Biochemistry and Molecular Biology

120.800.01  MPH CAPSTONE: BIOCHEMISTRY AND MOLECULAR BIOLOGY
(variable units)
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.
Pass/fail only
Consent of instructor required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the Capstone project.

120.820.01  THESIS RESEARCH BIOCHEMISTRY

120.840.01  SPECIAL STUDIES AND RESEARCH BIOCHEMISTRY

120.853.01  SUMMER BIOCHEMICAL TECHNIQUES
(6 units)
Departmental Faculty
Biochemistry and Molecular Biology doctoral students spend six weeks participating in the research activities of a faculty members laboratory.
Lab: TBA
Must be a 1st year Biochemistry and Molecular Biology student.
Pass/fail only
Consent of instructor required

Biostatistics

140.800.01  MPH CAPSTONE BIOSTATISTICS
(variable units)
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.
Pass/fail only
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

Environmental Health Sciences

180.601.01  ENVIRONMENTAL HEALTH
(5 units)
Links, Jonathan
Examines health issues, scientific understanding of causes, and possible future approaches to control of the major environmental health problems in industrialized and developing countries. Topics include how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems.
Lecture: M W F 1:30 - 3:20
Prerequisite: College courses in general biology, algebra, and physics or chemistry.
This course is required for MPH students. Optional Q&A and discussion sessions on Mondays and Wednesdays from 3:30-5 p.m.

180.800.01  MPH CAPSTONE ENVIRONMENTAL HEALTH SCIENCES
(variable units)
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.
Pass/fail only
Prerequisite: All other MPH core

182.625.01  PRINCIPLES OF OCCUPATIONAL AND ENVIRONMENTAL HYGIENE
(4 units)
Breysse, Patrick
Introduces concepts, terminology, and methodology in the practice of industrial hygiene, and identifies resource materials. Includes lectures, typical problems, demonstrations, and a walk-through survey.
Lecture: T Th 1:30 - 3:20

Epidemiology

Environmental Health Sciences

Summer term information is correct as of June 4, 2008. For updated information, please use Course Search at my.jhsph.edu/C4/Academics/.
340.601.01 PRINCIPLES OF EPIDEMIOLOGY (5 units)
Crum, Rosa and Kirk, Gregory
Introduces principles and methods of epidemiologic investigation of infectious and noninfectious diseases. Illustrates how methods of studies of the distribution and dynamic behavior of disease in a population can contribute to an understanding of etiologic factors, modes of transmission, and pathogenesis. Presents different types of study design, including randomized trials, case-control and cohort studies, and risk estimation and causal inferences. Demonstrates the interface between epidemiology and the development of policy. Laboratory problems provide experience in epidemiologic methods and inferences, illustrating a common-vehicle epidemic, the spread of infectious diseases in populations, epidemiologic aspects of a noninfectious disease, causality, vaccination, the epidemiological approach to health services evaluation, rates of morbidity and mortality, sensitivity and specificity, and life table methods.
Email: aarnold@jhsph.edu
Lecture: M W F 8:30 - 9:20
Lab: M W 10:00 - 11:50 or M F 10:00 - 11:50 or W F 10:00 - 11:50
Enrollment minimum of 5
Enrollment maximum of 275
Consent of instructor required
Consent required for non-MPH degree candidates. No auditors permitted.

340.655.01 INTRODUCTION TO CLINICAL RESEARCH (6 units)
Ford, Daniel
Provides an intensive two-week introduction to clinical research methods, emphasizing epidemiological, biostatistical, and computing methods. Hand-outs and homework exercises provided at each session.
Email: rjstamba@jhmi.edu
Lecture: M T W Th F 9:00 - 4:30 July 14 – July 25, 2008
Enrollment minimum of 5
Enrollment maximum of 50
K-12, GTPCI, Clinical Epid students
Pass/fail only
Consent of instructor required
Participants need to register with Roxanne Stambaugh prior to registering with the Registrar’s Office. Course Coordinator, Introduction to Clinical Research (t) 410-955-0496 rjstamba@jhsp.h
Prerequisite: Students must preregister and prior submission of an abstract for a research project
Participants need to register with the Course Coordinator, Roxanne Stambaugh, prior to registering with the Registrar’s Office. (t) 410-502-5999, rstamba1@jhmi.edu.

