PUBLIC HEALTH (H)

Additional public health courses can be found under HHS.

H 100, INTRODUCTION TO PUBLIC HEALTH, 4 Credits
A basic overview of public health. Uses a mix of lectures, guest speakers, classroom activities and homework to help students understand the role of public health in eliminating health disparities, understanding epidemics, and setting policy.

Equivalent to: H 100H
Available via Ecampus

H 100H, INTRODUCTION TO PUBLIC HEALTH, 4 Credits
A basic overview of public health. Uses a mix of lectures, guest speakers, classroom activities and homework to help students understand the role of public health in eliminating health disparities, understanding epidemics, and setting policy.

Attributes: HNRS – Honors Course Designator
Equivalent to: H 100

H 199, SPECIAL STUDIES, 1-16 Credits
This course is repeatable for 16 credits.

H 201, RESEARCH AND SCHOLARSHIP, 1-16 Credits
This course is repeatable for 16 credits.
Available via Ecampus

H 206, PROJECTS, 1-16 Credits
This course is repeatable for 16 credits.
Available via Ecampus

H 210, *INTRODUCTION TO THE HEALTH CARE SYSTEM, 3 Credits
Provides tools to understand and critically assess the health care delivery system, its components, and the challenges created by its structure. The health care system will be considered from the perspective of several main players [e.g., patients, hospitals, doctors, health plans]. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst
Available via Ecampus

H 220, INTRODUCTION TO HEALTH DATA ANALYSIS, 3 Credits
Introduction to the application of biostatistics and probability to the health sciences. Topics include quantitative analysis and inference, statistical methods in the biosciences, and quantitative study to evaluate and control health problems.
Recommended: MTH 105 or MTH 111 or higher mathematics.
Available via Ecampus

H 225, *SOCIAL AND INDIVIDUAL HEALTH DETERMINANTS, 4 Credits
Overview of the macro (social/system/environmental) and micro (individual) contributors to premature disease, disability and population health. Selected behavioral theories supporting health risks and strategies for the prevention of premature disease/disability and the promotion of health. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst
Available via Ecampus

H 250, INTRODUCTION TO HEALTH CARE MANAGEMENT, 3 Credits
Participants will learn key principles, practices and personalities of health care management. The content is broadly applicable to health care enterprises of every kind: public health organizations, physician practices and clinics, hospitals and health systems, agencies and service organizations, for-profit firms, not-for-profit enterprises, etc.
Prerequisite: H 210 (may be taken concurrently) with C- or better
Available via Ecampus

H 309, PRACTICUM IN HEALTH CARE SERVICES, 3-6 Credits
Supervised work experience in a health care service setting or health-related agency or program. Weekly progress reports and post-experience summary report and evaluation will be expected. Preplanned with instructor approval. Open to health care administration majors. Graded P/N.
This course is repeatable for 12 credits.

H 310, HEALTH FIELD EXPERIENCES, 3-6 Credits
Introductory field experience in a health or health-related worksite.
Graded P/N.
Prerequisite: H 210 with C- or better
This course is repeatable for 12 credits.
Available via Ecampus

H 312, HIV/AIDS AND STIS IN MODERN SOCIETY, 3 Credits
Fundamental principles relating to etiology, nature, prevention, and control of AIDS and other sexually transmitted diseases in contemporary society; emphasis on social, psychological, legal, economic, and ethical issues surrounding these diseases.
Available via Ecampus

H 319, INTRODUCTION TO HEALTH POLICY, 3 Credits
Describe the policy development process, including problem conceptualization, agenda setting, role of interest groups and public opinion, analysis of alternatives and selection of policy alternative.
Prerequisite: H 210 with C- or better
Available via Ecampus
H 320, INTRODUCTION TO HUMAN DISEASE, 3 Credits
Fundamental principles relating to etiology, nature, prevention, and control of communicable and noncommunicable diseases in human populations. Special emphasis on disease prevention and health promotion in the high risk diseases of modern, industrialized society.
Available via Ecampus

H 333, *GLOBAL PUBLIC HEALTH, 3 Credits
Introduction to the field of global health, its history, methods, and key principle; understanding global health inequities through case studies; overview of major global health prevention programs. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst
Equivalent to: H 333H
Available via Ecampus

H 333H, *GLOBAL PUBLIC HEALTH, 3 Credits
Introduction to the field of global health, its history, methods, and key principle; understanding global health inequities through case studies; overview of major global health prevention programs. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst; HNRS – Honors Course Designator
Equivalent to: H 333

H 344, *FOUNDATIONS OF ENVIRONMENTAL HEALTH, 3 Credits
Identifies environmentally-linked disease, population growth, and health concerns associated with toxic substances, food quality, air pollution, water pollution, noise, solid and hazardous waste, and pesticide use. Explores scientific topics related to environmental health in a global context that impact our collective environment. Compares and contrasts select environmental problems in the US to those that occur in the global community.
Attributes: CSGI – Core, Synth, Global Issues
Available via Ecampus

H 349, PEER HELPER SKILLS DEVELOPMENT, 3 Credits
Prepares the student for an active role as a peer helper in alcohol and drug abuse prevention and health education. Course work will include: drug, alcohol, addiction and other related health issues, basic listening and communication skills, conflict resolution, crisis recognition and referral. A major component will be affective learning situations designed to promote self-awareness and personal growth.

