

# JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

## SUMMER TERM 2009-10

### East Baltimore - Distance Education

#### SCHEDULE INFORMATION

This schedule includes all courses expected to be offered by the Johns Hopkins Bloomberg School of Public Health during the Summer term of academic year 2009-10. The listing is based on data supplied by the academic departments and approved by the subcommittee of the Committee on Academic Standards as of May 11, 2009. Courses are listed in numerical order within departments. The second three digits represent the department or division. The three digits to the right of the period represent the course number.

#### COURSE INFORMATION

Included in the listing for each course are class meeting dates, times, instructor, and prerequisites. Classes designated as TBA will have times arranged at a later date by the department offering the course; students must check with the department for this information. Classroom assignments will be made available immediately prior to the beginning of the term. The most recent course descriptions are included at the following website:

Visit the JHSPH Course Search site for current course information:  
<http://commprojects.jhsph.edu/courses/>

You can access links to comprehensive course information: [http://www.jhsph.edu/student\\_affairs/registrar/](http://www.jhsph.edu/student_affairs/registrar/)

#### REGISTRATION INFORMATION

Continuing students may register for Summer term through **June 19, 2009** by logging on to ISIS Self Services at <https://isis.jhu.edu/sswf>. To register via the web, students must use their JHED LID (logon user ID) and password for authentication. **Summer term tuition payments are due via the web (<https://isis.jhu.edu/sswf>) by Friday, July 17, 2009.** Changes to Summer term registration may be processed via the web during the published Add/Drop period for Summer term: **Wednesday, July 1 – Wednesday, July 15, 2009. The one exception to these dates is 340.655 Introduction to Clinical Research. Students taking this course must process any Adds or Drops during the first two days of the course – 7/13 and 7/14.** Special Students Limited and School of Medicine Post Doctoral Fellows may not register via the web; they must register in person, prior to the June 19<sup>th</sup> deadline. Special Students Limited must submit all registration materials (registration/student data form, instructor's permission and payment information) to the Business Office (W1101). SOM Post Docs must complete the paper registration form in E1002 (SOM Post Docs must adhere to all course restrictions and required permissions).

Tuition is assessed at a rate of **\$815** per credit unit. Students **receive a 100% tuition refund for any withdrawals made prior to the end of the Add/Drop period; however, there is no tuition refund after the Add/Drop period.** A fee of \$100 will be assessed for registering after the June 19<sup>th</sup> deadline and a fee of \$50 will be assessed for making changes after the Add/Drop deadline for each academic term. No changes will be accepted during the last two weeks of a term.

#### REQUIRED APPROVALS

All students in the School (with the exception of Special Students Limited and SOM Post Docs) are expected to have their registration selections approved by their academic advisors. **It is the student's responsibility to have his/her registration, including grading options and registration changes, reviewed and approved by an advisor. Additionally, if a course is noted as requiring instructor's consent, it is the student's responsibility to obtain such consent. This consent may be obtained in person or by e-mail and it is in the student's best interest to maintain documentation of such approvals. Additionally, all special studies (.800 series) and all courses taken for audit must have the instructor's consent.** All Special Students Limited must have each of their course registrations signed by the instructor or submit e-mail approvals with their registrations.

## **COURSE LISTING CODES**

Course listings consist of the following: a three character department code—the second two characters identify the department in which the course is offered, the third character may be used to indicate a division or cluster within the department. Refer to the list below for department/division codes.

## **DEPARTMENT/DIVISION CODES**

- 120. Biochemistry and Molecular Biology  
    Division of Reproductive Biology
- 140. Biostatistics
- 180. Environmental Health Sciences
- 182. Environmental Health Engineering
  - 183. Physiology
  - 186. Radiation Health Sciences
  - 187. Toxicological Sciences
  - 188. Occupational and Environmental Health
- 220. International Health
- 260. Molecular Microbiology and Immunology
- 300. Health Policy and Management
- 330. Mental Health
- 340. Epidemiology
- 380. Population and Family Health Sciences
- 390. Clinical Investigation
- 410. Health Behavior and Society
- 550. Adjunct Studies

A course number—the three character course number will be used to indicate the level, format, and the sequence of the course. Since the School of Public Health is a graduate division, courses will be numbered within the following range.