340.800.01 MPH CAPSTONE EPIDEMIOLOGY (variable units)
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.
Pass/fail only

340.820.01 THESIS RESEARCH EPIDEMIOLOGY

340.851.01 PHASE INTERNSHIP (variable units)
Ibrahim, Michel
Familiarizes students with public health practice settings and provides hands-on experience about research topics in practice. Students synthesize and integrate knowledge acquired in coursework and apply it to a practical issue. Field experiences, seminars, research projects, and a scientific paper form the basis for the course.
Lecture: TBA
Pass/fail only
Consent of instructor required
Instructor must meet with each student accepted to this program.
Prerequisite: 340.751 Epid Methods I, 340.601Principles of Epidemiology, or equivalent.

Extradepartmental

550.867.01 INTRODUCTION TO MPH STUDIES (1 unit)
Departmental Faculty
Introduces full-time MPH students to their educational program. Includes discussion group sessions with summer mentor faculty, enrichment seminars, required readings, and a final paper.
Lecture: TBA
Pass/fail only
This course will be administered by the faculty on the MPH executive board who will be serving as mentors to the students. The faculty advisors will review the final paper (the goals analysis).

550.870.01 SS/R: OCCUPATIONAL MEDICINE RESIDENCY-PRACTICUM YEAR (variable units)
Weaver, Virginia and Schwartz, Brian
Occupational medicine resident physicians perform a series of clinical, administrative, regulatory, and plant-based rotations throughout the year.
Lecture: TBA
Residency training.
Pass/fail only
Consent of instructor required
Must have approval of program director.

550.873.18 SEMINAR IN PUBLIC HEALTH LEADERSHIP (1 unit)
Morlock, Laura
Provides a framework for the development of advanced professional practice and leadership in public health. Topics include the scope of public health, leadership competencies, problem solving, and communication skills. Involves presentations by faculty, guest speakers, and students.
Lecture: TBA
Taiwan DrPH cohort only
Pass/fail only

Summer term information is correct as of June 4, 2008. For updated information, please use Course Search at my.jhsph.edu/C4/Academics/.
Please check extradepartmental listing for courses in individual departments.

550.880.01  SS/R: GENERAL PREVENTIVE MEDICINE RESIDENCY-MPH  
             (1 unit)  
Alexander, Miriam  
Lecture: TBA  
Restricted to MPH/GPMR during MPH year  
Pass/fail only

550.890.01  SS/R: GENERAL PREVENTIVE MEDICINE RESIDENCY-RESIDENCY YEAR  
             (variable units)  
Alexander, Miriam  
Lecture: TBA  
Restricted to GPMR during post MPH year.  
Pass/fail only

551.604.18  QUANTITATIVE TOOLS FOR MANAGERS  
             (3 units)  
Dickson, Conan  
Provides current and future managers in health care with operational understanding of quantitative modeling tools that can be used to support decision-making. Involves formulation of decision problems into models, solving models using spreadsheet and optimization software, and interpretation of modeling results. Modeling methods to be covered include linear programming, decision analysis, queueing, and simulation. These methods are applied to problems involving staffing, scheduling, patient flow analysis and other management problems.  
Lecture: TBA  
Taiwan DrPH cohort only

Health Behavior and Society

410.800.01  MPH CAPSTONE HEALTH, BEHAVIOR AND SOCIETY  
             (variable units)  
Departmental Faculty  
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.  
Pass/fail only  
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.  
All MPH students are required to do a capstone project.

