

PUBLIC HEALTH SCIENCES

Public Health Sciences Courses

PHLS 1110G. Personal Health & Wellness

3 Credits (3)

A holistic and multi-disciplinary approach towards promoting positive lifestyles. Special emphasis is placed on major problems that have greatest significance to personal and community health. Topics to include nutrition, stress management, fitness, aging, sexuality, drug education, and others.

Learning Outcomes

1. Students will identify, describe and explain human health behaviors and how they are influenced by social structures, institutions, and processes within the contexts of complex and diverse communities. Students should: Develop an understanding of self and the world by examining content and processes used by social and behavioral sciences to discover, describe, explain, and predict human behaviors and social systems.
2. Students will articulate how beliefs, assumptions, and values are influenced by factors such as politics, geography, economics, culture, biology, history, and social institutions. Students should: Enhance knowledge of social and cultural institutions and the values of their society and other societies and cultures in the world.
3. Students will describe ongoing reciprocal interactions among self, society, and the environment. Students should: Understand the interdependent nature of the individual, family/social group, and society in shaping human behavior and determining quality of life.
4. Students will apply the knowledge base of the social and behavioral sciences to identify, describe, explain, and critically evaluate relevant issues, ethical dilemmas, and arguments. Students should: Articulate their role in a global context and develop an awareness and appreciation for diverse value systems in order to understand how to be good citizens who can critically examine and work toward quality of life within a framework of understanding and justice.

PHLS 1110H. Personal Health and Wellness Honors

3 Credits (3)

A holistic and multi-disciplinary approach towards promoting positive lifestyles. Special emphasis is placed on major problems that have greatest significance to personal and community health. Topics to include nutrition, stress management, fitness, aging, sexuality, drug education, and others. In addition students will complete an experiential learning component or project.

Learning Outcomes

1. Students will identify, describe and explain human health behaviors and how they are influenced by social structures, institutions, and processes within the contexts of complex and diverse communities. Students should: Develop an understanding of self and the world by examining content and processes used by social and behavioral sciences to discover, describe, explain, and predict human behaviors and social systems.
2. Students will articulate how beliefs, assumptions, and values are influenced by factors such as politics, geography, economics, culture, biology, history, and social institutions. Students should: Enhance knowledge of social and cultural institutions and the values of their society and other societies and cultures in the world.
3. Students will describe ongoing reciprocal interactions among self, society, and the environment. Students should: Understand the

interdependent nature of the individual, family/social group, and society in shaping human behavior and determining quality of life.

4. Students will apply the knowledge base of the social and behavioral sciences to identify, describe, explain, and critically evaluate relevant issues, ethical dilemmas, and arguments. Students should: Articulate their role in a global context and develop an awareness and appreciation for diverse value systems in order to understand how to be good citizens who can critically examine and work toward quality of life within a framework of understanding and justice.

PHLS 2110. Foundations of Health Education

3 Credits (3)

Role and responsibility of the health educator with emphasis on small group dynamics, oral and written communication skills, building community coalitions and introduction to grant writing. Taught with PHLS 3210. Cannot receive credit for both PHLS 2110 and PHLS 3210.

Prerequisite: PHLS 1110G or consent of instructor.

Learning Outcomes

1. Define health, three levels of prevention, health education and health promotion, and describe the major determinants of health.
2. Describe the 7 major areas of responsibility, major competencies and sub-competencies of a professional health educator and the CHES's possible roles in various community health settings.
3. Describe and examine the historical context and development of the profession of health education.
4. Identify and critique major processes and practices of health education programming.
5. Describe the steps involved in conducting needs assessments, program and intervention planning, implementation, and program evaluation.
6. Identify, examine and describe elected health behavior change theories and models and explore possible applications in health education practice.
7. Describe and discuss the process of community mobilization and building of a community coalition.
8. Identify health issues and describe effective methods/strategies in health education advocacy.
9. Describe and discuss the future trends and issues in the professional preparation and practice of professional health educators. 1
10. Demonstrate effective and appropriate oral and written communication skills for health education professionals.

PHLS 2120. Essentials of Public Health

3 Credits (3)

The course will focus on principles and major areas of public health, including ecological and total personal concept of health care system, epidemiological approaches to disease prevention and control. Consent of Instructor required.

Learning Outcomes

1. Understand the sources of public health data, and how to interpret that information.
2. Access existing health related data.
3. Analyze health related data.
4. Identify populations for health education programs.
5. Incorporate data analysis and principles of community organization.
6. Interpret results from evaluation and research.
7. Infer implications from findings for future health-related activities.

8. Have a basic understanding of health topics faced by various populations.

PHLS 3110V. Human Sexuality

3 Credits (3)

Examination of human sexuality from a variety of perspectives: cultural, sociological, physiological and psychological. Issues examined from viewpoints such as gender, individual, family, and professional roles.

Learning Outcomes

1. Understand the cultural and historical inputs resulting in our current understanding of the human sexual experience.
2. Examine the early and modern researcher in the field of human sexuality, along with an overview of basic research skills.
3. Study gender roles and similarities and differences between men and women.
4. Examine male and female reproductive anatomy and the physiology of sexual arousal.
5. Identify the factors affecting love and attraction, and the development of relationships.
6. Discuss homophobia and the factors associated with negative attitudes toward homosexuality.
7. Identify and discuss current techniques of contraception along with fertility problems.
8. Discuss the sexual behavior of adults.
9. Examine the medical, relational, and stress factors related to sexual dysfunction. 1
10. Learn the facts and fallacies about sexually transmitted diseases. 1
11. Identify the continuum of behaviors related to paraphillias. 1
12. Examine sexual coercion and violence.

PHLS 3120V. Women's Health Issues

3 Credits (3)

A focus on the unique issues and problems that confront women today and how they affect the health of women. Crosslisted with: GNDR 381V. May be repeated up to 3 credits.

PHLS 3130V. Global Environmental Health Issues

3 Credits (3)

Introduction to global environmental health challenges in the 21st century with an emphasis on environmental problems as they affect public health and personal well-being.

