HUMAN MEDICINE   HM

College of Human Medicine

101  Introduction to Public Health
Spring. 3(3-0) Core public health philosophies and concepts. Health and disease – measures, determinants, health promotion and disease prevention. Introduction to health care delivery systems. Career opportunities in public health.

491  Special Topics in Bioethics and Medical Humanities
Fall, Spring, Summer. 1 to 7 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of college. Special topics in ethics and humanities of health care, proposed by faculty on a group study basis.

501  Preceptorship Training
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 24 credits in all enrollments for this course. Interdepartmental with Family Medicine. Administered by Human Medicine. RB: One year of graduate-professional program in College of Human Medicine. Field experience in primary care.

511  Infectious Disease and Immunology
Fall, 3 credits. RB: Not open to first year students. R: Open only to graduate-professional students in College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

513  Neurological Domain
Spring. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based learning small group experiences.

515  Cardiovascular Domain
Spring. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based learning small group experiences.

516  Disorders of Thought, Emotion, and Behavior Domain
Fall. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Basic science applied to clinically relevant situations. Problem-based learning small group experiences.

525  Pulmonary Domain
Spring. 3(3-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based learning small group experiences.

526  Urinary Tract Domain
Spring. 3(3-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based learning small group experiences.

527  Digestive Domain
Spring. 3 credits. RB: Block I. Not open to first year students. R: Open only to graduate-professional students in College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

528  Metabolic and Endocrine and Reproductive Domain
Spring. 3 credits. RB: Block I. Not open to first year students. R: Open only to graduate-professional students in College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

532  Clinical Skills II
Fall. 2(1-2) RB: HM 531 R: Open only to graduate-professional students in the College of Human Medicine. Adult screening physical examination and its integration with data-gathering skills.

533  Clinical Skills III
Summer. 2(2-0) RB: HM 532 R: Open to graduate-professional students in the College of Human Medicine. Age specific screening examinations and integration with data-gathering skills. Skill-oriented content will be supplemented with theoretical material covering the human lifespan.

534  Clinical Skills IV
Fall. 2(1-2) RB: HM 533 R: Open only to graduate-professional students in College of Human Medicine. Advanced interviewing and physical examination skills. Communication of patient-related data with the patient and other health professionals, orally and in writing. Problem solving.

535  Clinical Skills V
Spring, Summer. 2(1-2) RB: HM 535 R: Open only to graduate-professional students in College of Human Medicine. Advanced interviewing and physical examination skills. Oral case presentations and written medical records. Introductory problem solving skills.

537  Topics in Reproductive Health
Fall. 1(1-0) R: Open only to graduate-professional students in the College of Human Medicine. Advanced interviewing and physical examination skills. Preclinical focus on topics of reproductive health.

539  Hematopoietic/Neoplasia Domain
Fall. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Learn and apply advanced concepts of the basic sciences to clinically relevant situations. Problem-based learning small group experiences.

546  The Social Context of Clinical Decisions
Fall. 1(1-0) RB: Completion of Block I requirements. R: Open only to graduate-professional students in College of Human Medicine. Social perspectives on medicine and medical care.

547  The Social Context of Clinical Decisions II
Spring. 2(2-0) RB: HM 546 R: Open only to graduate-professional students in College of Human Medicine. Issues and concepts related to social and professional responsibilities of physicians.

548  Medical Humanities Seminar
Spring. 2(2-0) RB: HM 547 R: Open only to graduate-professional students in College of Human Medicine. Issues related to the humanities and human values pertinent to medical practice.

550  International Law and Ethics of Human Subject Research
Fall. 2(2-0) R: Open to graduate students or graduate-professional students or approval of department. Interdisciplinary understanding of the substance and interrelationships of international law and ethics in protecting human subjects of biomedical and behavioral research.

551  Basic Principles of Pathology
Spring. 2 credits. R: Open to students in the College of Human Medicine. SA: PTH 542 Fundamental pathologic processes. Clinical applications.