H 364, DRUGS, SOCIETY AND HUMAN BEHAVIOR, 3 Credits
Drug use and abuse; theories of addiction; basic principles of drug action regarding the use of sedative and stimulative compounds; alcohol; opiates; hallucinogens; designer drugs; cocaine; and over-the-counter products. Particular emphasis on the role of the individual's value orientation, decision-making, and self-responsibility in treatment and educational approaches to prevention.
Prerequisite: PSY 201 with C- or better or PSY 202 with C- or better
Equivalent to: H 364H

H 364H, DRUGS, SOCIETY AND HUMAN BEHAVIOR, 3 Credits
Drug use and abuse; theories of addiction; basic principles of drug action regarding the use of sedative and stimulative compounds; alcohol; opiates; hallucinogens; designer drugs; cocaine; and over-the-counter products. Particular emphasis on the role of the individual's value orientation, decision-making, and self-responsibility in treatment and educational approaches to prevention.
Attributes: HNRS – Honors Course Designator
Equivalent to: H 364

H 376, EVIDENCE-BASED HEALTH PROMOTION, 3 Credits
Future health professionals will learn what makes a successful health promotion program. Students will learn about research-tested programs that are effective for promoting health in community, clinical, and educational settings. Students will begin to develop the skills needed to critically examine evidence in the field and select programs to address current public health issues.
Prerequisite: H 100 with C- or better and H 225 [C-]
Available via Ecampus

H 385, SAFETY AND HEALTH STANDARDS AND LAWS, 3 Credits
Emphasis on the Occupational Safety and Health Act; study includes the scope and duties under the act, enforcement, and adjudication procedures and OSHA litigation; components of Oregon-OSHA.
Available via Ecampus

H 388, *GLOBAL ENVIRONMENTAL HEALTH, 3 Credits
An overview of global environmental issues, including climate change, air pollution, water, e-waste, and metals, and their impacts on human health.
Attributes: CSGI – Core, Synth, Global Issues
Available via Ecampus

H 399, SPECIAL TOPICS, 1-16 Credits
This course is repeatable for 16 credits.
Equivalent to: H 399H

H 399H, SPECIAL TOPICS, 1-16 Credits
Attributes: HNRS – Honors Course Designator
This course is repeatable for 16 credits.
Equivalent to: H 399

H 401, RESEARCH AND SCHOLARSHIP, 1-16 Credits
This course is repeatable for 16 credits.

H 402, INDEPENDENT STUDY, 1-16 Credits
This course is repeatable for 16 credits.

H 403, THESIS, 1-16 Credits
This course is repeatable for 16 credits.
H 405, READING AND CONFERENCE, 1-16 Credits
This course is repeatable for 16 credits.

H 406, PROJECTS, 1-16 Credits
This course is repeatable for 16 credits.

H 407, SEMINAR, 2 Credits
Seminar to prepare students for their internship in public health. Focus is on professionalism, leadership skills, identifying strengths, and transitioning from college to graduate school or the working world.
Equivalent to: H 407H
Recommended: H 480 for students in EOH (Environmental and Occupational Health) minors. H 250 for students in the HMP (Health Management and Policy) option. H 225 and H 320 for students in the HPHB (Health Promotion and Health Behavior) option
Available via Ecampus

H 407H, SEMINAR, 2 Credits
Seminar to prepare students for their internship in public health. Focus is on professionalism, leadership skills, identifying strengths, and transitioning from college to graduate school or the working world.
Attributes: HNRS – Honors Course Designator
Equivalent to: H 407
Recommended: H 480 for students in EOH (Environmental and Occupational Health) minors. H 250 for students in the HMP (Health Management and Policy) option. H 225 and H 320 for students in the HPHB (Health Promotion and Health Behavior) option

H 408, WORKSHOP, 1-16 Credits
This course is repeatable for 16 credits.

H 409, PRACTICUM, 1-6 Credits
Supervised work experience in a public health or health care administration setting. Open to majors in public health. Graded P/N. 
This course is repeatable for 16 credits.

H 410, INTERNSHIP, 1-12 Credits
Directed field experience with participation in a community, worksite, or health agency program. Experience is individually arranged to meet student needs. Graded P/N.
Prerequisite: H 407 with C- or better
This course is repeatable for 16 credits.
Recommended: H 436 (for HMP students). H 225 and H 320 and H 476 (for HPHB students)

H 414, BE THE CHANGE FOR GLOBAL HEALTH TRANSFORMATION, 3 Credits
Learn how stigma and discrimination create differences in access to resources and lead to health injustice and disparities. Draw on social justice and community mobilization frameworks to explore health-related social movements and social change necessary to improve public health throughout the world. Contextualize local work to eliminate health disparities in the United States within a global context and as part of global processes. Learn how community mobilization can lead to the transformation of structures, systems, and ideologies that drive discrimination and health disparities.
Prerequisite: H 100 with C- or better

H 415, PEOPLE ON THE MOVE: MIGRATION AND GLOBAL HEALTH, 3 Credits
Overview of migration as an issue of global health importance; social determinants of migrant health and disparities; migrant health and sustainable development.
Prerequisite: H 100 with C- or better

H 416, GLOBAL POVERTY AND HEALTH DISPARITIES, 3 Credits
Learn why poverty remains a primary factor in poor health outcomes around the world, driving limited access to clean water and sanitation, healthful food, education, safety, basic rights, and health care. Examine global poverty, including the causes and consequences of global poverty and the ways in which social structures, identities, and policies shape wealth and health. Discuss global distribution of wealth, the wealth-health gradient and social determinants of health in a global context, causes and consequences of global poverty, and policy and programmatic intervention strategies aimed at reducing material hardship and global inequality.
Prerequisite: H 100 with C- or better

H 418, PUBLIC HEALTH ETHICS AND ISSUES, 3 Credits
Current ethical issues in public health, including gender and ethnicity in employment, pharmaceutical controls, product liability, advertising, and export of high technology.

H 421, MENTAL HEALTH, 3 Credits
Examination of social, governmental, legal and individual mental health issues. Brief overview of some major mental disorders.
Prerequisite: H 225 with C- or better and H 320 [C-]

H 422, HEALTH, AGING AND CONTROL OF CHRONIC DISEASES, 4 Credits
Epidemiology of the major chronic diseases, risk factors, potential methods of prevention/intervention, ethical issues, and efficacy of current methods of prevention and control. Emphasis on adult populations and public health services, policies, and programs at the local, state, and federal levels designed to promote healthy aging.
Recommended: 9 credits of health course work.