Learning Outcomes

1. Discuss the major environmental health issues facing our global environment in the 21st century.
2. Discuss the status of our global environmental health.
3. Articulate basic concepts of environmental health and convey and understanding of their value and importance.
4. Discuss, define, and develop insight into the following terms and concepts as they relate to global environmental health: population dynamics, population control, the people-food predicament, impacts of growth on ecosystems, environmental disease, toxic substances, pests, pesticides, food quality, radiation, solid waste, and hazardous waste.
5. Specify common environmental hazards that pose risks to human health and safety.
6. Discuss global human population numbers and the impact on our global environmental health.
7. Describe federal and state regulatory programs, guidelines, and authorities that control environmental health issues.

8. Identify sources of reference research relevant to global environmental health.
9. Identify individual and human behaviors that foster or hinder the well-being of our global environmental health.

PHLS 3210. Foundations of Community Health Education

3 Credits (3)

This course introduces students to principles and practices of community health information, perspectives, and competencies necessary to promote health in various settings (e.g., community, school, workplace, and health care). The course explores concepts related to health and health education, including determinants of health, health equity, and various physical, mental, and environmental health conditions. The historical origins of the profession, the roles and responsibilities of community health educators, and the Certified Health Education Specialist competencies are examined. Equivalent to PHLS 2110 for prerequisite purposes.

Learning Outcomes

1. Define health, three levels of prevention, health education and health promotion, and describe the major determinants of health.
2. Describe the seven major areas of responsibility, major competencies and sub-competencies of a professional health educator and the CHES's possible roles in various community health settings.
3. Describe and examine the historical context and development of the profession of health education.
4. Identify and critique major processes and practices of health education programming.
5. Describe the steps involved in conducting needs assessment, program and intervention planning, implementation, and program evaluation.
6. Identify, examine and describe elected health behavior change theories and models and explore possible applications in health education practice.
7. Identify and describe governmental agency roles, and the ethical and economic dimensions of health education and promotion.
8. Identify health issues and describe effective methods/strategies in health education advocacy.
9. Describe and discuss the future trends and issues in the professional preparation and practice of professional health educators. 1
10. Demonstrate effective and appropriate oral and written communication skills for health education professionals.

PHLS 3220. Foundations of Public Health

3 Credits (3)

The course will focus on principles and major areas of public health, including ecological concepts of healthcare systems and epidemiological approaches to disease promotion and control. Equivalent to PHLS 2120 for prerequisites.

Learning Outcomes

1. Describe public health, including key terms, functions, and services.
2. Compare the differences between personal health and public health.
3. Describe analytical methods of public health, including basic principles of epidemiology and identify sources of statistics and data in public health.
4. Describe determinants of health from a global perspective, including environmental, social, cultural, behavioral, and biological factors.
5. Discuss concepts for prevention, detection, and control of infectious and chronic conditions.

6. Discuss the organization, financing, and delivery of medical and population-based US services with roles of quality, cost, access, and organizational structure in influencing population health.
7. Explain the most important health problems and issues facing our society.

PHLS 4130. Environmental Health

3 Credits (3)

Introduction to environmental health designed to address public health issues. Restricted to: PH,PHL majors.

Learning Outcomes

1. Define the major sources and types of environmental agents.
2. Discuss the transport and fate of these agents in the environment.
3. Identify the carriers or vectors that promote the transfer of these agents from the environment to the human.
4. Describe how these agents interact with biological systems and the mechanisms by which they exert adverse health effects.
5. Analyze public health problems using environmental health knowledge.
6. Evaluate and identify environmental health-related issues.

PHLS 4210. Methods of Community Health Education

3 Credits (3)

Responsibilities of health educators, analysis of social forces affecting health needs, application of wide range of health education methods and instructional media, and program implementation skills. Restricted to: Public Health majors.

Prerequisite: PHLS 3220 or PHLS 2120.

Learning Outcomes

1. Integrate two health education theories or models into community health education practice.
2. Identify two steps for conducting a training needs assessment.
3. Analyze training with different delivery methods.
4. Compare advocacy approaches for health issues.
5. Demonstrate methods for the preparation of materials to reach different audiences.

PHLS 4310. Biometrics and Health Research

3 Credits (3)

Critical analysis of community health research and related methodologies. Restricted to: Public Health majors.

Prerequisite: (MATH 1350G) or MATH 2350G or A ST 311.

Learning Outcomes

1. Compare and contrast a population versus a sample.
2. Explore data using appropriate graphs, charts, and tables.
3. Analyze data using descriptive statistics.
4. Formulate and test statistical hypotheses about population means and proportions.
5. Perform an ANOVA to compare multiple population means.
6. Compute and interpret the correlation between two continuous variables.
7. Distinguish between parametric and non-parametric methods.
8. Explain when to use non-parametric methods and why.

PHLS 4320. Epidemiology

3 Credits (3)

Epidemiologic approaches to disease prevention and control. Factors influencing health status. Restricted to: PHL majors.

Prerequisite: PHLS 3220 or PHLS 2120.

Learning Outcomes

1. Define key epidemiological terms and concepts, such as incidence, prevalence, morbidity, and mortality, and apply these concepts to analyze patterns and trends in disease occurrence and distribution.
2. Design and conduct basic epidemiological studies, including cohort, case-control, and cross-sectional studies, and interpret the results to assess associations between exposures and health outcomes.
3. Demonstrate proficiency in using statistical methods to analyze epidemiological data, including calculating measures of association (relative risk, odds ratio) and understanding their implications for public health research.
4. Critically evaluate epidemiological research articles, identify potential biases and limitations, and discuss the implications for public health practice and policy.

PHLS 4410. Administration of Health Programs

3 Credits (3)

Covers administrative responsibilities, organizational theory, strategic planning, and systems theory as applied to the administration of a variety of health programs. Restricted to: PHL majors.

Prerequisite: PHLS 3220, PHLS 2120, or consent of instructor.

Learning Outcomes

1. Compare types of public health leadership, motivation, and management skills needed for today's work environment.
2. Identify operational responsibilities, including processes for hiring, budgets, motivation, and performance management.
3. Discuss various systems thinking tools for strategic planning.
4. Develop systems planning strategies for a health program promoting collaborative efforts.
5. Compare the characteristics of the United States of America health system and health systems in other countries.