571  Integrative Clinical Correlations I
Fall. 2(2-0) RB: (ANT 551 or concurrently) and (BMB 521 or concurrently) and (PSL 501 or concurrently) R: Open only to graduate-professional students in the College of Human Medicine. Correlation of the principles of the basic biological and behavioral sciences with disciplines of clinical medicine using case presentations.

572  Integrative Clinical Correlations II
Spring. 1(1-0) RB: (HM 571 or concurrently) and (ANTR 552 or concurrently) and (ANTR 562 or concurrently) and (PTH 542 or concurrently) R: Open only to graduate-professional students in the College of Human Medicine. Correlation of the principles of the basic biological and behavioral sciences within the disciplines of clinical medicine using case presentations.

581  Mentor Program
Fall. 1(0-2) R: Open only to graduate-professional students in the College of Human Medicine. Dimensions of being a physician. Performance skills needed for patient care and interaction with medical workers. Current trends.

582  Mentor Program Year II
Fall, Spring. 1(0-2) A student may earn a maximum of 2 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine. Continuing exploration of the dimensions of being a physician. Professional skills needed to interact with patients and medical workers. Current trends.
590 Special Topics in Medicine  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 34 credits in all enrollments for this course. R: Open to students in the College of Human Medicine. Special topics related to healthcare covering a wide variety of disciplines and fields.

591 Special Problems in Human Medicine  
Fall, Spring, Summer. 1 to 34 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Human Medicine. Work under the direction of a faculty member on an experimental, theoretical, or applied problem that requires a broad, interdisciplinary approach.

608 Sub-Specialty Clerkships  
Fall, Spring, Summer. 4 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: FMP 602 R: Open only to graduate-professional students in College of Human Medicine. Hospital and office-based clinical experiences in sub-specialties in medicine and surgery.

609 Laboratory Medicine Clerkship  
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 16 credits in all enrollments for this course. Interdepartmental with Osteopathic Medicine. Administered by Human Medicine. R: Open only to graduate-professional students in College of Human Medicine or Osteopathic Medicine. SA: PTH 609 Anatomic and clinical pathology with emphasis on clinical-pathological correlation. Conducted in pathology departments of affiliated hospitals.

610 Pathology Clerkship  
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Osteopathic Medicine. Administered by Human Medicine. R: Open only to graduate-professional students in College of Human Medicine or Osteopathic Medicine. SA: PTH 608 Anatomic and clinical pathology with emphasis on clinical-pathological correlation. Conducted in pathology departments of affiliated hospitals.

612 Pain Medicine  

629 Leadership in Medicine for Underserved or Vulnerable Communities  
Spring. 6 credits. P: PHD 600 and MED 608 and FMP 608 and PSC 608 and OGR 608 and SUR 608 R: Open to graduate-professional students in the College of Human Medicine. Approval of college. SA: MED 629 Issues involved in securing access to medical care and community resources for families in medically underserved communities.

631 Advanced Leadership in Medicine for Underserved or Vulnerable Communities  
Spring. 6 credits. P: HM 629 R: Open to graduate-professional students in the College of Human Medicine. Approval of college. SA: MED 631 Continuation of HM 629. Medical care of an underserved or vulnerable population in a rural, urban, or international setting. Development of abilities to intervene in the public health issues of this population.

635 Core Competencies I  
Fall, Spring, Summer. 2(2-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine. Core knowledge and skills from an interdisciplinary perspective.

636 Core Competencies II  
Fall, Spring, Summer. 2(2-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine. Core knowledge and skills from an interdisciplinary perspective.

637 Core Competencies III  
Fall, Spring, Summer. 2(2-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine. Core knowledge and skills from an interdisciplinary perspective.

640 Service Learning In the Community  
Fall, Spring, Summer. 1(1-0) R: Open to graduate-professional students in the College of Human Medicine. Demonstrate preparation and planning to provide services which respond to community need. Participate for 40 hours with community organization. Demonstrate reflectivity on participation in services.

