences and Health Promotion (Dallas Regional Campus). The University of Texas Southwestern Medical Center, Dallas.

Jasmin Tiro, Ph.D., Assistant Professor of Behavior Sciences and Health Promotion (Dallas Regional Campus). The University of Texas Southwestern Medical Center, Dallas.
The El Paso Regional Campus
*Regional Dean: Hector G. Balcazar, Ph.D.*

The **El Paso Regional Campus** was established in 1992 to offer courses at the graduate level leading to the Master of Public Health degree. Since that time a doctoral degree program has been approved. The Regional Campus was created as a collaboration between The University of Texas School of Public Health at Houston and The University of Texas at El Paso (UTEP) and is located on the UTEP campus in the Stanton Professional Building.

**Degree and Non-Degree Programs**

The El Paso Regional Campus offers public health education, including the Certificate in Public Health (non-degree program), the M.P.H., and Dr.P.H. in Health Promotion/Health Education programs. The Dr.P.H. degree program is described under the Division listings. In addition to the M.P.H. curriculum, opportunities for depth of study in Behavioral Sciences and Environmental Sciences are provided via educational collaborations between UTSPH and UTEP. In-depth M.P.H. coursework is also available in epidemiology and biostatistics via distance education courses from the Houston campus.

The special interests of the faculty at the El Paso Regional Campus include public health issues that are important to the U.S. but are directed primarily to border health studies. These studies reflect the campus physical location on the U.S.-Mexico border and its characteristic and unique bicultural milieu.

**Centers**

The Hispanic Health Disparities Research Center is a collaborative program with UTEP and is housed, in part, at the El Paso Regional Campus. The purpose of the Center is to enhance the understanding of health disparities in the border region; identify new community-based intervention strategies; and to disseminate research findings to Hispanic populations, other researchers, practitioners and policy makers.

Members of the El Paso Regional Campus are **Hector Balcazar, Theresa Byrd, Victor Cardenas, Nuria Homedes, David S. Lopez, and Kristina Mena**.

**Adjunct Faculty, El Paso Regional Campus**


**Lawrence D. Cohn**, Ph.D., Adjunct Associate Professor (El Paso Regional Campus). The University of Texas at El Paso.

**Leticia Lantican**, B.S.N., M.S.N., M.A., Ph.D., Adjunct Associate Professor (El Paso Regional Campus). The University of Texas School of Nursing at El Paso.

**Osvaldo F. Morera**, B.S., M.A., Ph.D., Adjunct Assistant Professor (El Paso Regional Campus). The University of Texas at El Paso.

**Zuber D. Mulla**, B.A., M.S.P.H., Ph.D., Adjunct Associate Professor of Public Health (El Paso Regional Campus). Texas Tech University Health Sciences Center.
Rebecca L. Ramos, M.A., M.P.H., Adjunct Professor (El Paso Regional Campus). U.S.-Mexico Border Health Association, Division Director, Training and Technical Assistance Division, El Paso.
The San Antonio Regional Campus
Regional Dean: Sharon P. Cooper, Ph.D.

The San Antonio Regional Campus was established in 1979 to offer courses at the graduate level leading to the Master of Public Health degree. Since that time, other degree programs have been added. The San Antonio Regional Campus is located in the Datapoint Building, near its host institution, The University of Texas Health Science Center at San Antonio (UTHSCSA).

Degree and Non-Degree Programs
The San Antonio Regional Campus offers public health education, including the Certificate in Public Health (non-degree program), the M.P.H., Dr.P.H. in Community Health Practice and Dr.P.H. in Occupational and Environmental Health programs. These doctoral degree programs are described under the Division listings.

The programs offered by the San Antonio Regional Campus emphasize community-focused and population-based health research centering on the many public health problems of the San Antonio and South Texas region. These include community health assessment; diabetes; cancer control; health services research; bioterrorism and domestic preparedness; exposure to toxic materials; occupational health; and community information systems.

Members of the San Antonio Regional Campus are Benjamin Bradshaw, Sharon Cooper, David Gimeno, John Herbold, Alfonso Holguin (Professor Emeritus), Frank Moore, Jimmy Perkins, Eva Shipp, and Ximena Urrutia-Rojas.

Adjunct Faculty, San Antonio Regional Campus

Bryan J. Alsip, M.D., M.P.H., F.A.C.P.M., Adjunct Professor of Public Health (San Antonio Regional Campus). Assistant Director of Health, San Antonio Metropolitan Health District, San Antonio, Texas.

KoKo Aung, M.D., M.P.H., Adjunct Associate Professor (San Antonio Regional Campus). The University of Texas Health Center at San Antonio.

Richard G. Best, Ph.D., Adjunct Assistant Professor of Public Health (San Antonio Regional Campus). Researcher/Project Manager, Lockheed Martin Information Technology.

Jose A. Betancourt, B.S., M.S., Dr. P.H., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). Associate Dean, Academy of Health Sciences, United States Air Force.

Eileen T. Breslin, Adjunct Professor (San Antonio Regional Campus). B.S., M.S., Ph.D., The University of Texas Health Science Center at San Antonio.

Dianna M. Burns-Banks, M.D., F.A.A.P., M.H.A., Adjunct Assistant Professor (San Antonio Regional Campus). Co-owner of South Texas Center for Pediatric Care, San Antonio, Texas.

David P. Capelli, Ph.D., D.D.M., M.P.H., Adjunct Associate Professor (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.
Michael A. Charlton, Ph.D., Adjunct Assistant Professor (San Antonio Regional Campus). Assistant Vice President for Risk Management and Safety, The University of Texas Health Science Center at San Antonio.

Edward Codina, Ph.D., Adjunct Faculty (San Antonio Regional Campus). Director of Research, Planning and Policy: Methodist Healthcare Ministries.

Karl Eschbach, Ph.D., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). State Demographer of Texas. Associate Professor, The University of Texas at San Antonio.

Michael L. Farrell, B.A., M.D., M.P.H., M.S., Adjunct Professor (San Antonio Regional Campus). USAF School of Aerospace Medicine, San Antonio.

Dana A. Forgione, B.B.A., M.B.A., M.S.A., Ph.D., Adjunct Professor of Public Health (San Antonio Regional Campus). The University of Texas at San Antonio.

Erin Fox, Ph.D., (Cross Appointment) Adjunct Assistant Professor of Public Health (San Antonio Regional Campus). Project Coordinator, The University of Texas Health Science Center at Houston, Houston, Texas.

James D. Fraser, R.N., M.P.H., Adjunct of Public Health (San Antonio Regional Campus). Senior Healthcare Consultant, Lockheed Martin Information Technology, San Antonio, Texas.

Fernando Guerra, M.D., M.P.H., Adjunct Professor (San Antonio Regional Campus). Director of Health, San Antonio Metropolitan Health District, San Antonio.

Sandra Guerra-Cantu, M.D., M.P.H., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). Texas Department of State Health Services Region 8, San Antonio.

Daniel E. Hale, M.D., Adjunct Professor of Public Health (San Antonio Regional Campus). Professor, The University of Texas Health Science Center at San Antonio.

Jennifer N. Herriott, M.P.H., Adjunct Instructor of Public Health (San Antonio Regional Campus). San Antonio Metropolitan Health District, San Antonio.

Steven M. Hetrick, B.S., M.D., M.P.H., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). U.S. Air Force, San Antonio.

Thelma C. Hurd, M.D., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

Carlos R. Jaen, B.S., M.S., Ph.D., M.D., Adjunct Professor of Public Health (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

George B. Kudolo, Ph.D., Adjunct Professor of Public Health (San Antonio Regional Campus). Professor, The University of Texas Health Science Center at San Antonio.
Michael Lichtenstein, M.D., Adjunct Professor of Public Health (San Antonio Regional Campus). Professor of Medicine, The University of Texas Health Science at San Antonio.


David Mangelsdorff, Ph.D., M.P.H., Adjunct Professor of Public Health, Professor and Psychologist, Army-Baylor University Graduate Program in Health & Business Administration, Department for Health Services Administration, U.S. Army Medical Department Center and School, San Antonio, Texas.

Brian Masterson, M.D., M.P.H., Adjunct Assistant Professor of Public Health, United States Air Force, Brooks Air Force Base, San Antonio, Texas.

Laura C. McKiernan, B.S., M.P.H., Dr.P.H., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). El Centro de Barrio, San Antonio, Texas.

Claudia S. Miller, B.A., M.S., M.D., Adjunct Professor (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

William Boyd Miller, Ph.D., Adjunct Professor (San Antonio Regional Campus). San Antonio Metropolitan Health District, San Antonio.

Jan Evans Patterson, M.D., F.A.C.P., F.I.D.S.A., C.P.E., Adjunct Faculty of Public Health (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

Roger B. Perales, M.P.H., R.S., Adjunct Instructor of Public Health (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio, Laredo, Texas.