PHLS 4420. Health Program Planning

3 Credits (3)

Planning and development of community health education interventions for behavior change at the individual, family, social network levels of practice. Emphasis on applying program-planning models and designs into a grant-writing project. Restricted to: Public Health majors.

Prerequisite: PHLS 3210 or PHLS 2120 and PHLS 4430.

Learning Outcomes

1. Describe the foundational principles and history of health promotion and education, including the roles of planning in public health program development.
2. Conduct (and use data from) a comprehensive needs assessment to identify and plan to address health problems, risk factors, and priorities within a target population.
3. Apply health behavior theories and models, as well as a logic model or conceptual framework, to guide the planning process and design intervention strategies across individual, interpersonal, organizational, and community levels.
4. Discuss the roles of cultural competency and inclusivity in health programs, considering health literacy, social determinants, and community engagement.
5. Identify key stakeholders and build coalitions to support program planning, resource acquisition, and long-term sustainability.
6. Draft a written health program plan proposal integrating all components of the planning process, including budget and resource plans, timeline and implementation plans, staffing, and logistical considerations.

PHLS 4430. Theoretically-Based Interventions**3 Credits (3)**

Identifying and developing interventions to problematic health-related behaviors. Restricted to: Public Health majors.

Prerequisite: PHLS 3220 or PHLS 2120.

Learning Outcomes

1. Describe the foremost behavioral theories.
2. Identify the main concepts contained in each of the foremost behavioral theories.
3. Design health promotion programs based on behavioral theory.
4. Identify the use of behavioral theories in product marketing, social marketing, and public service announcements.
5. Identify the necessary links among theory, research, and health promotion practice.

PHLS 4440. Health Program Evaluation and Research**3 Credits (3)**

Covers the application of research and evaluation models for decision-making program and policy development of community health education interventions. Focus on the individual, family, and social network levels of practice.

Prerequisite: PHLS 4420.

Learning Outcomes

1. Discuss the concepts, language, methods, and applications of evaluation research.
2. Demonstrate the ability to search, review, and critically appraise evaluation research.
3. Develop a logic model for an intervention to guide evaluation.
4. Formulate clear and answerable research questions for evaluation.
5. Identify, modify, and/or develop appropriate measures of outcomes that are valid, reliable, and feasible.
6. Discuss ethical issues and potential bias in evaluation.
7. Describe how program evaluation results can be used to influence or impact policy.

PHLS 4510. Public Health Seminar in Community Health Education**1 Credit (1)**

Critical analysis of issues in CHE and health care. Readings focus on social, economic, cultural, and political issues as they affect the profession and practice. Emphasis on future, local, national, and international health trends. Restricted to: Public Health majors. May be repeated up to 1 credit.

Prerequisite: PHLS 4320, PHLS 4420, and PHLS 4430 or consent of instructor.

PHLS 4515. Approaches to Community-Focused Public Health**3 Credits (3)**

Introductory issues-focused course offering reading, writing, and active learning opportunities (including volunteering). Designed to challenge students toward innovative directions in community-focused public health. Select theories and professional practice areas will be emphasized, and students will practice public-friendly strategies relevant for our complex field.

Learning Outcomes

1. Articulate why, and how, a community problem of concern to them should be viewed as a public health issue (including applying a public health theory or model).
2. Discuss at least one way community-focused public health professionals approach identifying and working on public health issues.

3. Identify credible resources, including peer-reviewed sources as well as governmental and organizational reports and websites, and accurately and effectively use and share information from them with a variety of audiences.

PHLS 4610. Health Disparities: Determinants and Interventions**3 Credits (3)**

Investigates: descriptions of health disparities and measurement issues; physical environmental factors, behavioral and emotional variables; impact of aging of the populations, increased racial and ethnic diversity, and technological developments; intervention strategies and evaluation results.

Learning Outcomes

1. Examine the impact of structural racism on health in the United States of America.
2. Identify populations who have systematically experienced greater obstacles to health based on their race or ethnicity, religion, socioeconomic status, gender, age, mental health, cognitive, sensory, or physical disability, sexual orientation or gender identity, geographic location, or other characteristics historically linked to discrimination or exclusion in the United States of America.
3. Identify social and structural determinants of health that influence health and health equity.
4. Examine the role that public health professionals can play in advancing health equity.
5. Examine social and structural barriers to health care access and utilization.
6. Explain cultural competence, cultural humility, cultural safety, and structural competence.
7. Discuss research and program designs in health equity research and practice.
8. Examine the role of social determinants of health in achieving health equity.
9. Advocate for policies that advance health equity.

PHLS 4620V. Cross-Cultural Aspects of Health**3 Credits (3)**

An examination of health practices from a variety of cultural perspectives: communication, observation, research, and assimilation. Issues to be addressed will be examined from a number of viewpoints, such as individual, family, community, and professional roles. May be repeated up to 3 credits.

PHLS 4630. International Health Problems**3 Credits (3)**

Comparison of domestic health programs and problems with those in other parts of the world; emphasis on political parameters and delivery processes. Additional attention is focused on the health issues of the U.S.-Mexico border. Taught with PHLS 5630.

Learning Outcomes

1. Identify many of the current authoritative sources of information about global health, as a potential aid for future educational, training, and research endeavors.
2. Cite examples of specific issues and case studies in global health.
3. Identify key features of global health.
4. Explain the complexities of global health issues.
5. Explain intervention strategies being used to attack problems in global health.

PHLS 4640. Rural Health Issues**3 Credits (3)**

Comprehensive overview of rural health services with Southwestern United States and New Mexico focus. Taught with PHLS 5640.

Learning Outcomes

1. Compare and contrast the major perspectives on rural health.
2. Analyze the social, biological, psychological, and societal factors affecting the health of rural residents.
3. Critically analyze contemporary controversies, such as environmental contamination.
4. Evaluate current empirical research in understanding rural health challenges and resources.