H 425, FOUNDATIONS OF EPIDEMIOLOGY, 3 Credits
Measures of disease frequency; measures of effect; association and causation; sources of inaccuracy; experimental and observational study designs. Lec/rec.
Prerequisite: H 220 with C- or better or ST 201 with C- or better or ST 314 with C- or better or ST 351 with C- or better
Available via Ecampus
H 432, ECONOMIC ISSUES IN HEALTH AND MEDICAL CARE, 3 Credits
Application of economic principles to the health care field: the demand for medical care and insurance, health care suppliers, health care markets.
Prerequisite: (ECON 201 with C- or better or ECON 201H with C- or better) and H 210 [C-]  
Available via Ecampus

H 434, HEALTH CARE LAW AND REGULATION, 3 Credits
Legal aspects of health care delivery; tort law and its applications; professional liability and liability insurance; laws relative to health care institutions, cost controls, antitrust and access. (Writing Intensive Course)
Attributes: CWIC – Core, Skills, WIC
Prerequisite: H 210 with C- or better and H 250 [C-] and WR 222 [C-]  
Available via Ecampus

H 436, ADVANCED TOPICS IN HEALTH CARE MANAGEMENT, 3 Credits
Covers how health services are governed and organized; how health care organizations assess and adapt to change; constraints/opportunities in shaping organizational performance; leadership; strategic decision-making and the use of evidence-based management in health care.
Prerequisite: H 210 with C- or better and H 250 [C-]  
Available via Ecampus

H 445, OCCUPATIONAL HEALTH, 3 Credits
Current and historical topics in the area of occupational health, with particular emphasis on the types of materials that produce human health effects; clinical and epidemiologic data used to assess the public health importance of occupational pollutants and to evaluate control strategies. (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society
Available via Ecampus

H 448, PUBLIC HEALTH TOXICOLOGY, 3 Credits
Introduction to the concepts and principles of toxicology as they apply to environmental and occupational health
Prerequisite: H 344 with C- or better
Recommended: One term of basic chemistry
Available via Ecampus

H 449, MASS MEDIA AND HEALTH, 3 Credits
Designed to examine the effects of mass media on population health, from the negative impact of advertising of cigarettes, alcohol and junk food, to the (hopefully) positive impact of public-health campaigns.
Prerequisite: H 225 with C- or better and H 320 [C-]

H 457, FINANCIAL MANAGEMENT OF HEALTH CARE ORGANIZATIONS, 3 Credits
Utilization of standard financial tools needed to manage the capital resources of health care organizations. Includes funding capital projects, product costing, budgeting methods, capital formation and investment strategies.
Prerequisite: H 210 with C- or better and H 250 [C-] and BA 315 [C-]  
Available via Ecampus

H 458, REIMBURSEMENT MECHANISMS, 3 Credits
Introduces and analyzes the different types of healthcare reimbursement methodologies used in the U.S. health care system.
Prerequisite: H 210 with C- or better
Available via Ecampus

H 461, SEXUALITY: A HEALTH SCIENCE PERSPECTIVE, 3 Credits
Exploration of the meaning of sexuality from a variety of contemporary health science perspectives; aspects of sex and sexuality fundamental to total health; issues central to the health educator role examined.

H 465, PUBLIC HEALTH AND WOMEN: SOCIAL AND POLICY ISSUES, 3 Credits
Public health approach to the identification of women’s health needs in the United States and in other countries as it relates to the intersection of race, ethnicity, social class, sexual orientation, age, and ability. (Bacc Core Course)
Attributes: CPDP – Core, Perspective, Difference/Power/Discrimination
Recommended: 6 credits in public health.

H 468, FINANCING AND ADMINISTRATION OF LONG-TERM CARE, 3 Credits
Examines the financing and administration of long term care. Emphasis is on a system-wide overview and specific application to nursing facility management.

H 474, PUBLIC HEALTH AND VIOLENCE IN SOCIETY, 3 Credits
Examination of violence as a major public health issue. Historical, social, environmental, economic, behavioral and psychological aspects of assaultive violence, spousal abuse, rape and sexual assault, child abuse, child sexual abuse, suicide, the effects of the media on violence, drug abuse and violence, and related public health problems in contemporary American society. Emphasis on health and the efficacy of current efforts aimed at ameliorating these problems and potential for alternative public health models for prevention and intervention.

H 476, PLANNING AND EVALUATING HEALTH PROMOTION PROGRAMS, 4 Credits
A systematic approach to planning, implementing and evaluating health promotion programs in a variety of health related settings. Students will be writing a series of drafts to effectively develop a health promotion program plan. (Writing Intensive Course)
Attributes: CWIC – Core, Skills, WIC
Prerequisite: H 225 with C- or better and H 320 [C-] and H 376 [C-]
H 477, DIETARY INTERVENTIONS FOR PUBLIC HEALTH, 3 Credits
A public health perspective on the practice of population-based dietary intervention. Examination of relevant theories, research, and practice that pertain to health promoters/educators.
Prerequisite: NUTR 225 with C- or better
Equivalent to: NUTR 477

H 480, UNDERGRADUATE EOH SEMINAR, 1 Credit
Explores current topics in environmental health and safety. EOH faculty will discuss their current research interests; EOH graduate student speakers will share their environmental health and safety internship experiences. Documentaries will be viewed to introduce topics of discussion. Features will be discussions relating directly to ongoing, current environmental/occupational health crises, both in the United States and around the world. Graded P/N.
This course is repeatable for 2 credits.
Available via Ecampus

H 489, EMERGENCY AND DISASTER MANAGEMENT, 3 Credits
Study of preparedness, response, recovery and business resumption strategies, activities and applications needed to effectively deal with emergency and disaster incidents.

H 491, SELECTED TOPICS, 1-3 Credits
Recent changes and advances in public health and health care administration and their application to special fields of study. Topics vary from term to term and year to year.
Equivalent to: H 491H
This course is repeatable for 6 credits.

H 491H, SPECIAL TOPICS, 1-3 Credits
Recent changes and advances in public health and health care administration and their application to special fields of study. Topics vary from term to term and year to year.
Attributes: HNRS – Honors Course Designator
Equivalent to: H 491
This course is repeatable for 6 credits.

H 494, APPLIED ERGONOMICS, 3 Credits
Principles of occupational ergonomics for managing optimal worker performance and well-being.