641 Clinical Skills Competence Experience  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of college. Review of communication skills, history-taking, and physical examination skills in faculty-observed patient encounters.

691 Research Clerkship  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (HM 690) or approval of community research director. R: Open only to graduate-professional students in the College of Human Medicine. Biological, behavioral, or clinical research project.

801 Introduction to Public Health  
Fall. 3(3-0) R: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Philosophy and concepts of the discipline of public health. History and development of the profession. Ethical, legal, and political considerations. Provide first introduction to core public health areas.

802 Biostatistics for Public Health  
Fall. 3(3-0) R: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Data management, analysis and presentation of public health data. Techniques and methods for calculating population-based statistics. Instruction using Epi-Info software package.

803 Epidemiology and Public Health  
Fall. 3(3-0) R: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Distributions and determinants of disease in populations. Epidemiologic research, quantitative methods, study designs pros/cons.

804 Public Health Administration  
Spring. 3(3-0) R: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Planning, organization, administration, management, evaluation and policy analysis of public health. Legal and ethical considerations of public health.

805 Social and Behavioral Aspects of Public Health  
Spring. 3(3-0) R: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Concepts and methods of social and behavioral sciences applied to public health problems and issues.

806 Environmental Factors of Health  
Spring. 3(3-0) R: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Biological, physical and chemical factors that affect health of populations. Regulatory approaches to environmental hazards. Potential impact of environmental agents on health and preventive management approaches.

807 Introduction to Critical Reading in Public Health  
Summer of odd years. 3(3-0) R: Academic or professional background in public health and/or public health-related discipline R: Open to students in the Public Health major or approval of college. Critical reading skills. Understanding reporting guidelines. Causal Inference, Understanding and identifying bias. Case-study approach to literature in public health problem solving and decision making.
808 Public Health Surveillance
Summer of odd years. 3(3-0) RB: Academic or professional background in public health, epidemiology and/or public health related discipline. R: Open to students in the Public Health major or approval of college. Introduction, history, and design of national, state and local public health surveillance systems for communicable diseases, chronic diseases, birth defects, injury, and disasters. Use of surveillance data sources.

809 Adolescence to Early Adulthood: Key Issues for Public Health Practice
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college. Public health issues that affect health status, health polices, and development of this population. Role of youth development strategies, community investment, social media, and life-skill development for this generation.

810 GIS and Public Health
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college. Introduction to the application of geographic information science (GIS) and geography in public health. Spatial representation, visualization, exploration, and analysis of public health data using GIS.

811 Public Health in the Middle East and North Africa
Summer. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Introduction to public health in Middle East and North Africa; demography, disease patterns, food security, water, climate change. Effects of social justice and governance issues on public health such as health disparities, women/maternal and child health, aging, natural disasters and geopolitical conflicts.

812 Public Health and Healthcare for Migrant, Refugee and Mobile Populations
Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college. Utilization of multidisciplinary and interprofessional collaborations, networking, and partnerships to maximize existing public health resources and improve healthcare access and delivery for migrant, refugee and mobile populations.

813 Introduction to Qualitative Methods for Public Health Research
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college. Introduction to qualitative research. Principles of qualitative methodology, advantages and limitations of different approaches to data collection and analysis.

814 Making a Community Diagnosis II: Practical Applications
Summer. 2(2-0) P: HM 859 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health Major or approval of college. Continuation of HM 859. Skills and tasks required to plan, conduct, and communicate results of community assessment using case studies and real world examples. Barriers to implementation.

815 Introduction to Public Health Laboratory Data for Public Health Specialists
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline. R: Open to students in the Public Health Major or approval of college. Develops analytic and assessment skills; lab test performance and interpretation; pathophysiological basis of abnormal test results for public health specialists to integrate laboratory data into public health programs and products.

830 Practical Applications of Public Health Law
Fall of odd years. 3(3-0) P: HM 801 RB: Academic or professional background in public health or public health related discipline. R: Open to students in the Public Health Major or approval of college. Overview of legal basis of public health authority. Use of law to direct public health practice.