Lloyd B. Potter, Ph.D., M.P.H., Adjunct Professor of Public Health (San Antonio Regional Campus). Director, Institute of Demographic and Socioeconomic Research, The University of Texas at San Antonio.

Amelie G. Ramirez, Dr.P.H., Adjunct Professor (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

Janet P. Realini, M.D., M.P.H., Adjunct Professor of Public Health (San Antonio Regional Campus). San Antonio Metropolitan Health District, San Antonio, Texas. Roberts, Bertram W., M.D. Adjunct Associate Professor Public Health (San Antonio Regional Campus). Clinical Associate Professor, The University of Texas Health Science Center at San Antonio.

Cherise Rohr-Allegrini, Ph.D., Adjunct Assistant Professor of Public Health, San Antonio Metro Health District, San Antonio, Texas.

Jean R. Setzer, Ph.D., Adjunct Assistant Professor of Public Health (San Antonio Regional Campus). Vice President Strategic Planning, University Health System, San Antonio, Texas.
William D. Spears, Ph.D., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). Wright State University Boonshoft School of Medicine, Dayton, Ohio.

Kathleen R. Stevens, B.S., M.S., Ed.D., Adjunct Professor of Public Health (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

Beatriz Tapia, M.D., M.P.H., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.

Mauricio Tohen, M.D., Dr.P.H., M.B.A., Adjunct Professor of Public Health (San Antonio Regional Campus). Department of Psychiatry, The University of Texas Health Science Center at San Antonio.

James W. Tysinger, Ph.D., Adjunct Associate Professor of Public Health (San Antonio Regional Campus). Director, South Texas Regional Family Medicine Grand Rounds, The University of Texas Health Science Center at San Antonio.

Veronica Young, Pharm.D., M.P.H., Adjunct Assistant Professor of Public Health (San Antonio Regional Campus). Assistant Director Drug Information Service, The University of Texas Health Science Center at San Antonio.

John A. Zeber, B.A., M.H.A., Ph.D., Adjunct Assistant Professor (San Antonio Regional Campus). The University of Texas Health Science Center at San Antonio.
DISTANCE EDUCATION

The UTSPH has a strong commitment to the use of distance education to increase course availability and provide robust educational experiences for all students. A variety of communication technologies link students and faculty with one another at the five UTSPH regional campuses (Austin, Brownsville, Dallas, El Paso, and San Antonio) and with the main campus in Houston.

Since 1993, courses have been made available at all UTSPH campus via the interactive video conference network (ITV). Interactive video conferencing allows faculty and students to see and hear each other in real time in a traditional classroom experience. In 2006, state-of-the-art ITV classrooms were completed that enhance audio and video interactions and allow faculty with specific specialties to share their knowledge across UTSPH campuses as guest presenters. In this manner, faculty and students from all sites can participate in courses not originating at their location, and can share in additional learning experiences through seminars, “brown bags,” and conferences that are an important part of graduate education. Most ITV courses utilize Blackboard, a web-based content management system accessible by all students, to provide content, group discussion boards, and chat rooms to supplement classroom activities. Students can access a large selection of online periodicals and other professional publications through their Web-based link to the UTSPH Library.

Five online courses covering the basic disciplines of public health were made available to all degree and non-degree students in 2005. These introductory courses in epidemiology, biostatistics, health promotion/behavioral science, environmental health, and management, policy and community health sciences meet the core requirements for the M.P.H. degree. Online courses require no in-class activities and rely heavily on asynchronous class activities through Blackboard.

UTSPH also supports non-degree students in Austin by providing local and ITV classes and seminars at the UT-Austin School of Nursing and the Texas Department of State Health Services main campus. Students in Austin share the same learning experiences as students at all UTSPH campuses.
Institutes, Centers, Collaborating Centers, and Programs

Institute for Health Policy
The Institute for Health Policy was established at The University of Texas School of Public Health at Houston to assist researchers throughout the UT Health Science Center at Houston in translating their technical findings into usable advice for program administrators and practical recommendations for health policymakers. The mission of the Institute for Health Policy (IHP) UTSPH is to:

- Provide useful and scientifically-valid information Health policy formulation and decision-making based on both the translation of scholarly research and on ongoing assessments of health indicators and best practice.
- Develop effective strategies for the design, communication and dissemination of viable policy options and to build the collaboration necessary to make these solutions more effective.
- Develop creative ways to bridge the communication gap between academic researchers, public health practitioners, and policymakers.
- Equip the next generation of health policy leaders with the skills necessary to interpret and rely on findings from scholarly research.

Director: M. David Low, M.D., Ph.D.
Associate Director: Stephen H. Linder, Ph.D.

Center for Biosecurity and Public Health Preparedness
The Center for Biosecurity and Public Health Preparedness was created in 2003 to respond to the unique public health preparedness challenges in Texas through its regional campuses, including sites along the critical U.S.-Mexico Border. The Center’s mission is to educate frontline public health workforce, medical and emergency responders, key leaders, and other professionals to respond to threats such as bioterrorism and other public health emergencies. The Center works at the local, state, national, and international level with academic institutions, governmental agencies, relief organizations, and foreign ministries of health to promote public health preparedness programs. During the 2005 Hurricanes (Katrina and Rita), the Center responded by immediately establishing an operations center for the coordination of university public health relief efforts, in support of local health departments for disease tracking among survivors. In addition to working closely with state and local health departments, the Center has responded abroad to the SARS outbreak in China in 2003 and to the tsunami in Indonesia in 2004. Public-private partnerships are encouraged for staff working within the Center to ensure we provide the most competitive products. The Center is a designated CDC Academic Center for Public Health Preparedness, has trained more than 100,000 persons, and is organized into three main areas.

- Integrated training and community service endeavors provide a forum to bring critical community responders and academic experts together. In addition to targeted programs of preparedness instruction for community health and legal workforce, are provided. Provides public health emergency response support, expertise for planning, exercises, public health and hospital preparedness. A main focus of the Center is to work with local health departments and organizations, such as the Texas Association of County and City Health Officials (TALHO) to promote public health readiness. The Student Epidemic Intelligence Society (SEIS), an integral part of the Center, provides volunteer epidemiologic support for local health departments across the state of Texas, and provides support for drills and exercises.
• **Evaluation** of efforts for preparing local public health departments for disasters include syndromic surveillance, rapid case identification, epidemic response, financial investment outcomes in the preparedness infrastructure, the impact of preparedness training programs on responder readiness, and business continuity. The Center also strives to translate new ideas into effective solutions that address state and local health security needs.

• Many of the educational products developed by the Center are now being made available online, such as disaster preparedness, public health and the law, preparedness considerations for vulnerable populations (elderly), a laboratory guide for working with select agents, public health and displaced populations, field epidemiology, and risk communications. The Center also provides a number of different opportunities for a more specialized graduate education including a certificate program in emergency preparedness offered by the SEIS program. A concentration in public health preparedness is expected to be available soon.

*Director: John Herbold, D.V.M., M.P.H., Ph.D.*

*Faculty and Staff:*

**Kristy Murray**, D.V.M., Ph.D., (Associate Director of Laboratory Services, Research, and Development)

**Robert Emery**, Dr.P.H. (Associate Director of Outreach and Service)


**Richard N. Bradley**, M.D. (Associate Director of EMS)

**Sandra Tyson**, M.A. (Program Manager)

**Liliana Rodriguez**, Dr. P.H. (Lab Training Manager)

**Carolyn E. Barney**, M.S. (Coordinator for Preparedness and Response Programs)

**Jane R. Montealegre**, M.S.P.H. (Student Epidemic Intelligence Society President)

**Sheila A. Guillory** (Sr. Staff Assistant)

**Larry Dybala** (IT Coordinator)

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**The Centers for Health Promotion and Prevention Research**

The mission of the **Centers for Health Promotion and Prevention Research (CHPPR)** is to conduct research to develop, evaluate, and disseminate health promotion and disease prevention programs in diverse settings and populations. Faculty members form the core for graduate education in health promotion and behavioral sciences at the UTSPH and provide a stimulating research environment for pre- and post-doctoral training. CHPPR leadership has worked to attain a breadth and depth of collaborative relations with a wide variety of academic and community partners. CHPPR has been designated as Centers for Disease Control and Prevention (CDC) Prevention Research Center and has been a World Health Organization (WHO) Collaborating Center designation (currently in reapplication).

CHPPR is organized into research teams that assume responsibility for conducting individually funded research projects. UTSPH Investigator research interests include cancer prevention and control, adolescent and adult risk behaviors, women’s health, health promotion in the prison system, HIV and STD prevention, alcohol and substance abuse, disease management, social determinants of health, mental health,
obesity prevention, reproductive health, ethical issues in health promotion research, intervention development and evaluation, qualitative methods, and health disparities.

The WHO Collaborating Center for Health Promotion and Prevention Research is currently under reapplication. The CHPPR has collaborations with many institutions around the world and include formal collaborations with the Department of Health Education at Maastricht University in The Netherlands and the School of Public Health at Queensland University of Technology in Australia. Visiting fellowships allow faculty to exchange ideas for future projects and provide direction for graduate student research. Visiting fellows from over 17 countries have been hosted in the Center.