H 495, DESIGN FOR ENVIRONMENT, SAFETY, AND HEALTH, 3 Credits
Systematic consideration of environmental, safety, and health concerns at the earliest possible stage in the lifecycle design engineering of products, technologies, and manufacturing processes.

H 501, RESEARCH AND SCHOLARSHIP, 1-16 Credits
This course is repeatable for 16 credits.
Available via Ecampus

H 503, THESIS, 1-16 Credits
This course is repeatable for 999 credits.
H 515, RESEARCH METHODS IN SOCIAL AND BEHAVIORAL HEALTH SCIENCES, 3 Credits
Provides an introduction to quantitative research methods and design. Topics include definition of research problems and questions, hypothesis generation, research design, sampling, variable definition and measurement, data collection, and ethical considerations. Also provides a brief introduction to qualitative and mixed methods.

H 516, RESEARCH METHODS IN GLOBAL HEALTH, 3 Credits
Overview of research methods used to understand health, illness, health care, and health-seeking behavior in international settings. Special emphasis on the use of qualitative and mixed methods in international health research.

H 518, PUBLIC HEALTH ETHICS AND ISSUES, 3 Credits
Explores key ethical issues in the context of public health practice; codes and guidelines for ethical conduct of public health practice; issues related to social accountability, vulnerable populations, and ethical framework for community engagement.

H 519, DISPLACEMENT, MIGRATION, AND GLOBAL HEALTH, 3 Credits
Critical examination of health of displaced/migrant populations with an emphasis on health disparities and social determinants. Understanding intersections of humanitarianism, migration, vulnerability, and displacement from a global health perspective.

H 520, HEALTH DISPARITIES, 3 Credits
Health disparities based on race/ethnicity, culture, social class, and rural/urban residence, among others; strategies to reduce disparities, promote health, and prevent disease in diverse populations.

H 521, MENTAL HEALTH, 3 Credits
Focus upon mental health policy development, in relation to federal and state government services and regulations, implementation of services.

H 522, HEALTH, AGING AND CONTROL OF CHRONIC DISEASES, 4 Credits
Epidemiology of the major chronic diseases, risk factors, potential methods of prevention/intervention, ethical issues, and efficacy of current methods of prevention and control. Emphasis on adult populations and public health services, policies, and programs at the local, state, and federal levels designed to promote healthy aging. Recommended: 9 credits of public health course work.

H 523, FOUNDATIONS OF PUBLIC HEALTH, 4 Credits
Fundamental principles, concepts and tools used in public health to promote the health of populations. Using a combination of case study method, lecture and discussion, students will develop a broad understanding of public health and recognition of how discipline-specializations address the social, behavioral and environmental determinants of public health.

Available via Ecampus

H 524, INTRODUCTION TO BIOSTATISTICS, 4 Credits
Quantitative analysis and interpretation of health data including probability distributions, estimation of effects, and hypothesis-tests such as Chi-square, one-way ANOVA, and simple linear regression.

Available via Ecampus

H 525, EPIDEMIOLOGICAL METHODS I, 3 Credits
Introduction to the concepts and methods of epidemiology. Topics include measures of population health, screening, study design, measures of association, and interpretation of epidemiological data. Prerequisite: H 513 with B- or better or H 535 with B- or better

H 526, EPIDEMIOLOGIC METHODS II, 3 Credits
Concepts and methods of epidemiological analysis; standardization; stratified analysis; confounding and its control; planning and conducting epidemiologic research; role of multivariate analysis in epidemiologic research. Prerequisite: H 524 with B- or better and H 525 [B-]

H 527, CRITICAL ASSESSMENT OF INTERNATIONAL HEALTH PROGRAMS, 3 Credits
Introduces the critical evaluation framework of assessing international health development programs, based on self-determination and community ownership principles. The framework of assessment method includes three levels: upstream evaluation, midstream evaluation, and downstream evaluation. Recommended: H 528 and H 529

H 528, GLOBAL HEALTH ISSUES, 3 Credits
Examines major issues in health developments of global significance, their causes and impacts on international health, and methods and strategies to address them.

H 529, INTERNATIONAL HEALTH, 3 Credits
Overview of the epidemiological, economic, political, sociological, and cultural factors that impact on international health. Special emphasis on the methods of prevention/intervention utilized in coping with health problems on an international level.
H 530, HEALTH POLICY ANALYSIS AND POLITICS, 3 Credits
Examination of current health policy issues affecting health care programs, services, and organization as well as the role of politics in public health and health policy. Exploration of processes by which health policy proposals are generated, promoted, defeated, modified and implemented.
Prerequisite: H 513 with B- or better or HHS 514 with B- or better
Available via Ecampus

H 532, ECONOMIC ISSUES IN HEALTH AND MEDICAL CARE, 3 Credits
Application of economics principles to the health care field: the demand for medical care and insurance, health care suppliers, health care markets.
Recommended: ECON 201

H 533, HEALTH SYSTEMS ORGANIZATION, 3 Credits
Examines the nature of health and health care services and reviews the role of government and the free market on health services. Alternative ways of organizing, financing, and delivery of health care services are explored.
Available via Ecampus

H 534, HEALTH CARE LAW AND REGULATION, 3 Credits
Legal aspects of health care delivery; tort law and its applications; professional liability and liability insurance; laws relative to health care institutions, cost controls, antitrust and access.

H 535, INTERPRETING EPIDEMIOLOGIC EVIDENCE, 3 Credits
Intended for students in the human sciences and allied health fields. Introduces basic epidemiology concepts. Topics will include measures of disease frequency, assessing population health, causal logic, quantifying associations between exposures and health outcomes, epidemiologic study design, and threats to study validity (random error, bias, confounding). Examples focus on application of epidemiological methods to a variety of health-related fields.

H 536, HEALTHCARE ORGANIZATION LEADERSHIP THEORY AND BEHAVIOR, 3 Credits
Overview of organization theory and behavior in health care organizations. Emphasis is on developing an understanding of the factors and forces that influence the structures, behaviors, and operations of health care delivery organizations. This understanding will be developed through consideration of organizations, their environments, and the roles of individuals working in management.
Prerequisite: H 513 with B- or better or HHS 514 with B- or better
Available via Ecampus

H 537, INJURY EPIDEMIOLOGY, 3 Credits
An overview of the distribution and determinants of injuries, methodological issues specific to injury epidemiology, and approaches to injury control.
Prerequisite: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 513 with B- or better
Recommended: Graduate epidemiology training

H 538, PUBLIC AND PRIVATE HEALTH INSURANCE, 3 Credits
Introduction to the principles and practices of public or social and commercial health insurance, and their financial reimbursement mechanisms.