831 Communicable Disease in Public Health
Fall of even years. 3(3-0) P: HM 801 and HM 803 RB: Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work. R: Open to students in the Public Health major or approval of college. Fundamentals of communicable disease transmission. Overview of methods for prevention and control of communicable disease. Agents and organisms of public health significance.

832 Global Public Health
Spring of even years. 3(3-0) RB: Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work. R: Open to students in the Public Health major or approval of college. Factors and dynamics that affect global public health. Application of public health principles and policies in international settings. Key international stakeholders and their roles in global public health.

833 Introduction to Pharmaceutical Counterfeiting and Public Health
Fall of odd years. 3(3-0) P: HM 801 RB: Academic or professional background in public health or public health related discipline. R: Open to students in the Public Health major or approval of college. General principles of counterfeiting, counterfeit pharmaceuticals, and how it affects public health. Scope, policy, supply chain management, and health effects are examined using current case examples.

834 Advanced Counterfeit Pharmaceuticals Readings
Spring of even years. 3(3-0) P: HM 801 and HM 833 RB: Academic or professional background in public health or public health related discipline. R: Open to students in the Public Health major or approval of college. Advanced topics on the impact of counterfeit pharmaceuticals on public health.

835 Independent Study in Public Health
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to students in the Public Health major or approval of college. Independent study in areas relevant to public health.

836 Comparative Global Health Care Systems
Spring. 3(3-0) RB: Undergraduate degree in science or applied science with experience in a healthcare clinical setting. R: Open to students in the Public Health major or approval of college. Public health and culture, environment, psychosocial and economic issues. Healthcare systems and health policies. Community health assessments.

837 Poverty and Public Health
Fall of even years. 3(3-0) P: HM 801 RB: Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work. R: Open to students in the Public Health major or approval of college. Concepts of health and poverty and their interrelatedness from a global and public health perspective. Roles of international agencies, national policy, gender, socioeconomic status, race, ethnicity, culture, access to resources, and conflict. Role of public health programs in the achievement and maintenance of healthy populations. Struggle to eliminate poverty.

838 Cultural Aspects of Public Health Practice
Fall. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, undergraduate level math or statistics coursework R: Open to students in the Public Health major or approval of college. Cultural concepts that shape health and illness. Major issues and trends in global health. Cultural and socioeconomic factors related to work with diverse populations. Applications for public health practice.

839 Water and Public Health: A Global Perspective
Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or in the Public Health Specialization or approval of college. Role of water in public health, focusing on the global crisis of water quantity and quality. Specific water “hot spots” primarily the Middle East, Africa, Asia, the Western and Southern U.S., and Mexico.

840 Public Health Finance
Spring of odd years. 3(3-0) RB: Academic or professional background in public health or public health related discipline, experience with databases. R: Open to students in the Public Health major or approval of college. Issues surrounding financial administration of health service organizations. Pragmatic side of healthcare finance, incorporating healthcare economics.
841  Public Health Policy
Fall. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or in the Public Health Specialization or approval of college. U.S. healthcare delivery and financing systems and their contributions to improving health status.

842  Introduction to Public Health Informatics
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Survey of information technology applications in the public health domain, functions and tools used to support health technology. Focus on legal-ethical parameters affecting applications in public health and public health research. Professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Overview of major public health issues and the health care system, both Western and traditional, in Ghana. Health status indicators and determinants; major programs/strategies; organization of the health care system, access to and payment for care; role, image and status of health care providers; interface between Western and traditional medicine; basic qualitative and quantitative field research methods for community health. Preparation for Healthcare in Ghana Spring. 1(1-0) Preparation for public health study abroad experiences in Ghana.