The University of Texas Prevention Research Center (UTPRC) is funded by the Centers for Disease Control and Prevention (CDC). The UTPRC is part of network of academic centers, health agencies, and communities for health promotion and disease prevention research. The theme of the UTPRC is “From Healthy Children to Healthy Adults.” The Center focuses on prevention of childhood and adolescent morbidity and mortality and prevention of adult illnesses with origins in the pre-adult years.

Director: Susan Tortolero, Ph.D.

Director: (Pre- and Post-doctoral Fellowship Program) Patricia Dolan-Mullen, M.P.H., Dr.P.H.

Director: (International Programs) Michael W. Ross, Ph.D., M.P.H.

Director: (Texas Prevention Research Center) Susan Tortolero, Ph.D.

Center for Health Services Research
The mission of the Center for Health Services Research (CHSR) is to conduct research and provide technical assistance and training in the organization, financing, and outcomes of health services, systems, and policies. The Center focuses on the development and application of health services research methods in the design and evaluation of individually targeted health care and community-based public health.

The Center will complement other research activities within UTHSC-H and School of Public Health by applying basic research on causal relationships, intervention design, and population surveillance to service, system, and policy questions. The CHSR will provide graduate and postgraduate training and practice opportunities for students and fellows, and collaborative research opportunities with other centers, institutes, and external organizations where knowledge of financing, evaluation, organizational relationships, and policy is important. It will create opportunities for research collaboration among faculty and students at the Houston and regional UTSPH campuses and the Texas Medical Center, as well as with other public and private organizations throughout Texas.

Research areas of the Center:
- Clarify the costs and benefits of health promotion, protection, prevention, treatment, and rehabilitation services
- Identify and evaluate financing and service delivery initiatives to better serve uninsured, low-income populations
- Identify and evaluate relevant federal, state, and local health policy related to these issues

**Directors:**
Charles E. Begley, Ph.D.
David R. Lairson, Ph.D.

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**The Center for Infectious Diseases (CID)**
The mission of the Center for Infectious Diseases (CID) is to address public health concerns of the citizens by providing infrastructure and administrative support for multidisciplinary and coordinated research, teaching, and community service programs; to foster epidemiological and biomedical research and training in infectious diseases; and to encourage international collaborative research efforts addressing infectious disease problems of mutual concern.

The CID is dedicated to the control and prevention of existing, emerging, and re-emerging diseases of public health importance by bringing together the biological, clinical, and behavioral sciences.

The research that is being carried out in the Center for Infectious Diseases is directed towards the emerging and re-emerging infectious agents that threaten public health in Texas, in the United States and in the world. The Center is focusing on the movement of infectious agents and antibacterial resistance across the U.S.-Mexican border. In the studies, the Center focuses on infectious disease transmission, diagnosis, control and prevention. A major focus of the Center is viral, bacterial, and parasitic diarrheal diseases important to children living in developing countries, travelers to these regions and to approximately 80 million persons in the U.S. experiencing food borne enteric disease each year. Hepatitis C transmission and implementation of vaccination programs for hepatitis B in developing countries are research programs in the Center. An AIDS research and training program has been developed by Center faculty in Viet Nam. West Nile virus infection has become an area of research by Center faculty following the introduction of the disease into the U.S. Houston-based studies show that homelessness is a risk factor for West Nile Virus infection. Further, hypertension in infected persons is a predisposing factor for encephalitis. The epidemiology and detection of multiple-drug-resistant (MDR) tuberculosis is being actively pursued in Texas and in the U.S. Texas border regions. With the re-emergence of methicillin-resistant *Staphylococcus aureus* infection, the Center is pursuing studies of disease epidemiology.

Although the research program is of primary importance, the Center is also dedicated to educating and training public health professionals by involving students and trainees in laboratory research projects. CID investigators consist of public health and medical researchers brought together for a multidisciplinary approach to infectious disease problems. Center investigators are also involved in a number of international studies and collaborations in the U.S. Mexico border area and at other international sites including Peru, India, Thailand, and Viet Nam recognizing migration of humans and animals and travel in both directions has introduced a variety of non-endemic diseases into the U.S. Further, problems in other countries provide important and valuable opportunities to study infections that are of growing relevance to U.S. citizens.

**Director:** Herbert L. DuPont, M.D.
Center for Transforming Public Health Systems

The Center’s mission is to contribute to fundamental transformation of the people, processes, and technologies required to achieve the vision of “Healthy People in Healthy Communities.” Center programs of research, development and technical assistance focus on three major areas:

- Public health infrastructure: public health workforce; public health organizations and systems; and public health information systems, especially geographic information systems; and
- Community studies: epidemiologic and participatory community assessment methods, and community-based policy and program development; and
- Public health leadership and practice: public health leadership development; futures studies; practice-based research; teaching; and service.

The Center is headquarters for the Texas Public Health Workforce Training Consortium, a collaborative endeavor involving The University of Texas School of Public Health at Houston, Texas A & M School of Rural Public Health, and the University of North Texas Health Science Center School of Public Health.

Another component of the Center is the Valley Border Health Services Project established in 1988. This project serves as focal point for research, analysis, planning and policy development related to health services and health status along the U.S./Mexico border, particularly the Lower Rio Grande Valley. Project faculty and students, in collaboration with UTHSC-H, University component institutions and Valley representatives, develop and implement innovative strategies to expand access to health services and enhance community health.

Director: Frank Moore, Ph.D.

Associate Director: Beth Quill, M.P.H.

The Coordinating Center for Clinical Trials (CCCT)

The Coordinating Center for Clinical Trials was established in 1971 by members of the Biostatistics faculty. Its primary function is to provide individual investigators with the expertise and personnel to coordinate the design, performance, analysis, and interpretation of results of multi-center randomized controlled clinical trials. To accomplish its objectives, the CCCT has an experienced staff of individuals with expertise in every aspect of trial design and conduct. They are from the fields of medicine, cardiology, hypertension, genetics, epidemiology, biostatistics, clinical trials methodology, analytical methodology, data management and analysis, and administration. To date, the CCCT has served as the Coordinating Center for 16 national and international multi-center clinical trials, including the Antihypertensive and Lipid Lowering to prevent Heart Attack Trial (ALLHAT).

Research areas of the Center include:

- Hypertension – detection, treatment and outcomes
- Hypercholesterolemia – detection, treatment, and outcomes
- Genetics of hypertension
- Cost-effectiveness of treatment of hypertension and hypercholesterolemia
- Heart failure – detection and validation
- Long-term natural history of retinopathy of prematurity (ROP)
• Long-term ophthalmological outcomes in premature infants with severe ROP
• Screening for ROP

Director: Barry R. Davis, M.D.

Hispanic Health Disparities Research Center
The Hispanic Health Disparities Research Center, a collaborative arrangement between the University of Texas at El Paso College of Health Sciences and The University of Texas School of Public Health at Houston, fosters sustainable mechanisms for scholarship development in Hispanic health disparities. The Center is comprised of four cores: 1) Administrative, 2) Research, 3) Training and Education, and 4) Community engagement and Dissemination. The HHDRC is currently in its second five-year cycle, having been funded for a total of ten years by the National Institutes of Health (NIH), National Center on Minority Health and Health Disparities (NCMHD).

The collaborative relationship described above fosters sustainable mechanisms for scholarship development in Hispanic American health disparities. The HHDRC is guided by a conceptual framework that makes explicit the variables that influence Hispanic health disparities in our border community. Research based upon this framework seeks mechanisms to reduce Hispanic American health disparities.

Co-Director: Hector Balcazar, Ph.D.

Hispanic Health Research Center in the Lower Rio Grande Valley
The Hispanic Health Research Center in the Lower Rio Grande Valley (HHRC-LRGV) was created to address the disease burdens and the paucity of research capacity in this poor, undereducated, and medically underserved Hispanic population residing on the Mexico border. HHRC-LRGV activities encompass research on Hispanic health disparities, provide a source of data on Hispanic health, develop and evaluate intervention strategies for Hispanic cultures, evolve research collaborations with other Hispanic communities, and build research capacity in South Texas’ Lower Rio Grande Valley. The HHRC currently houses the new Center of Excellence in Diabetes for People of Mexican Descent.

The goals of the Center include developing a research capacity in a nucleus of individuals in partnership with minority serving academic institutions in the LRGV, and with institutions in Houston and elsewhere; transferring scientific technology and expertise to the LRGV. It uses training programs aimed at undergraduate and graduate students and at junior faculty; developing the capacity for collecting, managing, and disseminating information on Hispanic health locally, regionally, and beyond. In addition, the center is developing community participatory research and intervention strategies specific for Hispanic, especially Mexican-American cultures.

The center includes studies based on behavioral interventions, epidemiological and biological principles. There is a modern laboratory and an extensive community based program focusing on studies obesity, diabetes and related diseases including infectious diseases and cancer.