PHLS 4650. Coping with Loss and Grief: A Cross-Cultural Perspective
3 Credits (3)

A cross-cultural perspective to death, loss and grief. Hospice philosophy of caring for the dying will be included. Taught with PHLS 5650.

Learning Outcomes

1. Compare and contrast the major theories in thanatology.
2. Analyze the biological, psychological, social, and societal factors affecting the dying process and attitudes towards death and dying.
3. Critically analyze contemporary controversies, for example, physician-assisted suicide.
4. Evaluate current empirical research in thanatology.

PHLS 4660. U.S.-Mexico Border Health Issues
3 Credits (3)

Interdisciplinary analysis of the impact of living conditions and health issues of communities along the U.S.-Mexico border and of the strategies and initiatives to address these issues. Problem-based learning, case analysis, lecture, guest speakers, computer based instruction, and field trips. Taught with PHLS 5660.

Learning Outcomes

1. Analyze the social, economic, cultural, and environmental determinants of health affecting communities along the U.S.-Mexico border using an interdisciplinary framework.
2. Evaluate public health strategies, binational policies, and community-based initiatives aimed at addressing health disparities and improving living conditions in border regions.
3. Develop evidence-informed recommendations for collaborative interventions that incorporate diverse stakeholder perspectives and respect cultural and contextual factors unique to the U.S.-Mexico border.

PHLS 4670. American Indian Health
3 Credits (3)

Critical health issues facing American Indians in the contemporary world.

Learning Outcomes

1. Compare and contrast the major perspectives on Native American health.
2. Analyze the social, biological, psychological, and societal factors affecting the health of Indigenous populations.
3. Critically analyze contemporary controversies, e.g., governmental oversight of sovereign nations.
4. Evaluate current empirical research in understanding Native American health status.

PHLS 4680. Hispanic Health Issues
3 Credits (3)

The course will familiarize public health students with social determinants of health contributing to Hispanic health disparities and the impact that health and immigration policies have on Hispanics' access

to insurance and healthcare utilization, with a spotlight on different Hispanic subgroups. Recommendations for policy and research are also discussed.

Learning Outcomes

1. Explain the historical, ancestral, and national origins contributing to the diversity of the U.S. Hispanic population.
2. Assess obstacles researchers have encountered in explaining the Hispanic Epidemiological Paradox and the ethics surrounding them.
3. Compare and contrast health care coverage and access to health care in Hispanics relative to other racial/ethnic groups.
4. Describe factors contributing to health disparities in chronic and infectious diseases among Hispanics.
5. Explain how U.S. health policies negatively impact Hispanics.

PHLS 4710. Introduction to Gerontology
3 Credits (3)

Social, psychological, and physiological aspects of aging, with an interdisciplinary emphasis on health promotion. Demographic characteristics of the aging population. Taught with PHLS 5710. May be repeated up to 3 credits.

PHLS 4720. Health Promotion for the Older Adult
3 Credits (3)

Common health concerns and lifestyle issues relevant to older adults. Facts about the content area, health behaviors, and practices to promote health and prevent disease; program development strategies applicable to a variety of settings. Taught with PHLS 5720. May be repeated up to 3 credits.

PHLS 4730. Adulthood and Aging
3 Credits (3)

Normal transitions in later life; those occurring from 40 years of age to the end of life are discussed. Changes in interpersonal relationships and adaptations commonly made by individuals and meeting those alterations are presented through research findings, case studies, and autobiographies. Taught with PHLS 5730. May be repeated up to 3 credits.

PHLS 4740. Aging and Public Policy
3 Credits (3)

Exploration of public policies relating to elders, historical development, current status and trends in public policy for this age group. Impact of political behavior of elders on policy making and implementing processes. May be repeated up to 3 credits.

PHLS 4810. Infectious and Noninfectious Disease Prevention
3 Credits (3)

History, etiology, and prevention of diseases affecting humans. Taught with PHLS 5810.

Prerequisite: PHLS 3220, PHLS 2120, PHLS 4320, or consent of instructor.

Learning Outcomes

1. Describe historical context of disease and health.
2. Identify the role of public health, past and present, in the control of communicable and chronic disease.
3. Identify and evaluate the characteristics of major chronic and communicable diseases.
4. Define, classify, and describe the etiology, incidence, and prevalence of major diseases.
5. Describe risk factors related to gender, race, ethnicity, and lifestyle for major diseases.
6. Identify the major diagnostic and treatment protocols for common diseases of humans.

7. Assess psychosocial influences upon diseases including diet, physical activity, rest, and related lifestyle variables.
8. Determine the impact of major diseases on the quality of life for the patient family.

PHLS 4820. Health Informatics**3 Credits (3)**

The application of technology to engage communities and individuals in behavioral and environmental change processes. The course will focus on the use of technology to describe the magnitude of health problems and their sources; analyze risk factors; identify community strengths from which strategies may be defined and tools created to intervene, prevent problems, and promote health and well-being; and continuously evaluate, refine, and implement what works. Taught with PHLS 5820.

Restricted to: Restricted to Public Health majors.

Prerequisite: PHLS 3220 or PHLS 2120 or consent of instructor.

Learning Outcomes

1. Identify and list the concepts of informatics and its domains.
2. Explain how major theories and models apply to the adoption and use of health information systems.
3. Use project management tools to plan and monitor progress on an informatics project.
4. Describe basic ethical, legal, and policy-related issues in informatics.
5. Develop approaches to communicate and advocate for the use of technologies to address public health issues.

PHLS 4996. Special Topics**3 Credits (3)**

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 12 credits.

Learning Outcomes

1. Varies

PHLS 4997. Independent Study**1-6 Credits (1-6)**

Individual studies with prior approval of department head. May be repeated up to 12 credits.

Learning Outcomes

1. Varies

PHLS 4998. Applied Practice Experience**1-6 Credits (1-6)**

Senior-standing BPH majors will integrate and apply various concepts related to actual public health practice. Experience aims to prepare students to integrate CEPH foundational competencies and responsibilities of community health education specialists. Approximately 42 hours at a field agency are required per credit hour. Restricted to: BPH majors. May be repeated up to 6 credits.