H 540, WATER AND HUMAN HEALTH, 3 Credits
Critically examine the complex relationship between water quality, human activities, and population health.

H 541, AIR QUALITY AND HUMAN HEALTH, 3 Credits
Examination of the major sources of air pollution, its impact on ecosystems and climate change, and population health. Will also discuss technologies and introduce regulations that are used to control air pollutants.

H 542, ENVIRONMENTAL AND OCCUPATIONAL HEALTH RISK ASSESSMENT, 3 Credits
Understand concepts, principles and practices in modern environmental and occupational risk analysis and how they are utilized to make evidence-based decisions by regulatory agencies.

H 543, EXPOSURE SCIENCE I, 4 Credits
Overview of the concepts, principles and practices in modern environmental and occupational exposure assessment. Exposure Science I provides a broad introduction to environmental and occupational exposure assessment methods, while Exposure Science II focuses on sampling and measurement methods.

H 544, ENVIRONMENTAL AND OCCUPATIONAL EPIDEMIOLOGY, 3 Credits
Examines exposure assessment methodology and epidemiological study designs that are commonly used in environmental and occupational health science in order to characterize the impact of environmental and occupational exposures on population health.
Prerequisite: H 525 with C or better
Recommended: Graduate level statistics course

H 546, PHYSICAL AGENTS AND HUMAN HEALTH, 3 Credits
Focus on physical agents (heat, noise, vibration, radiation) and health risks associated with these agents. It covers the range and sources of exposure to physical agents, methods of characterizing these exposures, effects on human health, and the regulations/standards that set limits for physical agents. Lec/lab.
H 547, GIS AND PUBLIC HEALTH, 4 Credits
Applications of geographic information systems (GIS) to public health are reviewed, including mapping, spatial analysis methods, estimating access, and exposure assessment. This course is geared toward individuals involved in public health who have no (or introductory level) knowledge of GIS. Lec/lab.

H 548, PUBLIC HEALTH TOXICOLOGY, 3 Credits
Introduction to the concepts and principles of toxicology as they apply to environmental and occupational health.
Recommended: H 344 with a grade of C- or better and one term of basic chemistry.
Available via Ecampus

H 549, MASS MEDIA AND HEALTH, 3 Credits
Examines the effects of mass media on population health, from the negative impact of advertising of cigarettes, alcohol and junk food, to the (hopefully) positive impact of public health campaigns.
Prerequisite: H 571 with C or better

H 550, SOCIAL EPIDEMIOLOGY, 3 Credits
Explores the social determinants of health at the population level. Primary focus is on introduction to methods specific to social epidemiology, but will also provide an overview of current understanding of the empirical associations between social factors and health.
Prerequisite: H 525 with B or better
Recommended: Introductory course in epidemiology

H 551, APPLIED EPIDEMIOLOGICAL ANALYSIS OF SECONDARY DATA, 3 Credits
Practical experience performing a hypothesis-driven epidemiological analysis utilizing secondary surveillance or other appropriate data set, writing an analytical plan, appropriate programming for the analysis (using STATA or SAS), understanding the analysis output, preparing tables, and interpreting results.
Prerequisite: H 526 with B- or better and H 560 [B-] and H 580 [B-]

H 552, DISASTER EPIDEMIOLOGY, 3 Credits
Describe the impact of natural and manmade disasters on human health, understand epidemiologic methods specific to disasters, and apply fundamental epidemiologic methods to identify and characterize disaster-related adverse health outcomes.
Prerequisite: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better

H 554, EPIDEMIOLOGY OF AGING, 3 Credits
An overview of the core principles of the epidemiology of aging is provided. There will be an emphasis on health and disease processes in older adults. Students will learn essential study design and analytic issues that may arise in studies of aging.
Prerequisite: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better

H 555, CANCER EPIDEMIOLOGY, 3 Credits
Introduction to basic concepts and methodology in cancer epidemiology.
Prerequisite: H 513 with B- or better or HHS 514 with B- or better or H 525 with B- or better or H 535 with B- or better

H 556, STRATEGIC MANAGEMENT OF HEALTH SERVICE ORGANIZATIONS, 3 Credits
Theories and methodologies of long-range planning and strategic management in health care organizations.

H 557, FINANCIAL MANAGEMENT OF HEALTH CARE ORGANIZATIONS, 3 Credits
Utilization of standard financial tools needed to manage the capital resources of health care organizations. Includes funding capital projects, product costing, budgeting methods, capital formation and investment strategies.
Recommended: H 210 and H 250

H 558, REIMBURSEMENT MECHANISMS, 3 Credits
Techniques used in cost-effectiveness analysis. Examples are drawn from the public health and health economics literature.

H 560, PUBLIC HEALTH SURVEILLANCE, 3 Credits
An introduction to public health surveillance systems (national and international) for chronic and infectious diseases. Utility of existing surveillance systems for secondary epidemiological data analysis.
Prerequisite: H 524 with B- or better and H 525 [B-]

H 562, INFECTION DISEASE EPIDEMIOLOGY, 3 Credits
Understand epidemiologic methods specific to infectious diseases, apply fundamental epidemiologic methods to infectious disease questions, and describe the broad trends in global infectious disease burden. The application methods and principles will be explored through lectures, discussions, assignments and writing projects.
Prerequisite: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or H 514 with B- or better

H 563, PHYSICAL ACTIVITY EPIDEMIOLOGY, 3 Credits
Physical activity epidemiology will focus on current research, controversial issues, and methodological problems in the epidemiology of physical activity, exercise, and health.
Prerequisite: H 513 with B- or better or HHS 514 with B- or better or H 525 with B- or better or H 535 with B- or better
Recommended: H 524

H 564, COMPUTING TOOLS AND HEALTH DATA ANALYSIS, 3 Credits
Modern computational biostatistics for analyzing health data, emphasizing important technologies and methods for data processing and understanding of how they work. Topics will evolve over time as new procedures are developed.
Corequisites: H 524
H 565, PUBLIC HEALTH AND WOMEN: SOCIAL AND POLICY ISSUES, 3 Credits
Public health approach to the identification of women’s health needs in the United States and in other countries as it relates to the intersection of race, ethnicity, social class, sexual orientation, age, and ability.
Equivalent to: BA 565
Recommended: 6 credits in public health.

