

DOCTOR OF PUBLIC HEALTH (Dr.P.H.)

The Doctor of Public Health is offered in a specific concentration through the following departments:

Behavioral and Environmental Health

Dr.P.H. with a concentration in Behavioral Health Promotion and Education

Department of Epidemiology and Biostatistics

Dr.P.H. with a concentration in Epidemiology

Department of Health Policy and Management

Dr.P.H. with a concentration in Health Policy and Management

Overview

The Doctor of Public Health degree provides a foundation of core and elective courses beyond the master's degree that will prepare the student for leadership in public health research and/or practice. This includes a dissertation that involves independent study under a faculty mentor. The specific program at Jackson State University focuses on eliminating disparities in health and healthcare.

The Dr.P.H. Degree Program will prepare students to assume leadership roles in public health, especially as research scientists, administrators, educators, or practitioners. Such roles can be expected to include, but not be limited to, positions in organizations and agencies such as universities, public health agencies, hospitals, managed care organizations, pharmaceutical companies, research firms, and other settings where public health specialists are employed.

The program will include advanced theoretical and practical studies in the specialized fields of public health as well as the preparation of a dissertation. The dissertation will establish the student as a competent researcher and scholar, capable of conducting and supervising independent research studies. Students will be trained to study public health from a multidisciplinary perspective to appreciate the disparities affecting minorities in terms of health and healthcare services.

Students will master core competencies in public health as well as specialized courses in their chosen concentration. They will develop a high level of analytical (quantitative and qualitative research) skills, complemented by extensive breadth of relevant leadership knowledge in research grant preparation, management, study implementation and evaluation.

Admission Requirements

Requirements for admission to the DrPH program include dual admission to the Division of Graduate Studies and to the program itself, together with two official copies of transcripts from all colleges and/or universities attended, a masters' degree in Public Health from an accredited college or university,

specific program requirements, and a minimum GPA of 3.0 on the highest degree earned.

All students seeking admission to the program must meet the following criteria:

1. Earned baccalaureate or master's degree from an accredited college or university.
2. Completed DrPH program and Division of Graduate Studies applications.
3. Overall GPA of 3.0 or above (on a 4.0 scale) on the highest earned degree.
4. Transcripts from universities or colleges prior to program application.
5. A satisfactory score on the GRE.
6. Three letters of recommendation with at least two from academic professionals.
7. Statement of purpose reflecting applicant's career goals in public health. Recommendation by the program steering committee.
8. For international applicants, satisfactory performance on TOEFL by demonstrating oral and written proficiency.
9. GRE Scores (as per concentration-specific criteria).

Admission to the Division of Graduate Studies does not automatically guarantee admission to the Dr.P.H. Program. Applications are accepted year round for admission each Fall. The priority deadline for the Fall admission is March 1. Applications received after that date cannot be guaranteed review for the current year Fall admission.

Degree Requirements

The Dr.P.H. curriculum provides a broad grounding in overall public health knowledge and skills in addition to an in-depth learning experience within the program concentrations. The curriculum represents an interdisciplinary approach and bridging of academic core areas.

The Doctor of Public Health Degree Program comprises two tracks. The first track (Dr.P.H.) is for students who have received a master of public health degree or a master's degree in a public health related discipline within the last 10 years. The second track (MPH-Dr.P.H.) is for students who have not earned a master's degree in public health or related discipline and who seek both the Master and Doctor of Public Health Degrees. The second track allows students to graduate in approximately four years.

Community Research Practicum.

Students are required to spend a minimum of 100 clock hours per semester in the community health research practicum. A minimum of three hours per week must be on site. The research practicum, which begins the second semester of enrollment, requires three continuous, one-semester hour courses, which culminates in the final semester. A written and oral presentation of the community research project and the submission of a manuscript to a refereed journal

for publication review are required to complete the third course.

Comprehensive Examination

To become a candidate for the Dr.P.H. degree a student must take and pass a written comprehensive examination. The comprehensive examination must be passed prior to approval of the dissertation proposal. The examination will include core doctoral courses and information from each concentration. A score of 80 percent or higher will be required for passing.

Transfer of Credits

Students accepted into the program can transfer up to nine (9) credit hours from previous graduate work from a regionally accredited institution of higher education. A maximum of nine graduate credit hours may be transferred subject to the discretion of the faculty, department chair, and dean.