Director: Joseph B. McCormick, M.D.
The Human Genetics Center

The mission of the Human Genetics Center is to understand the genetic etiology of the common chronic diseases, including cardiovascular disease, diabetes, and various vision disorders. This objective is pursued and accomplished in multiple human populations. Understanding the genetics of these diseases involves (1) locating and characterizing genes underlying the common chronic diseases; (2) characterizing the extent and utility of DNA variation within and among populations and determining how these patterns of variation evolved in both time and space; and (3) establishing the impact of gene variation on the health of individuals, families, and populations. At each step, the role of computational and bioinformation approaches and resources are preeminent. It is the vision of the Human Genetics Center to be the world’s preeminent research unit focusing on the genetics of common chronic disease.

The goals of the Center are to train investigators in molecular biology and genetics and the management, use, and analysis of familial and population-oriented data; provide educational and research opportunities for doctoral students and postdoctoral fellows through employment on externally derived research funds; understand the contributions of genetic factors to those common diseases that account for most of the mortality in the public health context; understand the forces that influence the patterns of naturally occurring variation in the human genome, and how those patterns can be exploited to understand human disease; continue to expand our base of research through closer interdisciplinary collaboration with other research groups in the Texas Medical Center, in particular those located in the School of Public Health and Institute of Molecular Medicine; and seek external support to maintain the state-of-the-art laboratory and computing equipment which is essential to our research.

Research areas of the Center include:

- Genetics of cardiovascular disease
- Genome variation
- Bioinformatics
- Genetic epidemiology
- Computational biology
- Molecular evolution
- Computational genomics
- Gene family evolution
- Molecular genetics of common human diseases
- Population genetics theory
- Statistical methods for DNA sequence analyses
- Statistical and computational methods in human disease
- Medical resequencing
- Genes and mutations causing retinal diseases
- Diabetes
- Retinal pathophysiology
- Quantitative genetics

Director: Eric Boerwinkle, Ph.D.

Michael & Susan Dell Center for Advancement of Healthy Living

The Michael & Susan Dell Center for Advancement of Healthy Living was established in 2006 with a grant from the Michael & Susan Dell Foundation. The mission of the
Dell Center is to serve as a state, national, and international leader in the promotion of healthy living.

With a vision of “healthy children in a healthy world,” strategic priorities and key functions of the Dell Center include:

- **Strategic Priorities**
  - Prevention and control of childhood obesity through healthy eating and physical activity
  - Promotion of healthy eating behaviors
  - Professional education and community service
  - Evaluation of policy and environmental change

- **Key Functions:**
  - Creation of new scholarly works that push the frontiers of public health science
  - Research and development
  - Translation and dissemination of evidence-based programs and practices
  - Collaboration with community partners
  - Policy development and analysis

Center projects include the Coordinated Approach To Child Health (CATCH), a coordinated school health program to prevent obesity and related chronic disease risk factors; the School Physical Activity and Nutrition (SPAN) study, a population-based survey of child overweight in Texas; Project Northland, a program to prevent early use of tobacco and alcohol among adolescents; and Que Sabrosa Vida, a culturally sensitive, community-based nutrition education program. Other projects include the Texas Child Obesity Prevention Policy Evaluation (T-COPPE) Project, an assessment of the impact of two policy initiatives designed to improve physical activity and eating behaviors of children at risk for obesity in Texas; the Surgeon General’s Report, 2010 – Preventing Tobacco Use Among Young People; the U.S. Physical Activity Guidelines; Project MYTRI (Mobilizing Youth for Tobacco-Related Initiatives in India), a randomized controlled trial to develop, implement, and evaluate the efficacy of a tobacco prevention intervention for school children in urban India; and CATCH Middle School, dissemination of the CATCH physical activity and healthy eating program in Central Texas middle schools.

The Dell Center for Healthy Living is located in Austin near the University of Texas campus. Other Center programs and initiatives include a combined M.P.H./Dietetic Internship accredited by the American Dietetic Association; collaboration with the Center for Health Promotion and Prevention Research/Texas Prevention Research Center and the UTSPH NCI pre- and post-doctoral training program; and the Food Intake Analysis System (FIAS), a nutrient analysis software program.

**Director:** Deanna M. Hoelscher, Ph.D., R.D., L.D., C.N.S.

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**The Southwest Center for Occupational and Environmental Health (SWCOEH)**

The mission of the SWCOEH is to promote health, safety, and well-being in the workplace and the community. The goal of the Center is to respond to the critical need for well-trained occupational and environmental health specialists by providing graduate-level academic training and continuing education with an underlying foundation of a state-of-the-art occupational and environmental health research program. The Center faculty are involved with degree programs in occupational...
medicine, occupational health for nurses, industrial hygiene, occupational epidemiology, and occupational injury prevention. Emphasizing a multi-disciplinary approach, these degree programs interface with the associated disciplines of toxicology, epidemiology, biometry, occupational ergonomics, and the environmental, management, and behavioral sciences.

SWCOEH includes two major training programs providing support for graduate level training, short courses, and research training and development in the United States and Latin America. These training programs are funded by the National Institute for Occupational Safety and Health (NIOSH) Education and Research Center training grant program, and by the NIH International Training in Research in Environmental and Occupational Health (ITREOH) Program.

SWCOEH faculty conduct research into the causes and conditions of occupational injuries and illnesses, and the assessment of environmental exposures and related health effects through contracts and grants from industry, unions, federal, state or local government agencies, and community-based organizations. Center research activities in the workplace have focused on the health care, petrochemical, and construction industries. Environmental health research activities have included exposure assessments of outdoor and indoor air, as well as community-level exposures to toxicants, such as lead. Specific research topic areas of the Center over the past few years have included: occupational asthma; environmental exposures and childhood asthma; occupational bladder cancer; childhood lead poisoning; international aspects of occupational health; workplace ergonomics; work organization epidemiology and occupational hazards of health care workers.

**The Education and Research Center** (ERC) established in 1977, is one of 16 centers in the United States officially designated by the National Institute for Occupational Safety and Health (NIOSH) as a regional Education and Research Center (ERC). The ERC’s educational and outreach programs serve the five-state region of Texas, Oklahoma, Arkansas, Louisiana, and New Mexico. While assisting other academic institutions to develop their occupational health and safety training capabilities, the ERC works closely with industry and labor on issues of safety and health hazards in the workplace. An active Continuing Education Program provides courses for occupational and environmental health professionals. Additional international and consultative activities provide opportunities for research and service within the context of the global community.

The specific programs within the ERC and their Directors, are:

- **ERC Director:** Sarah A. Felknor, Dr.P.H.
- **Occupational Medicine/Occupational and Environmental Medicine Residency Program:** George Delclos, M.D., M.P.H., Ph.D., Interim Director
- **Occupational Medicine/Occupational and Environmental Medicine Residency Program:** George Delclos, M.D., M.P.H., Ph.D., Interim Director
- **Industrial Hygiene Program:** Lawrence Whitehead, M.P.H., Ph.D.
- **Occupational Health Nursing Program:** Thomas Mackey, Ph.D., R.N.C.
- **Occupational Epidemiology Program:** Sharon Cooper, Ph.D.
- **Occupational Injury Prevention Program:** Benjamin Amick III, Ph.D.
- **Continuing Education and Outreach Program:** Janet Harreld, M.A., M.F.A., M.P.A.
- **Pilot Projects Research Training Program:** David Gimeno, Ph.D.
The International Research Training Program in Occupational and Environmental Health, founded in 1995, is a collaboration between the Southwest Center for Occupational and Environmental Health of the School of Public Health and the University of Houston Department of Industrial Engineering. It is funded through a grant from the Fogarty International Center of the National Institutes of Health. Its mission is to contribute to capacity-building of Latin American research scientists, teachers, and professionals in the fields of occupational and environmental epidemiology, industrial hygiene, ergonomics, and safety engineering. The program accomplishes this mission by providing support for:

- Long-term academic and research preparation, through graduate education at United States campuses for Latin American students interested in research training in occupational and environmental health, with particular emphasis on the areas of occupational and environmental epidemiology, environmental sciences (industrial hygiene and toxicology), and industrial ergonomics and safety;
- Project-based research training and public health practice;
- Targeted short courses and workshops in various Latin American countries; and
- Institutional research infrastructure development and dissemination of scientific information.

Presently, the International Research Training Program at The University of Texas is coordinating these efforts through collaboration with key educational and/or governmental institutions in Colombia, Costa Rica, Nicaragua, and Venezuela.

The Fogarty International Collaborative Trauma and Injury Research Training Program (ICTIRT) was awarded to the SWCOEH in 2006 and is a new program of the Fogarty International Center designed to address the growing burden of morbidity and mortality in the developing world due to trauma and injury. The ICTIRT program of the SWCOEH is focused on traumatic injury prevention due to highway and traffic accidents in Colombia, South America. The ICTIRT program includes both long and short-term academic training, and pilot research project training. The training grant also promotes information dissemination through conference support and scientific presentations and publications. The main foreign collaborating agency for the ICTIRT program is Javeriana University in Bogotá, Colombia.