Health Policy and Management

300.645.01  MAKING CHANGE THROUGH POLICY  
             (5 units)  
Teret, Stephen  
Introduces students to the role that policy plays in the promotion and protection of the public’s health. Using a variety of domestic and international health issues as case studies, students learn how policy can be an effective tool for making change. Offers perspectives from both the developed and developing world.  
Lecture: T Th 9:00 - 11:20  
MPH students only  
Pass/fail only

300.800.01  MPH CAPSTONE HEALTH POLICY AND MANAGEMENT  
             (variable units)  
Departmental Faculty  
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.  
Pass/fail only

311.841.18  SPECIAL STUDIES AND RESEARCH HPM/DRPH  
             (variable units)  
Shi, Lelyu  
Students conduct independent research with faculty members.  
Lecture: TBA  
Taiwan DrPH cohort only  
Pass/fail only

312.624.18  FINANCIAL MANAGEMENT IN HEALTH CARE II  
             (3 units)  
Ellis, John  
Case studies present an overview of financial theory and financial management principles and concepts in a health care setting. Topics include discounted cash flow analysis, long-term debt financing, equity financing, lease financing, capital budgeting, analysis, and forecasting.  
Lecture: TBA  
Taiwan DrPH cohort only

313.631.18  CONCEPTS AND APPLICATIONS IN ECONOMIC EVALUATION II  
             (3 units)  
Frick, Kevin  
Enables students to understand and apply current methods in the economic evaluation of health interventions. Students design and carry out an economic evaluation. Introduces a number of prominent sets of recommendations for conducting economic evaluations. These recommendations form the basis for the remainder of the topics covered and for the assignment on which students are evaluated. Other analytic topics covered include the role of decision analysis in economic evaluation; an introduction to Markov modeling; estimating QALYs and DALYs; and the principles and practices of measuring and analyzing costs. Also introduces students to a range of techniques for presenting data on costs and effects together such as sensitivity analysis and league tables. Finally, introduces students to a critique of the value of economic evaluation in health care decision-making.  
Lecture: TBA  
Taiwan DrPH cohort only  
Prerequisite: 313.630  
Multi-term with 313.630 - CONCEPTS AND APPLICATIONS IN ECONOMIC EVALUATION I

International Health

Summer term information is correct as of June 4, 2008. For updated information, please use Course Search at my.jhsph.edu/C4/Academics/.
220.800.01 MPH CAPSTONE INTERNATIONAL HEALTH  
(variable units)  
Departmental Faculty  
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.  
Pass/fail only  
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

Mental Health  
330.800.01 MPH CAPSTONE MENTAL HEALTH  
(variable units)  
Departmental Faculty  
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.  
Pass/fail only

Molecular Microbiology and Immunology  
260.800.01 MPH CAPSTONE MOLECULAR MICROBIOLOGY AND IMMUNOLOGY  
(variable units)  
Departmental Faculty  
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.  
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

260.851.01 LABORATORY ROTATIONS  
(4-8 units)  
Departmental Faculty  
All departmental Sc.M. and doctoral students spend two and three terms, respectively, participating in the research activities of departmental faculty's laboratories. Students select appropriate rotations in consultation with their academic advisors and the departmental Graduate Program Committee.

Lecture: TBA  
Pass/fail only  
Consent of instructor required  
Consent of rotation supervisor required.  
TBA

Population, Family and Reproductive Health  
380.800.01 MPH CAPSTONE POPULATION, FAMILY AND REPRODUCTIVE HEALTH  
(variable units)  
Departmental Faculty  
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.  
Pass/fail only

DISTANCE EDUCATION  
Distance Education courses must have consent of instructor to be taken as audit. All students must complete the Introduction to Online Learning course prior to enrolling in any distance education course. Students can find information about the course, course dates, and directions for registration, at the course website:  
http://distance.jhsph.edu/oll/  

187.625.81 ANIMALS IN RESEARCH: LAW, POLICY, AND HUMANE SCIENCES  
(2 units)  
Locke, Paul and Goldberg, Alan  
Introduces students to the principles, laws, and policies that influence the use of animal and alternative, non-animal-based (humane sciences) research techniques in biomedical research.  
Prerequisite: Introduction to Online Learning.

221.606.81 TRAINING METHODS AND CONTINUING EDUCATION FOR HEALTH WORKERS  
(4 units)  
Brieger, William  
Identifies the role of training and continuing education as an important component of health service and personnel management. Participants are guided through the steps of planning training and continuing education activities for a range of health workers from managers to village volunteers. Draws on real life examples from community-directed onchocerciasis control, village health worker programs, and patent medicine vendor training programs, to name a few. Participants prepare a training plan that includes needs assessment instruments, procedures for involving the trainees in their own learning, instructional objectives, appropriate learning methods and delivery modes, resource and budget needs, monitoring and evaluation mechanisms and follow-up supervision. Can provide a foundation for developing a capstone project.  
Enrollment minimum of 10  
Prerequisite: Introduction to Online Learning.