H 566, DATA MINING IN PUBLIC HEALTH, 3 Credits
An introduction to high-dimensional data analysis and data mining techniques used as an information technology tool to extract previously unknown and potentially useful information from large databases in biology, medicine, and public health.
Recommended: H 561 and H 564

H 568, FINANCING AND ADMINISTRATION OF LONG-TERM CARE, 3 Credits
Examines the financing and administration of long term care. Emphasis is on a system-wide overview and specific application to nursing facility management.

H 569, MATERNAL AND CHILD HEALTH, 3 Credits
Women’s reproductive health and health of children stressing causation, management, and prevention of public health problems. Epidemiological analysis of morbidity and mortality in children and women of childbearing age; impact of social, political and economic influences on the health of women and children; comparison of issues and problems of industrialized versus developing nations. Consideration of health issues of interest to the many diverse racial and ethnic groups of women and children in the U.S. as well as the global village.

H 571, PRINCIPLES OF HEALTH BEHAVIOR, 3 Credits
Theoretical approaches to behavior change in health promotion/education research and practice; factors influencing health behaviors, ethical behavior change issues, behavioral interventions for special populations.
Available via Ecampus

H 572, COMMUNITY ORGANIZATION FOR HEALTH PROMOTION AND EDUCATION, 3 Credits
History, theory, and practice of community organizing for health advocacy; focus on group processes, use of media, leadership, coalitions, grass roots methods and social change.

H 575, EVALUATION OF HEALTH PROMOTION AND EDUCATION PROGRAMS, 3 Credits
Provides theoretical and practical bases for program evaluation. Develops basic skills in a variety of approaches to evaluation, including techniques that are particularly suitable for evaluating health promotion, community health improvement, and related health and social services programs. Course learning is synthesized through designing an evaluation framework and methodology for a relevant program.
Prerequisite: H 513 with B- or better or H 515 with B- or better or HHS 514 with B- or better
Available via Ecampus

H 576, PROGRAM PLANNING FOR HEALTH/HUMAN SERVICES, 4 Credits
Provides students with an introduction to the principles of program planning and the development of program plans, with a focus on evidence-based public health/human services. Students will have the opportunity to integrate skills developed through prior courses in the context of writing a program plan.
Prerequisite: (H 515 with C- or better or HHS 514 with C- or better) and H 571 [C-] and H 575 [C-]

H 578, INTRODUCTION TO MOLECULAR EPIDEMIOLOGY I, 3 Credits
A survey of and introduction to the methods and issues arising in genetics and molecular epidemiology, including key biostatistical methods, study designs, and technologies used in the conduct of these studies. Students will gain experience conducting critical reviews of research papers with respect to study design and biostatistical analysis.
Prerequisite: (H 524 with C or better and H 526 [C])
Recommended: Knowledge of and familiarity with basic concepts of molecular biology (DNA replication, transcription, and translation)

H 580, LINEAR REGRESSION AND ANALYSIS OF TIME TO EVENT DATA, 4 Credits
Multiple linear regression analysis for measurement data and survival analysis methods for time to event health data, including modes of inference, diagnostics, model selection, and reporting conclusions. Lec/lab.
Prerequisite: (H 524 with C or better or HDFS 530 with C or better)

H 581, GENERALIZED LINEAR MODELS AND CATEGORICAL DATA ANALYSIS, 4 Credits
Biostatistical methods focusing on binary and count data will provide a foundation for understanding and implementing generalized linear regression and categorical data models that are commonly used to analyze epidemiological and public health data from cohort, case-control, and clinical trial study designs. Lec/lab.
Recommended: H 580
H 582, ANALYSIS OF CORRELATED HEALTH DATA, 3 Credits
Biostatistical methods for clustered, repeated measures, and longitudinal correlated health data, with an introduction to applications of linear and generalized linear mixed models and generalized estimating equations.
Prerequisite: H 581 with C or better

H 583, ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT, 4 Credits
Studies the design and management principles and practices in the environment, safety and health field.

H 584, ANALYSIS OF INTERVENTION STUDIES AND CLINICAL TRIALS, 3 Credits
Principles of data analysis from intervention studies and clinical trials, including professional graphical and tabular presentation, reproducibility and reliability of measurements, and controlling the Type I error rate when analyzing multiple endpoints. Basic principles of designing experiments are also covered including blocking, stratification, interaction, and control of variability.
Prerequisite: (H 524 with C or better or HDFS 530 with C or better)

H 585, ENVIRONMENT, SAFETY AND HEALTH POLICY AND LAW, 3 Credits
Survey of the environment, safety and health policy and law in the United States. Furnishes the basic knowledge and general understanding about policy and law-related issues important to all environmental health and safety professionals.
Recommended: H 385

H 586, BAYESIAN BIOSTATISTICS IN PUBLIC HEALTH, 3 Credits
An examination of methods for designing and implementing Bayesian analysis to address scientific questions through hands-on experience with health data. This survey course also covers proper interpretation and communication of results from practical Bayesian methods for biostatistics data analysis, with illustrations of the utility of Bayesian ideas in public health.
Prerequisite: H 581 with C or better

H 587, TIME TO EVENT ANALYSIS OF HEALTH DATA, 3 Credits
Biostatistical models and methods for survival analysis of time to event data that are routinely encountered in biomedical and health research.
Prerequisite: (H 524 with C or better or HDFS 530 with C or better)

H 588, APPLIED OCCUPATIONAL SAFETY AND HEALTH, 3 Credits
The management and technical aspects of a workplace safety and health program are identified and assessed. Students completing the course receive a 30-hour OSHA General Industry card.