Course Requirements

The course requirements for the two tracks of the Dr.P.H. program are described below.

Track 1. Candidates with a Master of Public Health degree or a master’s degree in a public health discipline.

The curriculum is divided into advanced core courses (18 credit hours), concentration courses (15 credit hours), three elective (9 hours), a community research practicum (3 credit hours), and a dissertation. The advanced core courses (18 credit hours) are required for each concentration. The required concentration courses are specific to each concentration. Electives (9 credit hours) expand the student’s focus within a specific concentration. Although electives may be selected from other disciplines, including non-public health degree programs, they must be related to the concentration of interest and approved by the doctoral program advisors.

The community research practicum – the field residency – is based on research and issues related to each student’s concentration. The practicum allows students to develop insight into planning their dissertation so that research can be focused on addressing practical concerns in public health and the community.

Students are required to complete a minimum of 45 credit hours plus a dissertation. Students with an MPH or master’s degree in a public health-related discipline may transfer up to nine credit hours as electives. For successful completion of the program, all students are required to have taken an introductory course in each of the five core areas of public health: epidemiology, biostatistics, environmental and occupational health, health policy and management, and behavioral health. Students who have not completed introductory core courses must complete the courses prior to beginning

their dissertation or taking any advanced courses in the concentration.

Upon admission into the program, students must choose a concentration in public health for their doctoral studies. The course requirements for the concentrations of Behavioral Health Promotion and Education, Epidemiology, and Health Policy and Management are listed below.

Advanced Core Courses

Course	Title	Semester Hours
PHS 701	Advanced Biostatistics and Computer Science Applications	3
PHS 702	Disease Pathogenesis and Behavioral Risk Factors	3
PHS 703	Designing Research Studies on Minorities and Special Populations	3
PHS 704	Survey and Qualitative Research Methods	3
PHS 705	Advocacy and Public Health Policies	3
PHS 711-713	Advanced Biostatistics Laboratory (I-III) Hours	3
		18

Concentration Courses

Required Courses (See Specific Concentrations Below)	15	
Electives (Related to the concentration) Hours	9	
		24
Community Research Practicum	3	
Dissertation (maximum 15 credit hours)	15	
		45
Total Hours (not including dissertation)	45	

Concentration Courses

The course requirements for the concentrations of Behavioral Health Promotion, Environmental and Occupational Health, Epidemiology, and Health Policy and Management:

Behavioral Health Promotion and Education (Required Concentration Courses)	15
BHS 711 Advanced Theories and Scientific Principles for Health Promotion and Education	3
BHS 712 Behavioral and Psychosocial Epidemiology	3
BHS 713 Qualitative Research Methods (SW 742)	3
(Two of the following)	
BHS 714 Clinical Trials and Interventional Study Designs	3
BHS 715 Research Seminar in Health Promotion	3
BHS 716 Social and Cognitive Bases of Behavior (PSY 606)	3
BHS 717 Data Base Management Systems (CSC 520)	3
Epidemiology (Required Concentration Courses)	15
BIOS 711 Categorical Data Analysis	3

EPI 711	Behavioral and Psychosocial Epidemiology	3
EPI 712	Clinical Trials and Interventional Study Designs	3
(Two of the following)		
BIOS 712	Multivariate Analysis I (PSY 635)	3
EPI 713	Infectious Disease Epidemiology	3
EPI 714	Nutrition and Genetic Epidemiology	3
EPI 717	Environmental Epidemiology (ENV 780)	3
Health Policy and Management		15
(Required Concentration Courses)		
HPM 711	Strategic Leadership in Management of Human Resources	3
HPM 712	Public Health Economics	3
HPM 713	Analysis of Health Legislation and Regulations	3
(Two of the following)		
HPM 714	Evaluation of Performance and Quality of Health Service Organizations	3
HPM 715	Decision Modeling	3
HPM 716	Seminar in Strategic Management (MNGT 723)	3
HPM 717	Managed Care Networks and Public Health	3

Track 2. Candidates without a Master of Public Health Degree or a master's degree in a public health discipline.