Prerequisite: PHLS 4210 or concurrent enrollment.

Learning Outcomes

1. Varies.

PHLS 5110. Community and Psychosocial Aspects of Public Health**3 Credits (3)**

This course examines the major social and behavioral theories that seek to explain and predict human behaviors. Such theories not only serve to explain health behavior but also serve as guidelines for the development of health promotion and public health programs and interventions and their evaluation. The social determinants of health and health disparities, theoretical models of health behavior change, and intervention/behavior change strategies and tools are explored.

Learning Outcomes

1. Discuss behavioral, social and cultural factors associated with health and illness.
2. Describe major behavioral theories and models.
3. Identify the main concepts/constructs/components of each of the major behavioral theories and models.
4. Design or adapt a public health program applying one of the major behavioral theories/models.
5. Discuss the necessary links of theory public health practice and research.

PHLS 5120. Biostatistical Applications in Public Health**3 Credits (3)**

Quantitative methods for public health students including tabular, graphical, and numerical descriptive methods, random sampling, principles of statistical inference, confidence intervals, statistical tests of hypothesis through analysis of variance and regression. Restricted to MPH majors.

Learning Outcomes

1. Prepare data for analysis.
2. Analyze data using descriptive statistical methods.
3. Analyze data using inferential statistical methods (t-tests, ANOVA, regression).
4. Formulate and test statistical hypotheses about population means and proportions.
5. Explain how findings relate to hypotheses or research questions based on statistical results.
6. Use statistical results to draw conclusions.

PHLS 5130. Epidemiological Approaches to Disease Control and Prevention**3 Credits (3)**

Basic epidemiological principles applicable to infectious and noninfectious disease. Descriptive techniques and analytic designs, and application of statistical and epidemiological investigation methods included. Restricted to MPH majors.

Learning Outcomes

1. Define basic epidemiologic (EPI) terms used in the measurement of health and disease.
2. Summarize the modes of disease transmission.
3. Calculate and restate basic measures of disease frequency, association, and potential impact.
4. Distinguish between the major sources of epi data.
5. Describe patterns of disease and disease determinants by person, place, and time.
6. Compare the basic PH research designs, their strengths and limitations, including potential sources of bias, and inferences that can be drawn from each.
7. Restate disease causation concepts and the meaning of statistical significance in practice.
8. Explain epi principles of screening for disease and risk factors.
9. Describe basic ethical and legal principles involved in the study of human subjects.

PHLS 5140. Health Services System: Administration and Organization**3 Credits (3)**

This course focuses on using a systems approach to identify and analyze factors and interrelationships that influence the operation of health services organizations. Specific attention is to administrative structures

and operations, finance and quality among public health departments, hospitals, multi-institutional systems, integrated health systems and strategic alliances.

Learning Outcomes

1. Identify the main components of the organization for health care delivery and health care system in the U.S.
2. Compare health care systems in the U.S. and other developed countries.
3. Discuss resources and the principles of resources management in health care delivery.
4. Apply essential management functions (planning, organizing, staffing, leading, and controlling) to health services organizations.
5. Apply leadership and motivation concepts to the management of health services organizations.
6. Apply the principles and models of decision-making, communication, and managing change to address organizational challenges.
7. Demonstrate the knowledge and skills inherent in interprofessional work
8. Discuss how systems thinking works for healthcare delivery systems.

PHLS 5150. Environmental Public Health Issues

3 Credits (3)

This graduate-level course is primarily designed for Master of Public Health (MPH) students. It aims to provide a comprehensive overview of key areas within environmental health as a public health discipline. The course is intended to enhance your understanding of how environmental issues impact your role as a public health practitioner. Restricted to MPH majors.

Learning Outcomes

1. Define and discuss the history of environmental health.
2. Gain a basic knowledge of science that is fundamental to understanding environmental health issues.
3. Discuss the association between population growth and dissemination of environmental pollutants.
4. Describe methods used in toxicology to assess environmental exposures and hazards.
5. Identify chemical, physical, and microbial agents that originate in the environment and can impact human health.
6. Identify challenges and propose potential ways to deal with them in environmental health practices, with particular attention to issues of environmental justice and equity.

PHLS 5160. Public Health Policy Analysis

3 Credits (3)

This graduate-level course presents the key aspects of the policymaking process in the United States. The course introduces students to the steps necessary to formulate, implement, and modify healthcare policies. Economic, cultural, institutional, and social factors influencing policymaking will be explored. The evolution of federal health policy, including major healthcare reform efforts, will be presented. Students will be provided with the necessary tools to comprehend and explain policymaking. The class will primarily focus on federal-level health policymaking, but several examples of state-level policies will be discussed.

Learning Outcomes

1. Define and describe key health policy concepts: health, health determinants, public policy, and health policy.
2. Appreciate the significance of the Patient Protection and Affordable Care Act (ACA) and other major healthcare reform efforts and laws.

3. Describe the Longest Conceptual Model of the Public Policymaking Process and its key components of policy formulation, implementation, and modification.
4. Articulate the roles played by legislators, interest groups, researchers, and citizens in shaping and influencing health policy.
5. Summarize the roles of the three levels of government in making health policy.
6. Identify major health policy issues currently facing U.S. healthcare.

PHLS 5170. Qualitative Methods in Public Health

3 Credits (3)

This course introduces students to the principles and practices of qualitative research in public health. It emphasizes the value of qualitative inquiry for understanding complex health behaviors, cultural contexts, and social determinants of health. The course covers key methodologies including interviews, focus groups, ethnography, and content analysis. Students will develop skills in qualitative research design, data collection, coding, thematic analysis, and ethical considerations. Students will learn to apply qualitative methods to address public health challenges and to complement quantitative approaches in mixed-methods research.