- A. 600-699: Formal Courses normally offered in the second year of graduate study.
- B. 700-799: Formal Courses normally offered in the second or last year of graduate study.
- C. 800-899: Repeatable courses offered in a variety of informal (i.e., non-lecture) formats that can be distinguished by the following sub designations:
  - 810 series Field Placement
  - 820 series Thesis Research (master's and doctoral)
  - 830 series Postdoctoral Research
  - 840 series Special Studies and Research
  - 850 series Laboratory rotation courses
  - 860 series Informal seminars (e.g., journal or research clubs) that vary in content each quarter of each year and address current topics

## **Examples**

- 182.820 Thesis Research in Environmental Health Engineering
- 340.840 Special Studies and Research Epidemiology
- 260.851 Laboratory Rotations
- 187.861 Toxicological Sciences Seminar

## **INTERDIVISIONAL CODES**

Some School of Public Health courses may have prerequisites from other divisions of the University. Also, other divisions may jointly offer courses with the School of Public Health. To denote courses offered by other University divisions, the following system is used:

- AS School of Arts and Sciences (SAS)
- ME School of Medicine (SOM)
- NR School of Nursing (SON)
- BU Business Carey School

(Example: ME 330.702 denotes a School of Medicine course, in the Department of Pharmacology and Molecular Sciences)

# SUMMER TERM COURSE SCHEDULE 2009-2010

Please check extradepartmental listing for courses in individual departments.

## 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**  
Consent from the Capstone Supervisor is 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**  
Consent of instructor is 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.

## Clinical Investigation

**390.841.01 SS/R: DATABASE DESIGN AND IMPLEMENTATION IN CLINICAL RESEARCH**  
(2 units)  
Punjabi, Naresh  
Presents basic concepts of relational database design for clinical and basic research. Topics covered include: a) development of data collection forms, b) design of a relational database, c) data quality control, and d) importing and exporting collected data across different platforms.  
Lecture: M W Th 5:30 - 7:30 7/27, 7/29, 7/30, 8/3, 8/5, 8/6, 8/10, 8/12  
Enrollment minimum of 8  
Enrollment maximum of 20  
Restricted to individuals in the SOCI certificate program or GTPCI students.  
**Pass/fail only**  
**Consent of instructor required**  
This course is to be taken by individuals in the SOCI certificate program or GTPCI students.  
First in a five-course series. Course is held in a computer lab.

## 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 are on Mondays and Wednesdays from 3:30-5 p.m. Course Materials Fee is \$20.00

**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

## Epidemiology

- 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, epidemiological 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  
MPH students only  
No auditors permitted. Course Materials Fee is \$35.00
- 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  
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, rstamba1@jhmi.edu, 410-502-5999, prior to registering with the Registrar's Office.  
**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)  
Sifakis, Frangiscos  
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.  
Email: fsifakis@jhsph.edu  
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, 340.601 Principles 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  
Full-time MPH students completing program in 11 months (starting in July and ending in May)  
**Pass/fail only**  
This course is 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). Course Materials Fee is \$11.00.
- 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.
- 550.880.01 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**

## 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**

## International Health

### 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/oil/>

**Please check extradepartmental listing for courses in individual departments.**

**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.

**550.630.81 PUBLIC HEALTH BIOLOGY**  
(3 units)  
Korch, George and Coulombe, Pierre  
Offers an integrative molecular and biological perspective on public health problems. Explores population biology and ecological principles underlying public health and reviews molecular biology in relation to public health biology. Modules focus on specific diseases of viral, bacterial, and environmental origin. Specific examples of each type are used to develop the general principles that govern interactions among susceptible organisms and etiologic agents. Special attention is devoted to factors that act in reproduction and development. Emphasis placed on common elements encountered in these modules. These may include origin and dissemination of drug resistance, organization and transmission of virulence determinants, modulation of immune responses, disruption of signal transduction pathways, and perturbation of gene expression. The role of the genetic constitution of the host is considered as well.  
**Prerequisite:** Introduction to Online Learning

Content similar to 550.630.01

**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.

**221.637.81 HEALTH INFORMATION SYSTEMS**  
(3 units)  
Systematically presents population-based and provider-based methods by which data are secured and analyzed to provide indicators of health service use, health risk behavior, and outcomes relative to health status. Targets health status indicators as the basis of planning and evaluation across a wide range of health objectives and measurement characteristics examined. Introduces health information resources available through the World Wide Web and develops skills to search and access data through the Internet.  
Enrollment minimum of 20  
**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.

**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.

## **INTERNET MODULE 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.

## **NOT A HOPKINS FACILITY International Health**

Please check extradepartmental listing for courses in individual departments.

**221.675.91 KNOWLEDGE MOBILIZATION WITH INDIGENOUS PEOPLES**

**Course offered every third year. Course offered this year.**

(2 units)

Santosham, Mathuram

Stimulates new insights on how research can be applied to define and promote programs, policies and change. Explores key approaches to employing research agendas and findings to enhancement of health and well-being across local, national and international communities. These include, among other things, education and advocacy approaches to influencing policy and political change through research knowledge. Also examines systematic approaches to employing research and findings to facilitate change. Leading Indigenous researchers serve as guest faculty and share case examples of knowledge mobilization to address Indigenous interests. Among other activities, participants initiate development of a blueprint to translate research specific to their interests to enhancement of well-being in local communities and beyond.

Lecture: M T W Th F 8:30 - 2:20 July 20-24, 2009

Lab: TBA

Enrollment minimum of 10

Enrollment maximum of 45

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