Eligible students without a Master of Public Health degree or a master's degree in a public health related discipline may be admitted into the combined track for the Master of Public Health and Doctor of Public Health Degree Program. These students will be able to apply for the MPH degree by the end of the third year, and the DrPH degree during the fourth year of matriculation.

The combined track contains all the course requirements necessary for the completion of the doctor of public health program, except the three electives (9 credit hours total). Thus, 36 credit hours plus the dissertation will be required from the doctoral curriculum. The five core courses (15 credit hours) and three concentration courses (9 credit hours) selected from the master's program curriculum will also be required, for a total of 24 credit hours. (Note that a minimum of 12 credit hours is required in the concentration area of the doctoral program curriculum.) Therefore, the MPH-DrPH track can be completed in four years with a minimum of 60 credit hours plus the dissertation.

DESCRIPTION OF COURSES

Interdisciplinary Courses

PHS 701 Advanced Biostatistics and Computer Science Applications (3 Hours) This is an advanced course in biostatistics with emphasis on statistical inference, sample size calculations, and multiple regression techniques. The course emphasizes the use

of computer software packages in conducting statistical procedures. The software packages include SPSS, SAS, Epi Info, GIS, and others. Emphasis is placed on selecting the appropriate statistical test and the most appropriate analytical procedure. Advanced Biostatistics Lab I course (PHS 711) must be taken simultaneously with this course.

PHS 702 Disease Pathogenesis and Behavioral Risk Factors (3 Hours) This course addresses the major behavioral factors causing diseases in the nation. The course focuses on cardiovascular disease, cancer, HIV, and other chronic diseases. Disease pathology and pathogenesis are described, and their major determinants and behavioral risk factors are examined. Current models and theories of disease prevention and health promotion are addressed. Students will learn how to implement effective strategies and interventions to reduce risk factors and diseases.

PHS 703 Designing Research Studies for Minorities and Special Populations (3 Hours) This course examines unique health problems and concerns among African Americans, rural populations, women, children, other minorities and special populations. It describes basic study designs and their strengths and limitations, and addresses specific cultural competencies, research codes of ethics, and health disparities. It also addresses strategies for designing studies and interventions involving lay community leaders, faith-based organizations, and innovative means to reach special communities.

PHS 704 Survey and Qualitative Research Methods (3 Hours) This course explores descriptive research methods and emphasizes the importance of using a mixed approach of qualitative and quantitative techniques. Students are provided with an overview of survey research methodology. Questionnaire and interview design, scale construction, methods of administration, response rate, reliability measurements, scale construction and validity are discussed. Also, specific qualitative methods and techniques such as participant observation, interviewing, focus groups, and use of personal documents and records are discussed.

PHS 705 Advocacy and Public Health Policies (3 Hours) This course introduces advocacy and support measures for the promotion and formation of new legislation and the establishment of public health policies. Important federal, state, and international legislation is analyzed. The course also addresses the trends and processes by which public health programs are established in the United States and around the world.

PHS 711-712-713 Advanced Biostatistics Lab I, II, and III (1 Hour per lab course) These laboratory courses accompany the Advanced Biostatistics and Computer Applications courses. The computer laboratory courses provide practical experience with the computer software programs discussed in the class. The biostatistics course (PHS 701) and Lab I must be taken at the same time. Lab II and Lab III are taken during the following semesters. Each lab course is a one-hour credit.

PHS 750 Community Research Practicum (1-3 Hours) This is a supervised community experience where students participate in a community-oriented service or practice to gain first hand knowledge of community issues and decision-making processes. In the context of this experience, the student begins developing a research agenda that should be relevant to community needs and/or practices. Students are required to register for the 1-credit hour practicum during the second semester and maintain enrollment each semester for three consecutive semesters, with the third semester culminating as the capstone experience. A final paper of publishable quality is required for completion of the course and registering for the dissertation.

PHS 755 Independent Study (Variable Hours) This is an individually directed study in a specific concentration in public health selected by the student and approved by the professor.

PHS 756 Special Topics in Public Health (1-2 Hours) This course enables students to pursue a topic or project of their choice in Public Health, such as health disparities, prevalent illnesses in Mississippi and the US, e.g., diabetes and obesity, HIV/AIDS, cardiovascular ailments, and stroke; international health systems; interventional studies in public health; and tropical diseases, e.g., leprosy, onchocerciasis, trypanosomiasis, malaria, and yellow fever. The course provides DrPH students additional research methods training and skills in their public health concentration. Consent of the department chair required.