848  Healthcare in Brazil: A Public Health Perspective
Summer. 8(8-0) Summer: Abroad. RB: Academic or professional background in public health and/or public health related discipline; undergraduate level health-related discipline R: Open to students in the Public Health major or open to juniors or seniors. Approval of college; application required. Overview of major public health issues and the health care system in Brazil. Health status indicators and determinants of health and the legal basis and structure of the Brazilian health care system and social safety net. Includes field experiences with local health care providers and political leaders. eHealth and Telemedicine in Public Health Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Application of information and telecommunication technologies to the provision of healthcare including mHealth (Mobile Health). Benefits and applications of eHealth, telemedicine and mHealth both domestically and internationally. Outbreak Investigations in Public Health Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Process for conducting public health outbreak investigations including the role of local, state, federal and international agencies. Legal, political, media and law enforcement issues.

843  Methods in Public Health Informatics
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Theory, processes and applications of management information systems and how they relate to public health management, project management skills for information system implementation and evaluation.

844  Legal/Ethical Issues in Public Health Informatics
Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Focus on legal-ethical parameters affecting application of health technology.

845  Informatics and Information Technology
Spring of odd years. 3(3-0) P: HM 842 and HM 843 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Information technology for public health informatics systems, principles of relational database systems, operations, information systems, data sets, data standards and classification systems.

846  Advanced Topics in Public Health Informatics Management
Summer of odd years. 3(3-0) P: HM 842 and HM 843 and HM 845 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Research, evaluation and applications of informatics in public health and public health research.

847  Public Health in Ghana
Summer. 4(4-0) Summer: Abroad. P: HM 848 RB: Academic or professional background in public health and/or public health related discipline; undergraduate level health-related discipline R: Open to students in the Public Health major and open to juniors or seniors. Approval of college; application required. Overview of major public health issues and the health care system, both Western and traditional, in Ghana. Health status indicators and determinants; major programs/strategies; organization of the health care system, access to and payment for care; role, image and status of health care providers; interface between Western and traditional medicine; basic qualitative and quantitative field research methods for community health.

853  Public Health Program/Intervention Evaluation
Fall of even years. 3(3-0) P: HM 801 RB: Academic or professional background in public health and/or public health related discipline R: Open to graduate students in the Public Health major or approval of college. Introduce public health program evaluation methods/tools. Causal inference criteria, standard evaluation guides, procedural and outcome evaluation methods and needs assessment and performance monitoring methods. Integrates epidemiology, biostatistics and public health knowledge pertaining to program evaluation.

854  Health Equity Framework For Public Health Practice
Spring of odd years. 3(3-0) RB: Academic or professional background in Public Health and/or public health related discipline R: Open to students in the Public Health major or in the Public Health Specialization or approval of college. Social justice and health equity framework for the practice of public health with analysis of persistent health disparity across race, class, gender, and other forms of difference.

855  Environmental Public Health: Assessment and Response
Spring of odd years. 3(3-0) P: HM 806 and (HM 802 or HM 803) RB: Academic or professional background in public health and/or public health related discipline, experience with public health statistics. R: Open to students in the Public Health major or approval of college. Provide students with a conceptual foundation, practical skills and exposure to community-based methodologies for identifying and assessing environmental issues and developing strategies for improvement.

856  International Public Health Experience in Mexico
Spring of odd years. 1(1-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. C: PRR 410 concurrently. International public health field experience designed to provide students exposure to the culture and health problems facing local communities through hands-on practical experience in Mexico.
859 Making a Community Diagnosis I: Fundamentals
Spring of odd years. 1(1-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.

Concept and methods used in conducting community assessments (nationally and globally) – exploring key health indicators, environmental factors and community resources used to identify problems in a population.

860 Migrant, Refugee and Mobile Populations: Impact on Public Health
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.

Core public health issues prevalent and sometimes elusive in immigrant, refugee and mobile populations. Historical context, health care delivery, access and other barriers to preventive care, social justice, cultural competence, health policy, program challenges, measurement and data assimilation.

861 Introduction to Public Health Nutrition
Spring of odd years. 3(3-0) RB: Academic or professional background in public health or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.