Learning Outcomes

1. Design qualitative research studies to explore public health issues, including the development of research questions, selection of appropriate methods, and ethical considerations.
2. Conduct qualitative data collection using techniques such as in-depth interviews, focus groups, and participant observation, adhering to principles of cultural competence and research ethics.
3. Analyze qualitative data through coding and thematic analysis, utilizing software tools where appropriate, to identify patterns and derive meaningful insights. Critically evaluate qualitative research for methodological rigor, credibility, and relevance to public health practice and policy.
4. Critically evaluate qualitative research for methodological rigor, credibility, and relevance to public health practice and policy.
5. Communicate qualitative research findings effectively in written and oral formats to diverse audiences, integrating findings into public health strategies and interventions.

PHLS 5210. Foundations & Techniques of Public Health Education

3 Credits (3)

Social, behavioral, and educational aspects of disease prevention and health promotion. Includes history and theoretical basis of health education. May be repeated up to 3 credits.

Learning Outcomes

1. Explain, demonstrate, and apply health communication, education, and promotion knowledge and skill competencies.
2. Discuss the means by which structural biases, social inequities, and other social determinants of health undermine health and create challenges to achieving health equity at interpersonal, organizational, community, societal, cultural, and legal and policy levels.
3. Explain and demonstrate ways in which health communication, education, and promotion techniques can be utilized to increase health equity and reduce health disparities.
4. Utilize health behavior change theories to develop health communication, education and promotion materials, processes, and goals.
5. Identify best practices and evidence-based strategies and programs for use in health communication, education, and promotion.

PHLS 5220. Techniques of Health Communication/Education**3 Credits (3)**

Application of a wide range of communication and education theories/methods, including program planning and evaluation, in public health programming. Restricted to: MPH majors. May be repeated up to 3 credits.

Prerequisite: PHLS 5110.

PHLS 5230. Community Organization in Public Health**3 Credits (3)**

Strategies for identifying and involving community leaders, community needs assessment, small area analysis and planning, and community-level development strategies. Restricted to: MPH majors. May be repeated up to 3 credits.

Prerequisite: PHLS 5110.

PHLS 5240. Health Program Planning**3 Credits (3)**

Covers process of successful public health education program planning and grant writing. Restricted to: MPH majors.

Learning Outcomes

1. Explain, demonstrate, and apply health program planning knowledge and skill competencies.
2. Explain, demonstrate, and design strategies and multi-level planned interventions.
3. Explain, demonstrate, and apply health program proposal writing and presentation knowledge and skills.

PHLS 5250. Evaluative Approaches in Public Health**3 Credits (3)**

Survey and analyses of health testing and evaluation procedures, uses and limitations of knowledge and attitude tests, behavioral inventories, check lists, questionnaires, interviews, and other techniques. Restricted to: MPH majors.

Learning Outcomes

1. Understand the foundations of program evaluation.
2. Identify multiple program evaluation methods used to assess public health programs.
3. Examine the appropriate use of each evaluation design (process, outcome evaluation, impact monitoring) in relation to evaluating public health programs.
4. Design program logic models for various public health programs.
5. Gain knowledge related to the selection, design, and implementation of quantitative and qualitative research methods in program evaluation.
6. Understand practical issues in designing and implementing health program evaluation.
7. Assess challenges inherent to program evaluation and be able to describe strategies for navigating these challenges.
8. Explore the roles of program evaluators operating at the community and research levels and as external and internal evaluators.

PHLS 5260. Research and Resources in Community Health**3 Credits (3)**

This course introduces the fundamentals of and examines the necessary concepts and skills required for research design, implementation, data analysis, statistical testing, and results reporting. The course explores a variety of approaches to ethical issues in conducting research. Restricted to MPH majors.

Learning Outcomes

1. Understand and critique research as described both in technical reports for example, professional journals and in the popular media for example, newspapers, magazines, TV.
2. Identify and critically review quantitative health science research study designs.
3. Discuss problems associated with methodology and logistics of conducting research.
4. Develop the essential elements for a research plan.
5. Plan, design, and carry out a variety of different research projects.
6. Prepare and present a professional quality research plan.
7. Develop the essential elements for a research plan.

PHLS 5310. Principles of Health Program Management**3 Credits (3)**

This course prepares the student to assume a supervisory role in the management of health and human services programs. The course will cover essential management functions such as leadership, organizational assessment, planning, decision-making, organizational structure, budgeting, marketing, and human resource management.

Learning Outcomes

1. Discuss organizational and human resources management in public health activities.
2. Demonstrate the knowledge and skills inherent in budgeting.
3. Apply leadership and motivation concepts to the management of public health activities.
4. Apply the concepts, principles, and theories in management to public health settings.

PHLS 5320. Health Services Organization and Delivery**3 Credits (3)**

This course includes the framework of the United States healthcare system; organization and administration of health services; alternate ways of organizing and financing health systems; the roles of the government and free market on health care services; and the barriers to health services delivery. May be repeated up to 3 credits.

PHLS 5330. Public Health Finance and Budget Management**3 Credits (3)**

Introduces health care accounting and finance to non-financial students. Students are exposed to the financial structure of health care organizations and the environment within which they operate. Instruction also introduces the use of accounting and financial information in investor-owned and not-for-profit organizations in the health care industry. Topics include understanding the creation and interpretation of financial statements, financial accounting and reporting requirements, financial analysis, budgeting, and resource allocation.

Learning Outcomes

1. Discuss the healthcare environment in which health services providers operate.
2. Analyze basic financial statements: balance sheet, income statement, statement of changes in equity, and statement of cash flows.
3. Assess the financial condition of health services organizations based on the analysis of their financial statements.
4. Apply financial concepts, principles, and models to financial analyses for managerial accounting.
5. Demonstrate familiarity with budgeting processes and assess the financial performance of the organization using variance analysis.

- Evaluate the financing and capital investment decisions of the organization.

PHLS 5340. Public Health Law and Ethics

3 Credits (3)

This course examines major legal and ethical concepts and their impact on public health policy and practice. The course examines governmental authority, at various jurisdictional levels, to improve public health. This course will focus on public health law in the United States. Restricted to: MPH majors.