PHS 798 Dissertation (3-15 Hours) Students will complete doctoral level research that demonstrates the ability to conduct a rigorous project within a specific concentration. The research topic, approved by the dissertation committee, should reflect the candidate's interest in a problem unique to public health. The completion of a minimum of 45 semester credit hours is required before enrolling in this course. Enrollment must be continuous until the research experience culminates in the successful defense of the dissertation. Prerequisite: Consent of the Chair of the Dissertation Committee each semester of enrollment.

Behavioral Health Promotion and Education Concentration

BHS 711 Advanced Theories and Scientific Principles for Health Promotion and Education

The course provides an extensive overview of current theories and models of health promotion and education. In addition, it reviews the scientific evidence and principles supporting the foundation of health promotion and educational programs.

BHS 712/EPI- 711 Behavioral and Psychosocial Epidemiology (3 Hours) This course provides an overview of social, personality, and cultural factors influencing behavior. It also addresses stress and related psychosocial factors as determinants of health and disease. Psychosocial and behavior models are also discussed. Doctoral students are required to analyze a specific data set and prepare a research

literature report on a specific topic in behavioral and psychosocial epidemiology. A prerequisite for the master's students is PHS 505 Principles of Epidemiology. Prerequisite for doctoral students is PHS 702 Disease Pathogenesis and Behavioral Risk Factors.

BHS 713/SW 742 Qualitative Research Methods (3 Hours) This course examines major qualitative approaches that are most frequently applied to the study of process in human service settings. Students learn how to conduct systematic investigations of in-depth, non-quantitative studies of individuals, groups, organizations, or communities.

BHS 714/EPI 712 Clinical Trial and Interventional Study Designs (3 Hours) This course reviews in greater detail the design, conduct, and evaluation of clinical trials and cohort studies. In addition it addresses errors and common methodological pitfalls using practical illustrations. The first half of the course addresses clinical trials and the second half focuses on other interventional study designs. Prerequisites include PHS 521 Epidemiological Study Designs and PHS 703 Designing Research Studies on Minorities and Special Populations.

BHS 715 Research Seminar in Health Promotion (3 Hours) This course exposes graduates to current research methods and practice in health promotion. The course will consist of a series of guest lecturers.

BHS 716/PSY 606 Social and Cognitive Bases of Behavior (3 Hours) This course addresses the theories and research on attitude formation and change, attributional styles, prejudice, interpersonal perception, group dynamics, self-regulation, and cognitive styles.

BHS 717/CSC 520 Database Management Systems (3 Hours) This is an introduction to database concepts including data independence, relations, logical and physical organizations, schema, and subschema. Hierarchical, network, and relational models, with description of logical and physical data structure representation of the database system are discussed. Finally, normalization: first, second, and third normal forms of data relation and relational algebra, relational calculus, data structure for establishing relations, and query functions are addressed.

BHS 718/EPI 712 Clinical Trials and Intervention Study Designs (3 Hours) This is an in-depth course on the design, conduct, and evaluation of clinical trials and cohort studies. In addition, it addresses systemic errors and common pitfalls using practical illustrations from various sources. The first half of the course addresses clinical trials and the second half focuses on other interventional study designs. Prerequisites include PHS 521 Epidemiological Study Designs and PHS Designing Research Studies in Minorities and Special Populations.

BHS 719/SW 744 Clinical Practices with Urban Poor and Underserved Populations (3 Hours) This course examines a range of modalities used in working with urban poor populations, including the use of empowerment strategies with women of color and victims of urban violence, use of group work models

with parenting teens, and the diagnosis and treatment of Posttraumatic Stress Disorders (PTSDs). Theoretical models and social work strategies that have been applied in urban settings are critically analyzed.

Epidemiology Concentration

EPI 711 Behavioral and Psychosocial Epidemiology (3 Hours) This course provides an overview of social, personality, and cultural factors influencing behavior. It also addresses stress and related psychosocial factors as determinants of health and disease. Psychosocial and behavior models are discussed. Doctoral students will be required to analyze a specific data set and prepare a research literature report on a specific topic in behavioral and psychosocial epidemiology. A prerequisite for the master's students is PHS 505 Principles of Epidemiology. Prerequisites for doctoral students include PHS 505 and PHS 702 Disease Pathogenesis and Behavioral Risk factors.