H 589, EMERGENCY AND DISASTER MANAGEMENT, 3 Credits
Study of preparedness, response, recovery and business resumption strategies, activities and applications needed to effectively deal with emergency and disaster incidents.

H 590, OCCUPATIONAL ERGONOMICS AND BIOMECHANICS, 3 Credits
Examines the advanced theories, applications, and contemporary topics of occupational ergonomics and biomechanics. Topics include muscle physiology, work-related musculoskeletal disorders, assessing biomechanical exposure in the workplace, various material handling assessment tools, 3-Dimensional Static Strength Prediction Program, human vibrations, and implementing ergonomic interventions.

H 591, SELECTED TOPICS, 1-3 Credits
Recent changes and advances in public health and health care administration and their application to special fields of study. Topics vary from term to term and year to year. This course is repeatable for 9 credits.

H 592, SPATIAL EPIDEMIOLOGY, 3 Credits
An introduction to methods in spatial epidemiology is provided, including spatial exploration of health data, quantifying spatial patterns and clusters, spatial exposure assessment, and explaining patterns and associations.
Prerequisite: H 547 with C or better and H 581 [C]

H 593, REPRODUCTIVE EPIDEMIOLOGY, 3 Credits
Focuses on current research, controversial issues, and methodological problems in the epidemiology of reproductive health.
Prerequisite: H 513 with B- or better or HHS 514 with B- or better or H 525 with B- or better or H 535 with B- or better
Recommended: H 524

H 594, APPLIED ERGONOMICS, 3 Credits
Principles of occupational ergonomics for managing optimal worker performance and well-being.

H 595, DESIGN FOR ENVIRONMENT, SAFETY, AND HEALTH, 3 Credits
Systematic consideration of environmental, safety, and health concerns at the earliest possible stage in the lifecycle design engineering of products, technologies, and manufacturing processes.

H 596, HEALTHCARE EPIDEMIOLOGY, 3 Credits
Focus on current research, controversial issues, and methodological problems in the epidemiology of healthcare. Topics include institutional infection control, medical errors, screening and diagnostic testing, cost-effectiveness, and others related to the delivery and assessment of healthcare, with a focus on the US healthcare system specifically.
Prerequisite: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better
Recommended: H 524
Available via Ecampus
H 597, METHODS IN FOODBORNE DISEASE OUTBREAK INVESTIGATION, 3 Credits
Focuses on the practical basis for developing and implementing methods for foodborne disease outbreak detection, investigation and control, using recent outbreaks to highlight underlying principles. Biological characteristics of major foodborne disease pathogens, clinical features of the illnesses it causes and epidemiologic presentations of foodborne outbreaks will be reviewed. The implications of these characteristics will be discussed in a problem solving, interactive format that examines theory and practice in the context of recent outbreaks. Strategies to promote timely decision-making will be emphasized.
Prerequisite: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better

H 598, HEALTH POLICY ANALYSIS METHODS, 3 Credits
Analysis of public policies affecting health care programs, services and organizations and the impact of those programs on citizens. Health services research methods, including data sources for health policy research and health policy literature.
Prerequisite: H 513 with B- or better and H 533 [B-]

H 599, SPECIAL TOPICS, 1-16 Credits
This course is repeatable for 24 credits.

H 601, RESEARCH AND SCHOLARSHIP, 1-16 Credits
This course is repeatable for 16 credits.

H 603, THESIS, 1-16 Credits
This course is repeatable for 999 credits.

H 605, READING AND CONFERENCE, 1-16 Credits
This course is repeatable for 16 credits.

H 606, PROJECTS, 1-16 Credits
This course is repeatable for 16 credits.

H 607, SEMINAR, 1-16 Credits
This course is repeatable for 16 credits.

H 608, WORKSHOP, 1-16 Credits
This course is repeatable for 16 credits.

H 610, INTERNSHIP, 1-16 Credits
This course is repeatable for 16 credits.

H 611, INTRODUCTION TO SYSTEMATIC LITERATURE REVIEWS, 3 Credits
Students will learn how to apply systematic review methodology to a research question of their choice and understand how literature reviews inform evidence-based decision-making. Examples will focus on applying literature reviews to public health, clinical science, and biomedical research.

H 612, DOCTORAL SEMINAR IN PUBLIC HEALTH: RESEARCH AND PRACTICE, 1 Credit
Contemporary research and professional issues specific to the discipline of public health. Includes responsible conduct of research, writing for publication, professional development and leadership, and faculty research in public health.
This course is repeatable for 9 credits.

H 613, INDEPENDENT RESEARCH PROJECT, 1-9 Credits
Independent research project for PhD students, including research design, execution or research, and the formal presentation of findings in written form. Student will develop an original research topic based on knowledge and review of the literature in a public health-relevant area of inquiry. Graded P/N.
This course is repeatable for 9 credits.

H 614, RESEARCH MANUSCRIPT, 4 Credits
PhD students write a manuscript to submit to a peer-reviewed journal as part of the course requirements. Graded P/N.

H 615, ADVANCED EVALUATION AND RESEARCH DESIGN, 3 Credits
Provides an in-depth examination of advanced research designs and methods for establishing causal statements about the efficacy, effectiveness and generalizability of public health and social service interventions designed to alter public health and social risk or protective factors.
Recommended: H 515 and H 575

H 620, ADVANCED TOPICS IN GLOBAL HEALTH INTERVENTION AND PRACTICE, 3 Credits
Examines the processes and tools involved in planning and evaluating culturally competent health and human service prevention and intervention programs in the global context. Special considerations in program decision-making in the global context (community engagement, cultural competence, sustainability, feasibility, political/ethical issues) will be explored. Provides a key forum for doctoral students to share ongoing developments in their research and practice drawing from fieldwork as well as attended conferences and meetings.