Learning Outcomes

- Discuss legal and ethical concepts underlying (or related to) public health policy and practice.
- Articulate ethics-related ideas, from documents such as the American Public Health Association's Public Health Code of Ethics, as they apply to contemporary public health issues.
- Examine national, regional, state, and local government entities in terms of their authority to use legal and ethical concepts and foundations to improve public health.
- Design or present a case study to support practitioners' or the public's understanding of the legal and ethical underpinnings of public health policy and practice.

PHLS 5410. Human-Animal Interactions in Environmental Contexts

3 Credits (3)

This MPH course will cover foundational concepts of human-animal interactions as they occur in a wide variety of environmental contexts and biomes. Modules of the course will include foci on zoonotic diseases, the impacts of invasive species, climatic shifts, emergent diseases, and companion animals.

Learning Outcomes

- Describe the One Health approach to global health and the health of humans, animals, environments, and biomes.
- Recognize the role of human impacts on environments and biomes as they impact human, animal, and environmental health.
- Be attuned to the global patterning of increased contact between wild animals and humans and the implications for emergent diseases.
- Analyze how human-animal interactions positively and negatively impact the health of humans, animals, and environments with emphases on wild, domesticated, companion, and service animals.
- Make a case for the importance of addressing human-animal interactions, the global climate crisis, and environmental degradation and enhancements as part of a comprehensive public health strategy.
- Demonstrate how transdisciplinary efforts, policies, and programs can be integrated to address current and emergent public health problems.

PHLS 5420. Global Health: One Health, Climate Change, Human Migration

3 Credits (3)

This MPH course will cover foundational concepts of One Health, impacts of the climate crisis on human, animal, and environmental health, the impacts of global human and animal migration and displacement on global health, social and behavioral science theories, and evidence-based prevention and intervention programs aimed at promoting health of individuals, groups, communities and populations.

Learning Outcomes

- Describe the One Health approach to global health and the health of humans, animals, environments, and biomes.

- Recognize the role of social and behavioral factors and the natural history of animals in shaping global mortality and morbidity.
- Be attuned to the global patterning of public health problems and their implications for solutions.
- Analyze how human-animal interactions positively and negatively impact the health of humans, animals, and environments.
- Make a case for the importance of addressing human-animal interactions, the global climate crisis, and environmental degradation and enhancements as part of a comprehensive public health strategy.
- Demonstrate how transdisciplinary efforts, policies, and programs can be integrated to address current and emergent public health problems.

PHLS 5610. Health Disparities: Determinants and Interventions

3 Credits (3)

Investigates: descriptions of health disparities and measurement issues; physical environmental factors, behavioral and emotional variables; impact of aging of the populations, increased racial and ethnic diversity, and technological developments; intervention strategies and evaluation results. Taught with: PHLS 4610.

Learning Outcomes

- Examine the impact of structural racism on health in the United States of America.
- Identify populations who have systematically experienced greater obstacles to health based on their race or ethnicity, religion, socioeconomic status, gender, age, mental health, cognitive, sensory, or physical disability, sexual orientation or gender identity, geographic location, or other characteristics historically linked to discrimination or exclusion in the United States of America.
- Identify social and structural determinants of health that influence health and health equity.
- Examine the role that public health professionals can play in advancing health equity.
- Examine social and structural barriers to health care access and utilization.
- Explain cultural competence, cultural humility, cultural safety, and structural competence.
- Discuss research and program designs in health equity research and practice.
- Examine the role of social determinants of health in achieving health equity.
- Advocate for policies that advance health equity.

PHLS 5620. Cross-Cultural Aspects of Health

3 Credits (3)

An examination of health practices from a variety of cultural perspectives; communication, observation, research, and assimilation. Issues to be addressed will be examined from a number of viewpoints, such as individual, family, community, and professional roles. May be repeated up to 3 credits.

PHLS 5630. International Health Problems

3 Credits (3)

Comparison of domestic health programs and problems with those in other parts of the world; emphasis on political parameters and delivery processes. Additional attention is focused on the health issues of the U.S.-Mexico border. Taught with: PHLS 4630.

Learning Outcomes

1. Identify many of the current authoritative sources of information about global health, as a potential aid for future educational, training, and research endeavors.
2. Cite examples of specific issues and case studies in global health.
3. Identify key features of global health.
4. Explain the complexities of global health issues.
5. Explain intervention strategies being used to attack problems in global health.

**PHLS 5635. International Health Practicum
1-3 Credits (1-3)**

Intensive examination of health practices and beliefs from a cultural perspective. Focus on health structure, index of diseases, morbidity, mortality and epidemiological approaches to planning. Required travel (personal travel, lodging, and related expenses are extra). May be repeated up to 3 credits.

**PHLS 5640. Rural Health Issues
3 Credits (3)**

Comprehensive overview of rural health services with southwestern United States and New Mexico focus. Taught with: PHLS 4640.

Learning Outcomes

1. Compare and contrast the major perspectives on rural health.
2. Analyze the social, biological, psychological, and societal factors affecting the health of rural residents.
3. Critically analyze contemporary controversies, for example, environmental contamination.
4. Evaluate current empirical research in understanding rural health challenges and resources.

**PHLS 5650. Coping with Loss and Grief: A Cross-Cultural Perspective
3 Credits (3)**

A cross-cultural perspective to death, loss and grief. Hospice philosophy of caring for the dying will be included. Taught with: PHLS 4650.

Learning Outcomes

1. Compare and contrast the major theories in thanatology.
2. Analyze the biological, psychological, social, and societal factors affecting the dying process and attitudes towards death and dying.
3. Critically analyze contemporary controversies, physician-assisted suicide.
4. Evaluate current empirical research in thanatology.

**PHLS 5660. U.S.-Mexico Border Health Issues
3 Credits (3)**

Interdisciplinary analysis of the impact of living conditions and health issues of communities along the U.S.-Mexico border and of the strategies and initiatives to address these issues. Problem-based learning, case analysis, lecture, guest speakers, computer based instruction, and field trips. Taught with: PHLS 4660.

Learning Outcomes

1. Analyze the social, economic, cultural, and environmental determinants of health affecting communities along the U.S.–Mexico border using an interdisciplinary framework.
2. Evaluate public health strategies, binational policies, and community-based initiatives aimed at addressing health disparities and improving living conditions in border regions.
3. Develop evidence-informed recommendations for collaborative interventions that incorporate diverse stakeholder perspectives and

respect cultural and contextual factors unique to the U.S.–Mexico border.