Biological principles of nutrition and physical activity with public health focus. Nutritional issues in specific populations. Introduction to malnutrition, current issues in nutrition, role of nutrition in chronic diseases, and nutrition policy and intervention programs.

862 Parasitic Diseases and Public Health in Developing Countries
Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, knowledge of parasitology R: Open to students in the Public Health major or approval of college.

Nature, impact and control of parasitic diseases in developing countries.

863 Intersections of Human and Animal Health
Summer of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to graduate students in the Public Health major or approval of college.

Epidemiology and preventive medicine disease control methods for the control of infectious diseases and environmental health issues shared by animals and people.

864 Vitamins and Minerals: Risks to Public Health
Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.

Introduction to public health issues in vitamin and mineral nutrition, including biological roles, human requirements, and consequences of deficiency and excesses. Current issues regarding specific micronutrient status in U.S. and worldwide. Current and proposed population-based interventions.

865 U.S. Healthcare Access and Delivery for Migrant, Refugee, and Mobile Populations
Summer of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.

Impact and challenges posed to U.S. Public Health system by migrant, refugee and mobile populations entering the United States and core public health issues they face. Barriers to prevention including health care access and delivery, social justice, cultural and language competence, workplace and environmental factors. Issues in measurement and data assimilation.

866 Demography, Population Dynamics and Public Health
Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.

Methods and concepts in the study of population change. Analytical approaches for analyzing and interpreting population changes. Applications in planning, policy-making and administration.

867 integrated Research Study Design and Informatics
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, nursing or allied health R: Open to students in the Public Health major or approval of college.

Introduction to clinical trial phases, research design, informatics aims, informatics platforms and datum lifecycle.

868 Psychiatry and Public Health: A Biopsychosocial Perspective
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.

Overview of common psychiatric diagnoses across the ages highlighting sociological and economic determinants of treatment and outcomes.

869 Zoonotic Diseases of Public Health Importance
Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.

Zoonotic diseases by agent (bacterial, viral, parasitic, prion, rickettsial, fungal), modes of transmission (direct, indirect-food, water, vectorborne), and human, animal, environmental interactions leading to disease intervention/control methods. Impacts of climate change and changing dynamics of the human population (migration, global travel, shifts in housing preferences and urbanization) and the animal population.

870 Vaccine Preventable Diseases of Public Health Importance
Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.

Vaccine-preventable diseases of importance to the public health and the global community. Basic epidemiology, surveillance, vaccine updates, status of the vaccination programs, associated cost, benefits, and related public health policies. Current controversies associated with national and international disease control, elimination, and eradication campaigns.

871 Global Public Health in Action
Summer of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline. Basic knowledge of public health issues and epidemiology are essential R: Open to students in the Public Health major or approval of college.

Qualitative research methods and analysis using case studies in national and international public health. Development of a case study.
876 Nutrition and Chronic Diseases: Living Longer and Healthier
Summer of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Role of nutrition and physical activity in chronic diseases with emphasis on macronutrients. Relationshio between obesity and health and socioeconomic disparities in the United States and current policies. Overview of nutrition transition and impact on developing nations.

877 Public Health Nutrition and the Life Stages
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.

878 Applied Biostatistics for Public Health Practitioners
Fall of even years. 3(3-0) P: HM 802 RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.

879 Ethnographic Approaches to Public Health Practice
Summer of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Use of ethnography and theory in public health research and practice. Through ethnography explore how culture, history and politics combine to influence health and disease is approached by health professionals and experienced by communities. Use ethnographic research methods to examine a public health issue in local community.

880 Public Health Research Methods
Summer of odd years. 3(3-0) P: HM 802 and HM 803 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. Not open to students with credit in VM 830. Identification of research questions, study design, data collection and questionnaire design, dataset manipulation and analysis, reporting of findings. Proposal writing, ethical considerations and submission to institutional review board (IRB).