H 622, GLOBAL HEALTH SYSTEMS, POLICY AND POLITICS, 3 Credits
Focuses on learning to identify key stakeholders in the politics of global health, and to be able to describe political and policy processes involved in negotiating global health decisions. Employment of theories and evidence from both the global North and South to explain political processes affecting public health practice and programs.
H 626, GLOBAL HEALTH SYSTEM FINANCE AND STRENGTHENING, 3 Credits
Introduces an analytical framework of health system finance strengthening for global health, from local community to national level and international level. Develops the analytical skill and knowledge for examining the source and mechanism of financing health systems and identify, mobilize, organize, and manage domestic and global health resources. Provides training to examine equity and efficiency of financial burden in a health system, and the strategies to strengthen it.

H 630, QUANTITATIVE HEALTH POLICY RESEARCH METHODS I, 4 Credits
Contemporary doctoral-level quantitative health policy/services research methods emphasizing linear regression models, data sources for health policy research, and health policy research literature.
Prerequisite: H 524 with B- or better

H 632, APPLIED HEALTH ECONOMICS, 4 Credits
Advanced doctoral-level quantitative health policy/services research methods emphasizing causal inference when potential endogeneity is present.
Prerequisite: H 630 with B- or better

H 635, COST EFFECTIVENESS ANALYSIS IN HEALTH AND MEDICAL CARE, 3 Credits
The primary objective of this course is to introduce students to cost-effectiveness studies in health and medical care. Covers the core concepts of CEA, quality adjusted life years, cost calculations, and decision rules.

H 638, PUBLIC AND PRIVATE HEALTH INSURANCE, 3 Credits
Introduction to the principles and practices of public or social and commercial health insurance, their finance mechanisms, and theoretical foundation behind the selection of certain system of health insurance and finance method.
Prerequisite: H 533 with C or better

H 639, COMMUNITY-BASED PARTICIPATORY RESEARCH, 4 Credits
Focuses on initiating and conducting research in partnership with communities. Includes in-depth examination of community-based participatory research (CBPR) elements, principles, theories, and approaches; how researchers can successfully partner with communities; and research with minority and/or underprivileged communities; with examples from environmental health, gerontology, and health promotion.
Recommended: 9 credits of public health or HDFS graduate coursework

H 642, ENVIRONMENTAL AND REGULATORY RISK ASSESSMENT, 3 Credits
Understand concepts, principles and practices in modern risk analysis and how they are utilized to make evidence-based decisions in public health. Focus will be on real world examples of risk assessment by environmental and occupational regulatory agencies.

H 650, REPORTING RESULTS: WRITING FOR EPIDEMIOLOGY, 3 Credits
Applied experience writing a scientific paper to disseminate results, including deciding on authorship, preparing a lay summary, revising and responding to peer review, and serving as a reviewer.
Prerequisite: H 526 with B- or better and H 551 [B-] and H 580 [B-]

H 651, ADVANCED EPIDEMIOLOGICAL METHODS, 4 Credits
Covers advanced topics in epidemiology. Course expands on many of the same topics as H 526, and explores them in greater breadth and depth. Topics include causal theory, measures of disease and association, confounding, selection bias, predictive models, directed acyclic graphs, effect modification, mediation, indirect and direct effects, study design, and other contemporary topics.
Prerequisite: H 526 with B- or better and H 581 [B-]

H 652, CAUSAL INERENCE IN EPIDEMIOLOGY, 3 Credits
Discussion of the theoretical framework of causal statistics and the development of modern methods including propensity scores and marginal structural models. Focus is on the inverse probability of treatment weighting; discussion of other estimation methods will be included. Additional topics may include longitudinal causal models, causal mediation, instrumental variables, and other contemporary topics.
Applied examples will be used for illustration.
Prerequisite: H 651 with B- or better

H 659, QUANTITATIVE HEALTH POLICY RESEARCH METHODS II, 4 Credits
Advanced doctoral-level quantitative health policy/services research methods emphasizing health care utilization, expenditures, and outcomes data.
Prerequisite: H 630 with B- or better

H 662, ADVANCED METHODS IN INFECTIOUS DISEASE EPIDEMIOLOGY, 3 Credits
Covers advanced methods and principles for infectious disease research, including framing infectious disease issues into testable hypotheses, designing epidemiologic studies using appropriate sampling strategies, and identifying strengths and weaknesses of various epidemiologic research methods.
Prerequisite: H 526 with B- or better and H 562 [B-]

H 671, ADVANCED THEORIES OF HEALTH BEHAVIOR, 3 Credits
Provides an in-depth examination of major theories of health behavior (both health compromising and health enhancing).
Recommended: H 571
H 672, ADVANCED QUALITATIVE METHODS IN HEALTH BEHAVIOR, 3 Credits
Provides an in-depth examination of the use of qualitative methods in health behavior research and practice.
Recommended: H 515 and SOC 518 and HDFS 538

H 673, MEASUREMENT OF HEALTH BEHAVIOR CONCEPTS, 4 Credits
Provides in-depth study and field work for graduate students in public health and related fields of the methods used in the conceptualization, development, and evaluation of quantitative measures of health behavior and related concepts.
Recommended: H 524, H 515, and 3 credits in other quantitative research methods or social behavioral methods (eg. sociology or psychology or health promotion or education programs)

H 675, DEVELOPMENT OF HEALTH BEHAVIOR INTERVENTIONS, 3 Credits
Examines the application of social/behavioral theories in health promotion interventions and in conducting intervention research in diverse populations. The course will focus on program development, on implementation strategies, and on translation into practice.
Recommended: H 571 and H 575 and H 576

H 676, ADVANCED TOPICS IN HEALTH PROMOTION AND HEALTH BEHAVIOR, 3 Credits
Examines topics of relevance to health promotion and health behavior. Specific topics include current issues and emerging research findings, with a focus on social and behavior science perspectives, analysis of public health problems, and application of principles and practices of health promotion and health behavior.
This course is repeatable for 6 credits.
Recommended: H 515 and H 571

H 681, ADVANCED TOPICS IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY, 3 Credits
Advanced topics in the environment, safety and health discipline. Content varies with each offering.

H 682, ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY: MOVING FROM RESEARCH TO PRACTICE, 3 Credits
An examination of research transfer models that can be adapted and implemented to environmental and occupational settings. Case studies and content will vary with each course offering.