Director: Ken Sexton, Sc.D.

Texas Public Health Training Center (TPHTC)

The Texas Public Health Training Center is one of 14 Health Service Research Administration (HRSA) funded Public Health Training Centers across the nation. TPHTC was established in 2000 as a collaborative partnership of The University of Texas School of Public Health at Houston, University of North Texas Health Science Center School of Public Health, and Texas A&M Health Science Center, School of Rural Public Health.

The vision of the Center is to enhance the knowledge and skills of both the current public health workforce and future public health professionals in Texas. Since 2001, TPHTC has developed and delivered over 100 training events involving more than 3,600 participants from state, local, and community organizations, and has signifi-
cantly built partnerships with many health departments and public health organizations in the state.

TPHTC strives to provide quality learning programs and informational sessions in order to:

- Strengthen the technical, scientific, managerial, and leadership competencies and capacities of the current and future public health workforce;
- Contribute to improved performance of the public health system;
- Transform and strengthen public health infrastructure;
- Provide policy makers with evidence-based information to develop and implement comprehensive health care legislation.

**Director:** Linda E. Lloyd, Ph.D.

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**World Health Organization Collaborating Center for Health Promotion Research and Development**

In 2000, the Center for Health Promotion and Prevention Research (CHPPR) (established in 1981) and the Texas Prevention Research Center (formerly the Southwest Center for Prevention Research, established in 1986) merged. CHPPR's mission is to conduct research to develop, evaluate, and disseminate health promotion and disease prevention programs in diverse settings and populations. To achieve this mission, the Center conducts survey research, methodological studies, program evaluations, research syntheses, dissemination studies, and policy research. CHPPR provides The University of Texas System with a focal point for the development and testing of programs and methods to assist public and private sector organizations in broad scale prevention of lifestyle-related diseases, disabilities, and causes of premature death.

In 1986, the Center was designated to provide consultation, technical assistance, and training as a World Health Organization (WHO) Collaborating Center. Service provision is coordinated by the Pan American Health Organization and its regional Health Promotion Program. Global activities are coordinated by the WHO Division of Chronic Disease Prevention, the Global Program on AIDS, the Program on Tobacco or Health, and other units as needed.

Center faculty have led numerous WHO working sessions with participants from many different nations and helped organize global teleconferences through WHO partnerships in Kazakhstan, China, and Switzerland. Ongoing programs for technical assistance and scientific exchange are carried out with the National Public Health Institute in Finland, the University of Maastricht in the Netherlands, Queensland University of Technology in Australia, and the School of Public Health in Colombia. The Center houses a group of five to ten scholars from different countries who are enrolled in courses ranging from two-week orientations to M.P.H., Dr.P.H., and Ph.D. degree programs in Health Promotion/Health Education and Behavioral Sciences. The WHO Center is currently exploring possible links with other Latin American centers.

Although the areas of research and action for which the Center provides leadership are as diverse as the global scope of disease and injury, they share a base of theory from the social and behavioral sciences and have common settings in schools, health centers, and community agencies. Current prevention research at the Center
is concerned with cardiovascular disease, cancer, violent and unintentional injury, addictions and sexually transmitted diseases. Behavioral studies involve nutrition, tobacco and alcohol use, physical and sexual activity, cancer screening, prenatal care, and aggression. The social and behavioral change methods investigated by the Center include patient counseling in primary care, group education, mass communication, community organization, and public policies such as taxation.

**Director:** Susan Tortolero, Ph.D.

**Director for International Programs:** Michael W. Ross, Ph.D., M.P.H.

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**The World Health Organization Collaborating Center for Occupational Health**

The Center for Occupational Health was established in 1985, and emphasizes the School’s expertise in occupational epidemiology, exposure assessment and program development, implementation, and evaluation. The bulk of contributions of the Southwest Center for Occupational and Environmental Health (SWCOEH) as a WHO Collaborating Center are conducted through two National Institutes of Health-funded (Fogarty International Center) Training and Research Programs, one in Occupational and Environmental Health and a second program in Injury Prevention, as well as through participation in the WHO Network of Collaborating Centers in Occupational Health. The activities of the Center are focused on collaborating with and providing assistance mainly, but not exclusively to Spanish-speaking countries. These activities are linked to selected objectives of the WHO Global Strategy on Occupational Health for All, and to the WHO Global Plan of Action. Objectives include strengthening of international and national policies for health at work; development of human resources in occupational health; effective transmission of occupational health data and raising of public awareness through public information; strengthening of research; and development of collaboration in occupational health and with other activities and services.

The priority research areas of the Center include occupational epidemiology, occupational hazards of health care workers, respiratory diseases, ergonomic evaluations, and exposure assessment. The Collaborating Center is housed in the SWCOEH and provides advisory services in the development of occupational health programs and applied epidemiology.

To date, internationally coordinated assistance has been provided through short courses and lectures, program development and evaluation, competitive scholarships, and short term research activities in Argentina, China, Colombia, Costa Rica, Cuba, Ecuador, France, Guatemala, Indonesia, Kazakhstan, Mexico, Nicaragua, Poland, Portugal, Russia, Spain, Surinam, Taiwan, and Venezuela. In addition, training assistance through the Occupational Medicine Residency Program has been provided to physicians from Bahrain, Colombia, Egypt, Indonesia, Iraq, Netherlands, Nigeria, Norway, Pakistan, Spain, and Taiwan. Bilingual faculty from the SWCOEH provide assistance to the Pan American Health Organization and WHO by coordinating and directing international symposia and workshops and by participating in occupational health research projects.

**Director:** George Delclos, M.D., M.P.H., Ph.D.

**Associate Director:** Sarah Felkner, Dr.P.H.


**STUDENT SERVICES**

The mission of the Office of Student Affairs is to assist students by providing timely and accurate information with a high quality of service in an atmosphere that is both welcoming and professional. The Office of Student Affairs serves as the central "hub" for the services that will assist students from the time they apply through graduation. The services and support systems offered through the office include: communicating with prospective students; processing of applicant documents; conducting orientation; providing financial assistance information; administrative support for UTSPH courses; programs and registration; career information; thesis and dissertation format review; planning commencement activities; and corresponding and coordinating activities with alumni. In addition, the Office, in conjunction with the UTSPH Student Association, promotes student life and acts as a liaison between students and faculty, advocating for student needs and concerns.

The office, located on the second floor, east wing, is open Monday to Friday from 8:00 a.m. to 5:00 p.m.

**Financial Assistance**

The School administers funds to support a limited number of traineeships and scholarships. Information about a variety of scholarships awarded on the basis of academic merit and achievement is available from the UT Health Science Center Office of Financial Aid. Traineeships and scholarships are awarded according to merit, need, and field of specialization. Students can find information about these and other funds that become available by going to the Office of Student Affairs Financial Assistance website.

Students subject to selective service registration will be required to file a statement that the student has registered or is exempt from selective service registration in order to be eligible to apply for federal financial aid. In addition, effective January 1, 1998, the selective service requirement is also applicable to students applying for financial assistance funded by State revenue.

**Traineeships**

Traineeships are available for the term of the award and vary among types of training grants. The training grants listed below are those that are currently in effect.

**Health Resources and Services Administration Training Grant**

This grant is designed to train a health workforce that is both diverse and motivated to work in underserved communities. Traineeships consist of a monthly stipend for full-time recipients and payment of tuition and fees for part-time recipients. Traineeships are restricted to United States citizens or permanent residents in the United States. Traineeships may be granted to full-time and part-time Public Health master’s and doctoral level students. Trainees are expected to perform only such work as would be an integral part of their training program. Traineeship awards are based on student needs and continued academic progress.
National Institute of Occupational Safety and Health Training Programs

The Southwest Center for Environmental and Occupational Health has been awarded funds to train health care workers and graduate students in five areas: Occupational Injury Prevention Research Doctoral Training Program; Occupational Epidemiology Doctoral Training Program; Occupational and Environmental Medicine Residency Program; and Industrial Hygiene. Tuition and/or stipends are available on a competitive basis to qualified individuals.

Director: Sarah A. Felknor, Dr.P.H.

Interdisciplinary Pre- and Post-doctoral Fellowships in Cancer Prevention and Control

This training fellowship is designed to prepare individuals for a successful career in cancer prevention and control research. The pre-doctoral program provides four fellowships per year for doctoral students at the University of Texas School of Public Health at Houston who have been admitted to doctoral programs in health promotion, behavioral sciences, epidemiology, biometry, policy sciences, or management and community health. Selected individuals receive payment of tuition and a stipend.

Director: Patricia Dolan-Mullen, M.P.H., Dr.P.H.

National Institutes of Health Training Grant in Biostatistics

This traineeship is designed to provide pre-doctoral students the opportunity to collaborate with researchers in biomedical, genetic, epidemiological, clinical, and behavioral studies while working on methodological research. Trainees receive support for tuition, training related expenses (including support for health insurance), and an annual stipend.