BIOS 711 Categorical Data Analysis (3 Hours) This course provides an in-depth review of the appropriate biostatistical techniques for analyzing categorical data. Included will be chi-square statistics, log-linear analysis, and logistic regression. SPSS and/or SAS statistical software packages will be utilized. Prerequisites: PHS 503 Introduction to Biostatistics and Computer Applications, PHS 701 Advanced Biostatistics and Computer Applications, and a multiple regression analysis course.

EPI 712 Clinical Trial and Interventional Study Designs (3 Hours) This course provides an in-depth review of the design, conduct, and evaluation of clinical trials and cohort studies. In addition it addresses errors and common methodological pitfalls using practical illustrations. The first half of the course addresses clinical trials and the second half focuses on other interventional study designs. Prerequisites include PHS 521 Epidemiological Study Designs and PHS 703 Designing Research Studies on Minorities and Special Populations.

EPI 713 Infectious Disease Epidemiology (3 Hours) This course reviews infectious agents of public health importance. Included are vaccine-preventable infectious diseases; diseases spread by personal contact, water, and food; and arthropod-borne diseases and nosocomial infections. In addition, the emergency preparedness system will be discussed and agents involved in bioterrorism will be addressed regarding treatment and (PHS 702) prevention. Prerequisites are PHS 505 Principles of Epidemiology, and Disease Pathogenesis and Behavioral Risk Factors.

EPI 714 Nutrition and Genetic Epidemiology (3 Hours) This first half of the course addresses nutritional factors and their relationship to disease. The second half involves a review of genetics, inheritance, and molecular factors causing disease. Prerequisites are PHS 505 Principles of Epidemiology, and PHS 702 Disease Pathogenesis and Behavioral Risk Factors.

EPI 715/ MNGT 712 Applied Multivariate Analysis (3 Hours) This course offers doctoral students a thorough analysis of the theory and applications of multivariate methods. Topics to be covered include matrix algebra, factor analysis, canonical correlation, discriminant function analysis and multivariate analysis of variance. Prerequisite: MNGT 710 or equivalent. May substitute PSY 635.

EPI 716/PPAD 610 Epidemiology and Toxicology for Public Managers (3 Hours) This course introduces and teaches the concepts, theories, facts, and principles of the study, prevention and treatment of disease and poisons. The course includes conducting an epidemiological study.

BIOS 712/PSY 635 Multivariate Method I (3 Hours) This course covers multivariate analysis of variance and covariance, canonical correlation, factor analysis, discriminant function analysis, and selected advanced topics. Prerequisite: PSY 502 may be substituted for MNGT 712.

BIOS 713/ PSY 665 Multivariate Methods II (3 Hours) Structural-equation models, log-linear models, and selected advanced topics based on student needs and interests. Prerequisite: PSY 635.

EPI 717 / ENV 780 Environmental Epidemiology (3 Hours) This course is designed to provide students with the basic knowledge and skills required to develop and apply epidemiologic principles and concepts to the study of adverse effects of various environmental factors on both human and ecological health. Emphasis is put on the study of the health effects of physical, chemical and biological factors in the external environment, broadly conceived from the epidemiological point of view. As such, it enables students to interpret epidemiological data and understand the approaches used in epidemiological investigations of acute and chronic diseases. The course also covers the basic methods and issues involved in epidemiologic investigations of disease conditions in human populations.

Health Policy and Management Concentration

HPM 711 Strategic Leadership in Management of Human Resources (3 Hours) This course provides theoretical and practical knowledge for managing the human resources of public health organizations. Topics include cultural and psychological factors affecting recruitment, selection, placement, and promotion; training and development processes; performance appraisal methodologies; and job evaluation methods and compensation practices. Factors promoting employee productivity and job satisfaction are explored. Legal concerns, including the requirements for the validation of selection tools, are covered.