**PHLS 5670. American Indian Health
3 Credits (3)**

Critical health issues facing American Indians in the contemporary world. May be repeated up to 3 credits.

**PHLS 5680. Hispanic Health Issues
3 Credits (3)**

The course will familiarize public health students with social determinants of health contributing to Hispanic health disparities and the impact that health and immigration policy has on Hispanics' access to insurance and health care utilization, with a spotlight on different Hispanic subgroups. Recommendations for policy and research are also discussed. Taught with PHLS 4680.

Learning Outcomes

1. Explain the historical, ancestral, and national origins contributing to the diversity of the U.S. Hispanic population.
2. Assess obstacles researchers have encountered in explaining the Hispanic Epidemiological Paradox and the ethics surrounding them.
3. Compare and contrast health care coverage and access to health care in Hispanics relative to other racial and ethnic groups.
4. Describe factors contributing to health disparities in chronic and infectious diseases among Hispanics.
5. Explain how U.S. health policies negatively impact Hispanics.

**PHLS 5710. Introduction to Gerontology
3 Credits (3)**

Social, psychological, and physiological aspects of aging with an interdisciplinary emphasis on health promotion. Demographic characteristics of the aging population. May be repeated up to 3 credits.

**PHLS 5720. Health Promotion for the Older Adult
3 Credits (3)**

Common health concerns and lifestyle issues relevant to older adults. Facts about the content area, health behaviors, and practices to promote health and prevent disease; program development strategies applicable to a variety of settings. May be repeated up to 3 credits.

**PHLS 5730. Adulthood and Aging
3 Credits (3)**

Normal transitions in later life; those occurring from 40 years of age to the end of life are discussed. Changes in interpersonal relationships and adaptations commonly made by individuals and meeting those alterations are presented through research findings, case studies, and autobiographies. May be repeated up to 3 credits.

**PHLS 5810. Infectious and Noninfectious Disease Prevention
3 Credits (3)**

History, etiology, and prevention of diseases affecting humans. Taught with PHLS 4810.

Prerequisite: PHLS 3220, PHLS 2120, PHLS 4320, or Consent of Instructor.

Learning Outcomes

1. Describe historical context of disease and health.
2. Identify the role of public health, past and present, in the control of communicable and chronic disease.
3. Identify and evaluate the characteristics of major chronic and communicable diseases.
4. Define, classify, and describe the etiology, incidence, and prevalence of major diseases.

5. Describe risk factors related to gender, race, ethnicity, and lifestyle for major diseases.
6. Identify the major diagnostic and treatment protocols for common diseases of humans.
7. Assess psychosocial influences upon diseases including diet, physical activity, rest, and related lifestyle variables.
8. Determine the impact of major diseases on the quality of life for the patient family.

PHLS 5820. Health Informatics

3 Credits (3)

The application of technology to engage communities and individuals in behavioral and environmental change processes. The course will focus on the use of technology to describe the magnitude of health problems and their sources; analyze risk factors; identify community strengths from which strategies may be defined and tools created to intervene, prevent problems, and promote health and well-being; and continuously evaluate, refine, and implement what works.

Learning Outcomes

1. Identify and list the concepts of informatics and its domains.
2. Explain how major theories and models apply to the adoption and use of health information systems.
3. Use project management tools to plan and monitor progress on an informatics project.
4. Describe basic ethical, legal, and policy-related issues in informatics.
5. Develop approaches to communicate and advocate for the use of technologies to address public health issues.

PHLS 5830. Public Health Preparedness and Response

3 Credits (3)

This course is designed to teach students about the role of public health in emergency preparedness and response. It focuses on the nature of public emergencies as well as the role various sectors have in responding to them. One purpose of this online course is to introduce students to the basics of disaster preparedness and responding to disasters, and to build a base for further development in responder training. The course provides training and resources for a basic understanding of the Incident Command System (ICS) and National Incident Management System (NIMS). May be repeated up to 3 credits.

PHLS 5995. Integrative Learning Experience

1-3 Credits (1-3)

Integrative Learning Experience (ILE) is the culminating experience for MPH students. The course is designed to integrate and apply public health knowledge acquired across the PHLS curriculum through a practice-based or policy-oriented project. Under the supervision of a faculty advisor, students will develop a high-quality written product and present their findings in a public or semi-public forum. The ILE requires students to demonstrate synthesis of at least three CEPH Foundational Competencies and one Concentration-Specific Competency.

Learning Outcomes

1. Synthesize and apply CEPH Foundational and Concentration-Specific Competencies to address a public health problem.
2. Apply evidence-based reasoning and appropriate methodologies to solve a practice- or policy-based public health issue.
3. Produce a professional-quality written deliverable suitable for a public health agency, policymaker, or stakeholder group.
4. Demonstrate effective oral communication in a public or semi-public presentation of project findings.

5. Engage in ethical, professional collaboration with academic and/or community partners throughout the project process.

PHLS 5996. Special Topics

3 Credits (3)

Specific subjects to be announced in the Schedule of Classes. Restricted to: MPH majors. May be repeated up to 12 credits.

Learning Outcomes

1. Varies

PHLS 5997. Independent Study

1-6 Credits (1-6)

Individual studies with prior approval of department head. Consent of Instructor required. May be repeated up to 6 credits.

Learning Outcomes

1. Varies

PHLS 5998. Applied Practice Experience

1-4 Credits (1-4)

Student will work in a public health setting under the supervision of an experienced public health professional and will use acquired knowledge and skills to conduct a project which addresses a specific public health problem or program need. Projects are agreed upon by the student and faculty. Consent of the instructor is required. Restricted to MPH majors.

Learning Outcomes

1. Varies.

PHLS 5999. Master's Thesis

1-6 Credits (1-6)

Minimum of 4 credits required but may be repeated for a maximum of 6 credits. May be repeated up to 6 credits.

Learning Outcomes

1. Varies