Director: Robert Hardy, Ph.D.

Scholarships

The School of Public Health offers a number of endowed scholarships that are administered by the school or program. Graduate scholarships are awarded on the basis of scholastic excellence and adequate preparation for graduate study in the student’s chosen field, as shown by the student’s academic record. Scholarship eligibility criteria include admission into a degree program, enrollment in course work leading to the degree, reasonable progress in the degree program, good academic standing, Grade Point Average (GPA) and in some cases test scores, references and personal statements. There are additional specific qualifications for scholarships in various areas of study. Students are encouraged to contact the Office of Student Affairs to obtain information about eligibility criteria and scholarships awarded in the student’s area of study. Scholarships that may be available based on funding are listed below; availability may change, amount may change, and only scholarships of greater than $1000 will be eligible for resident tuition.

Outstanding New Student Scholarship

The University of Texas School of Public Health at Houston has a limited number of scholarships available for award to outstanding incoming students. This scholarship is awarded on the basis of academic merit and potential for success in public health. Applicants with Grade Point Averages of 3.5 or greater on a 4.0 scale, and Graduate Record Examination combined verbal and quantitative scores of 1200 or better are
eligible to be recommended for the scholarship by their respective Divisions to the Admissions Committee for consideration. Students cannot apply for this scholarship; instead, the Admissions Committee awards scholarships following recommendations made at the time of admission.

**Lu Ann Aday Scholarship**
Eligibility: Returning M.P.H., Ph.D., or Dr.P.H. student whose research focus is on improving quality of care and or community health. Award is based on merit and financial need.

**J. Fred Annegers Memorial Scholarship**
Eligibility: Continuing student or new student to the M.S. or Ph.D. Epidemiology program. Admissions recommendations will suffice for new students. Award is based solely on academic merit.

**Catherine Tyrell Campbell Scholarship in Public Health**
Award is based on academic merit.

**Leslie A. Chambers Memorial Scholarship Fund**
Eligibility: Continuing Environmental Sciences student, based solely on academic merit.

**The Dolan-Mullen Family Scholarship**
Eligibility: UTSPH student pursuing a degree in Health Promotion/Health Education. Award is based on academic merit and need. Two letters of recommendation are required.

**Roger Florky Memorial Scholarship Fund**
Eligibility: Occupational Health or Industrial Hygiene student. Based on academic merit and need, and student should partially support his or her education through employment.

**Richard M. Grimes Scholarship in Public Health**
Award is based on academic merit and financial need.

**Hervey Scholarship Recipient**
Eligibility: This scholarship is for either a new student or returning full time student. Award is based on academic merit and financial need. The student must be registered during the term of the scholarship. Grades need to be reported to the foundation.

**Mr. and Mrs. Ralph T. Hull Scholarship**
Award is based on academic merit.

**Marcus M. Key Scholarship**
Eligibility: Continuing student who has completed a minimum of one semester, or a new student with exceptional background, training, and potential for excellence in the field of Occupational Health. Award is based solely on merit. Application must be accompanied by two letters of recommendation.
Carolyn and Matt Khouri Endowed Scholarship in Nutrition
Eligibility: New or returning UTSPH students whose academic and career plans include a focus on healthy nutrition as a critical component of public health. Awards will be based on academic merit and financial need.

D. Jack Kilian Memorial Endowed Scholarship
Eligibility: UTSPH student pursuing a degree in Cytogenetics, Genetics, Toxicology, or Occupational Medicine. Award based on merit and need.

Lawrence E. Lamb Endowed Scholarship Fund
Eligibility: Students pursuing Dr.P.H. degrees in Health Promotion/Health Education or Health Services Organization, based on academic merit and need.

Ronald J. Lorimor Memorial Scholarship
Eligibility: Student pursuing a Ph.D. in Behavioral Sciences, based on academic merit and need. Application must be accompanied by two letters of recommendation.

Dr. David W. Martin Memorial Scholarship
Award is based on academic merit and financial need.

Guy and Alissa McDaniels Memorial Scholarship
Eligibility: Continuing student or new student to the M.S. or Ph.D. program in Epidemiology. Admissions recommendations will suffice for new students. Award is based solely on academic merit.

People with AIDS International Public Health Scholarship
Eligibility: Returning master’s or doctoral student conducting qualitative research on Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome or sexually-transmitted diseases with a focus on women, gender issues, or underserved communities. 
Student’s research will be conducted in a country outside the United States with a preference given to Africa or Asia. The scholarship will be acknowledged in the student’s thesis or dissertation. Award is based on academic merit.

People with AIDS Public Health in the Americas Scholarship
Eligibility: Returning master’s or doctoral student conducting qualitative research on Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome or sexually-transmitted diseases, with a focus on women, gender issues, or underserved communities. Student research will be conducted in North, Central, or South America or the Caribbean. The scholarship will be acknowledged in the student’s thesis or dissertation. Award is based on academic merit.

Richard D. Remington Scholarship
Eligibility: Continuing Biometry student who has completed a minimum of one semester. Award is based solely on academic merit. Application must be accompanied by two letters of recommendation.

Susan Sampson Memorial Endowed Fund
Eligibility: M.P.H. Student who has completed at least two semesters and who demonstrates an interest in community health assessment and applications, reflected by a written statement of goals and/or an appropriate thesis topic. Award is based on merit and need.
Susanne M. Savely Scholarship  
Eligibility: UTSPH student. Award based on academic merit.

The John E. Scanlon Memorial Scholarship  
Eligibility: Qualified candidates who have a focus in Tropical Diseases. If an appropriate candidate is not found, the scholarship will be used to support a student who has a focus in Global Health. Award is based on academic merit.

Richard K. Severs Memorial Scholarship Fund  
Eligibility: Continuing Environmental Sciences student, based solely on academic merit.

Reuel A. Stallones Endowed Scholarship Fund  
Eligibility: Continuing UTSPH student. Award based solely on academic merit.

Texas Water Pollution Control Endowed Scholarship  
Eligibility: Continuing Environmental Science student who has successfully completed a minimum of one semester with background, training, and potential for excellence in the field of Environmental Sciences. Award is based on academic merit and need.

Dr. Oddis Calvin Turner Endowed Scholarship in Health Promotion and Behavioral Sciences  
Scholarship support to graduate students pursuing a degree with a focus on Health Promotion and Behavioral Sciences. The award will be based on academic merit and financial need. The student must be actively involved in community service, demonstrate leadership qualities, and be committed to working in an African American community after obtaining a degree.

Polly Sparks Turner, M.P.H., Dr.P.H. Endowed Scholarship in Public Health  
Award is based on academic merit and financial need.

M. Stewart West Memorial Scholarship  
Eligibility: Continuing Biostatistics student who has completed a minimum of one semester, has background, training, and potential for excellence in the field of Biostatistics. Award based on academic merit and need.

President James T. and Nancy Beamer Willerson Endowed Scholarship in the School of Public Health  
Award is based on academic merit.

Zetzman Memorial Scholarship Fund  
Award based on academic merit and financial need.

Selection Process  
Awards of traineeships and scholarships are made by the UTSPH Financial Aid Committee, which is composed of faculty members and administrative staff. In awarding scholarships, the Financial Aid Committee considers the following as appropriate to achieve the donor’s scholarship intent:
  - Faculty recommendations
  - Academic performance
  - Financial need
- Research interests
- Other professional and personal achievements

**Fellowships**
A limited number of fellowships are available through the research centers of the School. Application for these fellowships is made directly to the Centers. Selection criteria include those listed above, and the recipients are chosen by the faculty in the Centers. Other fellowships received through the Office of Student Affairs are posted on the website for Fellowships.

**Career Services**
UTSPH Career Services assists students and alumni in identifying employment positions, and also offers advice and assistance with resume preparation and the development of related skills necessary for attaining satisfactory careers in public health. The Career Services website lists a plethora of information, including direct links to public health agencies, employment resources, Texas Medical Center employment opportunities, a list of UTSPH graduate assistant positions available to enrolled students, and a list of local and national position vacancy descriptions.

Career Services also utilizes “Job Ops,” a web-based system that allows students to register online, upload and manage their resumes, research and apply for jobs, sign-up for interviews, RSVP to attend career events and job fairs, and seek and contact available alumni mentors.

A summary of the UTSPH Career Services office responsibilities is presented during the first week of classes. The office is located on the second floor, east wing, in the Office of Student Affairs. There is no charge for this service.

**Alumni Online**
“UTSPH Alumni Online” is a website allowing alumni to foster relationships with classmates and faculty. Elements includes creating online groups that share a common interest, such as area of specialty, a class notes section to update activities since graduation, a photo gallery to which alumni can add pictures of work and family, and a section where alumni can join the alumni association.