881 Pathogens of Parasitic Infections: Important to Public Health
Summer. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Specific causes and progression of major parasitic diseases important to global public health; diverse aspects of the host's responses to the invasion by these organisms; protective and pathogenic immune responses; development of clinical disease; role of chemotherapy development of clinical disease; effects of chemotherapeutic agents; epidemiological discussion of the importance of quantification of the pathology and clinical disease seen in populations.

882 Public Health Nutrition: Assessment and Development of Population-Based Interventions
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Assessment of nutritional and physical activity on a population level. Identification of at-risk populations. Collection, interpretation and application of data for developing intervention programs and evaluating behavior change and health outcomes. Role of public health and national nutrition institutions.

883 Mobile Technology, Social Media, and Games in Public Health
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Utilization and critical analysis of mobile technology, social media platforms and games to assess, implement and improve public health programs and community education.

884 Decision Making and Technology Assessment in Healthcare and Public Health
Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline and a familiarity with health information technology and telehealth concepts. R: Open to students in the Public Health major or approval of college.
Decision theory, assessment, project management, and program evaluation of information technology for public health including Telehealth, eHealth, and mobile technology for health (mHealth).

885 Health Information Technology and Telehealth Technologies as Applied to Public Health
Summer of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline with an interest in new technologies and strategies for problem solving in public health. R: Open to students in the Public Health major or approval of college.
Introduction to health information technology and health information systems in healthcare and public health industries. Telehealth, eHealth, and mobile technologies for health (mHealth).

886 Public Health Diagnosis and Interpretation of Parasitic Infections
Fall of even years. 3(3-0) P: HM 863 RB: Academic or professional background in public health and/or public health related discipline, knowledge of parasitology R: Open to students in the Public Health major or approval of college.
Current approaches in the detection, measurement and field interpretation of parasitic infections at the individual level and community level.

887 Control and Eradication of Parasitic Infections: Public Health Importance
Spring of odd years. 3(3-0) P: HM 863 RB: Academic or professional background in public health and/or public health related discipline, knowledge of parasitology R: Open to students in the Public Health major or approval of college.
Control programs, elimination/eradication of parasitic diseases of public health importance in developing countries.

888 Field Methodology for Investigating Parasitic Diseases of Public Health Importance
Summer of even years. 3(3-0) P: HM 863 RB: Academic or professional background in public health and/or public health related discipline, knowledge of parasitology R: Open to students in the Public Health major or approval of college.
Financial, personal, and logistical aspects of control programs for parasitic diseases. Practical applications in field methods.

889 Applied Epidemiologic Methods for Public Health Practitioners
Fall of even years. 3(3-0) Interdepartmental with Epidemiology. Administered by Human Medicine. P: HM 802 and HM 803 RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Identification and conceptualization of public health problems. Generation of testable hypotheses and appropriate data sets. Interpretation of appropriate measures of associations. Evaluation of validity and generalizability of results and ethical issues surrounding the use of humans in epidemiological research. Real case studies are used to analyze study design including the role of chance, bias, misclassification, effect measure modification, interaction, and missing data.

890 Independent Study in Bioethics
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to masters students in the Bioethics, Humanities, and Society major. Approval of department. Special projects, directed readings, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.

891 Introduction to Public Health Practicum
Fall, Spring, Summer. 1(1-0) P: HM 801 RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Approval of college.
Preparatory work for practicum placement. Special projects arranged by an individual student and faculty member in areas supporting practicum placement.
892 Public Health Practicum  
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P: HM 801 and HM 891 RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Approval of college.  
Professional practicum.

893 Public Health Capstone  
Fall, Spring, Summer. 1 to 2 credits. A student may earn a maximum of 2 credits in all enrollments for this course. P: HM 801 and HM 891 and HM 892 RB: Academic or professional background in public health and/or public health related discipline, undergraduate level math or statistics coursework R: Approval of college.  
Capstone experience.

894 Practicum in Bioethics  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: HM 820 R: Open to master's students in the Bioethics, Humanities, and Society major. Approval of department. Observations, participation, and study of ethical and policy issues in selected health, research, or governmental settings.

899 Master's Thesis Research  
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Master's thesis research.