221.688.81 SOCIAL AND BEHAVIORAL FOUNDATIONS OF PRIMARY HEALTH CARE  
(4 units)  
Brieger, William  
Provides students with the knowledge and skills needed to understand individual, community, and organizational behaviors and change processes in cross-cultural and developing countries settings as a foundation for planning appropriate Primary Health Care (PHC) programs. Students learn to outline the contributions of social and behavioral science theory in the planning and implementation of culturally relevant PHC programs; will utilize social and behavioral theories to understand individual, social network, organizational, community, and policy maker health related behaviors; and identify the factors that promote and inhibit community involvement in PHC program development and implementation.  
Prerequisite: Introduction to Online Learning.
Please check extradepartmental listing for courses in individual departments.

**Extradepartmental**

**550.860.82 RESEARCH ETHICS**
(1 unit)
DiPietro, Janet
This series of online modules presents information concerning issues related to the responsible conduct of research, such as authorship, data management, data ownership, guidelines of professional conduct, research fraud or scientific misconduct, academic ethics, conflict of interest, federal and institutional guidelines related to research using human and animal subjects, ethical issues involving vulnerable subjects in research, confidentiality, the Institutional Review Board (IRB) and the Institutional Animal Care and Use Committee (IACUC).

**Pass/fail only**
This course fulfills the requirement of all research students (PhD, ScD, ScM, and some MHS students) for a course in the responsible conduct of research.

**222.641.81 PRINCIPLES OF HUMAN NUTRITION**
(4 units)
Caballero, Benjamin
Provides an integrated overview of the physiological requirements and functions of protein, energy, and the major vitamins and minerals that are determinants of health and disease. Topics include dietary sources, intake levels, and biological determinants of nutrient requirements; assessment of nutrient status in individuals and populations; the role of nutrition in growth and health through the life cycle; the rationale for the development of dietary guidelines and of nutrition policies in different countries; and the role of diet on the development of chronic diseases, such as cardiovascular disease, cancer, diabetes, etc.

**Prerequisite:** Introduction to Online Learning; basic background in biology/medical sciences.

**223.672.81 DATA MGMT METHODS IN HEALTH RESEARCH STUDIES**
(5 units)
Holt, Elizabeth
Presents data management techniques needed to implement a health research study, especially in international settings. Discusses methods of designing and monitoring patient data flow, emphasizing data collection, management, and analysis using database software packages. Involves lectures and labs. Geared to second-year doctoral students preparing to undertake research.

**Enrollment minimum of 5**
**Enrollment maximum of 30**

**Prerequisite:** Introduction to Online Learning; 340.601 - Principles of Epidemiology.

**NOT A HOPKINS FACILITY**

**International Health**

**221.725.98 COMMUNITY-BASED PARTICIPATORY RESEARCH WITH INDIGENOUS PEOPLES**
Course offered every other year. Course offered this year.
(2 units)
Departmental Faculty
Course Location: Banff, Canada
Focuses on teaching the principles and methods of community-based participatory research (CBPR) in the context of addressing the root causes of disease and injury in Indigenous communities. Challenges students to use a CBPR framework to deepen their understanding and application of social determinants of health, such as spirituality, indigeneity, resource alienation and colonization that are unique to indigenous communities. Develops skills in CBPR approaches and methods for conducting field research related to social determinants. Prepares students to conceptualize, design, understand, and implement CBPR projects in indigenous populations.

**Lecture:** M T W Th F 8:30 - 2:20 July 21-25, 2008
**Enrollment minimum of 10**
**Enrollment maximum of 45**

**Prerequisite:** Experience living and working in indigenous settings

Students who take 221.725.81 should not take 410.631.01 or 410.841.111 because of content overlap. First offering of the course will focus on recruiting Indigenous peoples from the United States.

**ONLINE NOT DE**

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