**School Organizations**
The School of Public Health Student Association has several purposes: to promote the mutually supportive two-way communication within and between the student body, faculty, staff, and administration at the school and institution; to improve the quality of student life through a variety of social activities; to foster opportunity for student involvement in special events; and to promote service to the community at large.

All registered students in good standing at The University of Texas School of Public Health at Houston are members of the UTSPH Student Association. All student members are eligible to vote in general and committee elections and to hold office.

The Student Association Executive Board directs the general policy of the Student Association and is the governing body of the Student Association with the power to act on all matters for the best interests of the student body. The Executive Board is
composed of 16 members: the elected officers, council representatives, and a representative from each of the Regional Campuses.

The Student Association also appoints students to various school committees, such as the Admission’s Committee.

**Diversity Program**
The University of Texas School of Public Health at Houston is committed to creating and encouraging a campus community in which diversity is a fundamental value. To this end, the UTSPH Diversity Program promotes recruitment and retention of a diverse student body, and provides opportunities for students that will optimize their chances for success during their tenure as students and beyond.

The program, in collaboration with the Office of Student Affairs, provides financial aid information announcements about special conferences, meetings and workshops with special programs for minority students or topics on health disparities; and exposure to many culturally-diverse Houston-based health organizations, such as the Hispanic Health Coalition, the African-American Health Coalition, and the Asian-American Health Coalition. The UTSPH Diversity Program also works with the larger University community.

The Minority Advisory Council (MAC), an organization sponsored and organized by the UTSPH Diversity Program Office, is comprised of faculty, staff, and students who are committed to contributing to the success of minority students at the School of Public Health. MAC faculty members commit to making themselves available to minority students when needed. They provide advice and mentoring over and above the guidance students receive from their academic advisor. MAC is also charged with raising student, faculty, and staff awareness of health issues that affect minority populations. Twice a year, at the beginning of each semester MAC holds a new student meeting during orientation to provide opportunities for students, faculty, staff, and alumni to interact and learn from each other and to plan activities for the coming semester. The Office for Diversity and MAC also conduct various other cultural and educational activities throughout the year. These include a health disparities journal club, a series of scientific writing lunch session, and student presentations. Minority students in the UTSPH are automatically members of MAC. There is a MAC BlackBoard site that is updated regularly with announcements about MAC activities, scholarships, fellowships, and other opportunities.

Information regarding the UTSPH Diversity Program may be obtained from the Office of Student Affairs.

Director of Diversity Programs: Maria E. Fernandez, Ph.D.
Grading, Conduct, and Satisfactory Progress Policies

Grades
Letter grades (A, B, C, or F) are given for all M.P.H. core courses. Elective courses may be letter-graded or pass/fail (P or F) at the discretion of the instructor. A grade point average (GPA) will be calculated from all letter-graded courses. Repeated courses will be listed on the transcript along with the original course. However, the GPA will be calculated on letter-graded courses using only the grade from the repeated course. An INCOMPLETE will revert to an “F” if the coursework is not successfully completed after one semester. A “W” grade is assigned when a student withdraws from a course. Students may withdraw from courses through the last class day of the term.

Academic Conflict Resolution
Individual faculty members have primary responsibility for grading and evaluations. The faculty member’s judgment is final unless compelling evidence suggests differential treatment or mistake. In attempting to resolve any issue regarding academic matters, it is the obligation of the student first to make a serious effort to resolve the matter with the faculty member with whom the issue originated. If the student and faculty member cannot resolve the matter, the student may elect to file a complaint through the Associate Dean for Academic Affairs. The Associate Dean forwards an unresolved complaint to the Academic Council for facilitation of the academic conflict resolution process.

The academic conflict resolution procedure is available on the Student Affairs website.

Satisfactory Progress
Satisfactory progress is evaluated on an individual basis by a student’s advisor and for Advisory Committee members. Evaluation week for all students is scheduled at the end of the Fall and Spring semesters. Committees review each student’s coursework for purposes of assisting them to achieve their maximum potential and to assess their progress toward academic goals. This overall evaluation of knowledge and performance allows the Committee to determine which students have progressed satisfactorily and which should be placed on academic probation. Failure to attend the evaluation meeting may result in a “hold” placed on the student’s registration for a subsequent term.

Academic probation provides a structure within which the faculty of the student’s Advisory Committee can address issues and problems related to the student’s academic performance. For letter-graded courses, a student may be placed on academic probation if he or she has earned one or more “F”s, two or more “C”s, or multiple “W”s within one or more semesters. For pass/fail courses, a student may be placed on academic probation if he or she has exhibited “marginal performance” in two or more courses or has earned one or more “F”s or multiple “W”s within one or more semesters. Once a student has been placed on probationary status, the Advisor will schedule a meeting of the student’s Advisory Committee to discuss the problem(s) and will design a plan and timetable for remediation. Once the student has met the terms of the recommendation, the Advisor will document the progress via memorandum to the Associate Dean for Educational Programs, and the student will be returned to good academic standing.
Students who are veterans and who fail to achieve satisfactory progress at the end of a probationary semester will be reported to the Department of Veterans Affairs as making unsatisfactory progress.

A process for dismissal from the School may be instituted for students who are consistently performing below UTSPH standards. A recommendation for dismissal may be proposed by the faculty of the Student Advisory Committee if any of the following conditions arise:
- A student refuses to accept the advice and guidance of the student’s Advisory Committee in matters of remediation of academic probation; and/or
- A student who has been placed on academic probation does not respond adequately or in a timely manner to the recommendations agreed upon by the student’s Advisory Committee; and/or
- A student has repeated failures documented in any type of course, including thesis or dissertation work; and/or
- Academic probation is invoked a second time; and/or
- A student does not demonstrate satisfactory progress in thesis or dissertation work as determined by the thesis/dissertation advisory committee.

Students who have been dismissed from the School for unsatisfactory progress may be evaluated for readmission. Readmission to the degree program must follow general readmission policies. Students seeking readmission should contact the Assistant Dean for Academic Affairs for details regarding necessary application documents and procedures.

**Absences, Long Term Absences and Readmission**

Students are excused from attending classes or other required activities, including examinations, for the observance of a religious holy day (as defined by state law), including travel for that purpose. A student absent under these circumstances may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

Students who anticipate interrupting their program for two or more semesters should consider requesting a leave of absence (LOA). Students who have an approved leave of absence maintain their student status within the school. The LOA “stops the clock” on the student’s degree program and does not add to the timeline for completing the degree.

The LOA is requested by submitting a memorandum to the Associate Dean for Student Affairs explaining the reason(s) for the request and estimating the time away from the program. The LOA may be granted for up to one calendar year. In extraordinary circumstances, a second year may be granted. LOAs do not extend beyond two years.

After absences for a duration of one or more calendar years (three or more consecutive semesters), the student is automatically dismissed from the School. To complete a degree, the student must be readmitted to the degree program. All applicants for readmission must meet the admission standards described in the current UTSPH catalog. Readmission requires a review of the applicant’s record while previously enrolled at the UTSPH. Following the review and decision by the Division or Regional Campus to which the student wishes to be admitted, the Division-
al/Regional Campus recommendation will be forwarded for subsequent evaluation and approval of the application by the School’s Admissions Committee.

Credit hours previously accumulated toward the degree program may be counted after readmission to the same degree program. However, the student’s advisory committee may require that the student repeat one or more courses if the student has not been enrolled in the school for more than five years. New course requirements adopted by the School during the student’s absence may be required of the student if the Student Advisory Committee faculty members so advise, even if this requirement results in greater than minimum required credit hours of course work toward the degree.

Prior thesis research must be reviewed and approved by the newly-formed Student Advisory Committee and the UTSPH Research Office. The topic and content are expected to be up to date and relevant. All research compliance policies in effect at the time of readmission apply to the readmitted student and his or her research project.

Students seeking readmission to the school should contact the Associate Dean for Student Affairs for details regarding necessary application documents and procedures.

Required Review
Any student in a doctoral degree program who has successfully completed the qualifying examination is expected to complete the degree within three years from the date of admission to candidacy. Otherwise, the dissertation committee will review the progress at the end of the three-year period and will consider such recommendations as (1) the meeting of any new requirements which may have been adopted in the interim; (2) additional coursework; or (3) discontinuation of the candidacy. If the degree program is continued, the academic progress of the student will be reviewed by the dissertation committee on a regular basis. Recommendations of the dissertation committee are forwarded to the Associate Dean for Academic Affairs for approval.

Student Conduct and Discipline
Students are charged with knowledge of and compliance with all University regulations concerning student conduct and discipline as set forth in The University of Texas System Board of Regents’ Rules and Regulations, and the UTHSC-H Handbook of Operating Procedures, The University of Texas Board of Regents and The University of Texas School of Public Health at Houston have adopted policies regarding misconduct in school-related scholastic and/or research activities, whether on- or off-campus. Cheating, plagiarism, or dishonesty in any scholastic activity is a serious breach of ethical standards and is grounds for disciplinary action, which in some cases may include dismissal from the School. Responsibility and authority for investigating allegations of misconduct and enacting disciplinary measures lies with the Associate Dean for Academic Affairs, subject to appropriate review by the Dean, whose decision is final.