HPM 712 Public Health Economics (3 Hours) This course examines factors determining the supply and demand for healthcare services. Markets for professional services, drugs, and insurance are discussed. Competitive effects on efficiency, effectiveness, and access are examined. The class

discusses relevant theories of production, cost curves, market structure, and factor price determination.

HPM 713 Analysis of Health Legislation and Regulations (3 Hours) This course identifies and analyses legislation and regulations that determine and/or influence healthcare access, delivery and practice. It focuses on the factors that influence policy formulation and implementation. Students are expected to analyze laws and regulations affecting the health of populations at risk for major health problems. Examples of current issues covered are Medicaid, Medicare, HIV/AIDS, family planning, and cardiovascular disease.

HPM 714 Evaluation of Performance and Quality in Health Service Organizations (3 Hours) This course provides an overview of theories and designs used for measurement and evaluation of the performance of healthcare organizations. Emphasis is given to the importance of quality as a measure of performance. Strategies to insure continuous performance improvement and excellence in delivery of services are explored.

HPM 715 Decision Modeling (3 Hours) This course describes the application of the techniques of analytical modeling to managerial decisions. The course offers a study of data collection, presentation, and analysis including Bayesian inference, decision matrices, and decision trees.

HPM 716 Administration of Integrated Health and Hospital Systems (3 Hours) The course focuses on the complex and essential interrelationships that exist within and among healthcare entities. This course will 1) identify and study components of the healthcare system (hospitals, clinics, home care agencies, hospice care, emergency medical services, etc.) as well as the interrelationships necessary for their survival. 2) It will explore the variety of arrangements (networks, systems, alliances, etc.) used for integrating and managing these entities. This course will also illustrate the fact that survival within the healthcare industry is largely predicated upon an entity's ability to partner with other healthcare providers.

HPM 717 Managed Care Networks and Public Health (3 Hours) This course introduces the dynamic impact of managed care on the delivery of healthcare services and the cost containment features of health plans that thrived in the 1990s. The student will become familiar with all aspects of managed care (HMOs, PPOs, and POS) from effectiveness including of these healthcare plans medical/loss ratios, profit margins and outcomes measurements to their effects on access to quality of healthcare services.

HPM 720/ PPAD 607 Management of Information Systems (3 Hours) This course familiarizes students with quantitative approaches that can be used to solve problems in public sector management.

HPM 723/ PPAD 660 Financial Management in Public Organizations (3 Hours) The management of organizational resources is the focus of this course. While local governments will be highlighted, the principles and techniques have applications to all public and quasi-public organizations. Prerequisite: PPAD 549 - Public Finance Administration or equivalent.

HPM 724/ MNGT 723 Seminar in Strategic Management (3 Hours) This course offers special topics dealing with important issues in strategic management. The course emphasizes global and technological perspectives of strategic management issues.

HPM 725/ MNGT 725 Seminar in Organizational Change (3 Hours) This course focuses on the human aspects of problems arising in technical, social, and organizational arenas faced with the need to change. The course includes detailed analyses of organizations as systems, organizational leadership and change.

HPM 726/ MNGT 726 Seminar in Organizational Strategy and Decision Making (3 Hours) This course offers an overview of the theory and research in strategic management with a scholarly research orientation on issues of both strategic content and process. The empirical study of these issues is emphasized.

HPM 727/ SW 724 Policy and Practice Issues in Family and Children's Services (3 Hours) This seminar is designed to provide students with an opportunity to explore policies, programs, services, and related practice issues affecting families and children. It focuses on the nature of selected policies, the policy-making process, factors that influence policy formulation, implementation, and evaluation and approaches to policy analysis. Particular emphasis is placed on the critical examination of selected policy and practice issues related to families and children. Students are expected to prepare a major analytical policy or practice issue paper. Examples of current issues covered are the impact of welfare reform, Medicaid coverage, managed care, homelessness, permanency planning for children at risk, and research on the prevention of family and /or youth violence.

HPM 728/SW 762 International Health Policy and Practice Issues in Social Welfare (3 Hours) This course examines international health policy issues and trends and their implications for access to healthcare at the international level. It explores issues of accessibility, affordability, attitudes and belief systems, and indigenous governmental and non-governmental organizations. The course provides a seminar setting for conceptualization and organization of theoretical concepts and constructs related to healthcare policy and service delivery paradigms with implications for practical utilization.