Plagiarism
Plagiarism is the use of ideas or words of another person without giving appropriate credit. The appropriation of another author’s text and the presentation of it as
one’s own constitutes plagiarism. Plagiarism, in turn, constitutes academic misconduct under University policy. Written materials regarding plagiarism are provided to all students during orientation. These materials explain what plagiarism is and give helpful examples so that students know how to properly cite sources. These materials are available in the Office of Student Affairs for all students and faculty. International students should pay particular attention to this material since laws, regulations, and practices may differ in various cultures.

The School of Public Health provides a program called SafeAssign in BlackBoard that students should utilize to ensure that their written documents do not contain text that may have been inadvertently copied from a published author’s work. Information and instructions for using SafeAssign are located at http://www.sph.uth.tmc.edu/uploadedFiles/Services/sservices/safeassigns.pdf
FACILITIES AND RESOURCES

Building
The ten-story Reuel A. Stallones School of Public Health Building is the primary site of the school's teaching, research, and community service activities. Four of the School's five academic Divisions are located in the building, and the fifth is based in the nearby University Center Tower. The five Regional Campuses are connected through interactive television and other means of communication. Teaching facilities, including auditorium, classroom, and seminar spaces equipped for distance learning, are distributed throughout the building, as are faculty offices and research project spaces. Teaching and research laboratories occupy five levels in the west wing of the building. A comprehensive library, computer study spaces, student services, and administrative offices are also included.

All institutional facilities and locations are intended for the exclusive use of active students, faculty, staff and registered alumni for purposes consistent with educational programs and recognized activities. Solicitation in school facilities or on school property is not permitted except as provided by The University of Texas Boards of Regents Rules and Regulations, the UTHSC-H Handbook of Operating Procedures, and/or as approved by written agreement with the school administration.

Library Facilities and Services
The mission of The University of Texas School of Public Health at Houston Library is to provide primary information support services for the education, research, and community health services programs of the School of Public Health faculty, students, and staff. The focused support of the Library for the specialized academic and research programs of the School is evidenced in the selection of key public health information books, journals, and online databases. Remote access that utilizes a proxy server and the UTHSC-H Virtual Private Network (VPN) makes available to UTSPH students, staff, and faculty over 31,000 electronic periodicals, over 50,000 electronic books, and more than 150 subscribed online databases.

The UTSPH Library is a member of the Texas Health Science Libraries Consortium (THSLC), which was formed to develop cooperative programs to improve access to biomedical information at participating institutions. The five library members of THSLC are:

- UT School of Public Health Library at Houston (UTSPH)
- Houston Academy of Medicine-Texas Medical Center Library (TMC)
- M.D. Anderson Cancer Center Research Medical Library (MDA)
- UT Dental Branch at Houston Library (TDB)
- UTMB Moody Medical Library (TMB)

The holdings of the five Consortium libraries have been combined into a single online catalog developed by Endeavor Information Systems that contains more than 400,000 book and journal titles. Borrowing privileges to any of the libraries above are extended to all members of the Consortium. Consortial purchases of online databases and journals have greatly increased access to specialized resources for the UTSPH community.
In addition to the wealth of resources provided by the THSLC, the UTSPH Library is able to take advantage of group purchases made by both the TexShare consortium and The University of Texas System to expand the collection of both electronic journals and online databases. In particular, UT System agreements with major publishers such as Elsevier, Nature, Blackwell, and Springer have resulted in access to a far richer more academically diverse collection of electronic journals and databases than was previously possible through individual library agreements.

To ensure that students are knowledgeable about the specialized resources available in their subject areas, multiple workshops are offered each semester covering primary research databases for each of the five Divisions. Individual instruction is provided on a walk-in basis, by appointment, or by clicking on the “Ask a Librarian” link which can be found on any UTSPH Library Web page, students and faculty may also take advantage of extended literature search assistance for grant applications, research papers, class projects, and theses and dissertations. UTSPH The UTSPH Library is privileged to have experienced and knowledgeable staff that enthusiastically assist faculty, students, and staff in determining which services will best meet their information needs, then working to meet those needs in the most efficient and effective manner possible.

**Educational Media Resources**

**Educational Media Resources (EMR)** provides faculty and students at the School of Public Health with consultation and technical support for graphic productions. The staff assists faculty and students in appropriate choices of media for teaching and reporting research findings. These include graphics and studio and on-site photographic services for displays, brochures, newsletters, journal articles, poster sessions, reports, advertising, graphic logos, signage, wall displays, hi-resolution scanning, and promotional materials: graphs, transparencies, and displays. The EMR team supports faculty and students in their efforts to create an effective and stimulating learning environment in the school. The technical and design skills offered help to further enhance the public health education atmosphere.

**Computer Services and Facilities**

**UTSPH Information Technology (IT)** provides the school with a team of computer professionals that supports the education, research, and administrative functions of a graduate school. This includes automated universal account activation and maintenance, computer support, disk storage services, electronic groupware including mail and calendaring software, website creation and maintenance, Access and SQL database creation and maintenance, and consulting services on just about anything else technology related.

The School of Public Health maintains a high speed Local Area Network based on gigabit technology with 100 megabit per second access to each workstation within the building. Advanced network monitoring technologies from Cisco Systems help supply the school with diagnostic and corrective tools to maintain the ever expanding network. The School is interconnected to The University of Texas Health Science Center at Houston through fiber optic cabling providing the highest available bandwidth possible for additional University resources and access to the Internet. This network currently provides access to more than 800 computers in Houston and provides additional computing resources to more than 200 computers located remotely at the School’s remote campuses in Dallas, San Antonio, El Paso, Brownsville, and Austin. Between the multiple sites, IT Services provides access to more
than 1,600 student, staff, and faculty. Besides dual high speed connections to the internet, UTSPH maintains high speed connections to collaborative teaching and research networks Internet-2 and the Texas LEARN network. Access to our wireless network is available throughout the entire UTSPH building. General wireless internet access is available without authentication. The wireless network does provide for additional capabilities with user authentication.

IT Services maintains a state-of-the-art microcomputer lab and a computer-based instruction classroom for students, faculty, and staff. The lab and classroom are open during all the hours the School is open. The computer lab provides student access to 18 Intel-based microcomputers running Microsoft Windows XP. The computer-based instruction classroom has 22 workstations. A ceiling mounted projection system is available for demonstrations and instruction. The classroom may be reserved for classes and meetings by both students and faculty. When not being used as a classroom, students may use the room for additional computer lab access. In 2006, UTSPH became one of the first graduate institutions to implement a virtual computer lab. The virtual lab consists of more than 160 computers which can be accessed from the Regional Campuses or any remote location. This allows students to gain access to hardware and software applications on the PCs in the microcomputer lab in off hours from the comfort of their home, or other remote location.

All of these machines are connected to the School’s local area network giving students access to a variety of services including the library services, electronic mail, Microsoft Office, statistical applications, and the Internet. A high speed Xerox multi-bin printer/copier is available for student printing. The following is a partial list of the software packages that are available in the computer lab: Microsoft Office 2007 including Word, Excel, PowerPoint, Access, Publisher, SPSS, Stata, MiniTab, SAS, EpInfo, ML-Win, SmartDraw, S-Plus, Sudaan, TreeAge, R, WinBugs, Simul8, MapInfo, MapMarker, and Surfer. In addition, tutorials are available for many of the software products. All software in the computer lab is copyrighted and licensed to the School by the manufacturer for use only on the lab computers. Any attempt to make copies of this software for use on another computer is a violation of the license agreements and a violation of School and University policy.

Students are encouraged to have a personal computer available to them as a graduate student. UTSPH provides free access to McAfee anti-virus protection software as well as reduced software prices through the UT Bookstore. For compatibility purposes, students should consider a traditional IBM-style computer running Windows Vista, or Windows 7. While Macintosh computers are not restricted, there are certain systems and applications which are not compatible with Macintosh computers. The best support options are available to students who have a traditional IBM-style computer.

All students are provided with a user account which offers access to a feature rich web-based electronic mail application, an online instruction based system in BlackBoard, the ability to connect personal wireless computers within the UTSPH campus, and a file repository and sharing system known as XFiles.
# Geographic Distribution of Alumni

### Non United States

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**Total Graduates**: 4767  
**Total U.S.**: 4000  
**Total Non U.S.**: 160  
**Unknown Address**: 480  
**Deceased**: 107  
**APO Address**: 20

Information in this table will be changed as the databases become available.
**GEOGRAPHIC DISTRIBUTION OF ALUMNI**

**UNITED STATES**

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*Information in this table will be changed as the databases become available.*
# GRADUATE SCHOOLS OF PUBLIC HEALTH

**University of Alabama at Birmingham**  
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1530 Third Ave. South  
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http://info.med.yale.edu/eph/
Dean: Paul D. Cleary, Ph.D.