SCHEDULE INFORMATION
This schedule includes all courses expected to be offered by the Johns Hopkins Bloomberg School of Public Health during the 1st term of academic year 2012-13. The listing is based on data supplied by the academic departments and approved by the subcommittee of the Committee on Academic Standards as of July 16, 2012. 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://www.jhsph.edu/courses/

You can access links to comprehensive course information: http://www.jhsph.edu/offices-and-services/student-affairs/registrar/

REGISTRATION INFORMATION
Continuing students may register for 1st term through August 24, 2012 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. 1st term tuition payments are due via the web (https://isis.jhu.edu/sswf) by Friday, September 21, 2012. Changes to 1st term registrations may be processed via the web during the published Add/Drop period for 1st term: Monday, September 3 – Friday, September 14, 2012. School of Medicine Post Doctoral Fellows may not register via the web; they must register in person, prior to the August 24 deadline. SOM Post Docs must complete the paper registration form in E1002. SOM Post Docs must adhere to all course restrictions and required permissions and are responsible for any course materials/ lab fees in addition to any late registration and late change fees. Special Students Limited (SSL) may apply for the regular eight week term at http://www.jhsph.edu/offices-and-services/student-affairs/studentaccts/non-degree-application/index.html; SSL online registration requests will not be processed until instructor’s permission for all courses and tuition payment are received. SSLs must submit payment and permission to the Continuing Education Student Services Office at 410-614-8633 or mail to: Continuing Education Student Services, Suite 1101, 615 N. Wolfe St., Baltimore, MD 21205.

Tuition is assessed at a rate of $923 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 August 24 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 approved by the instructor in writing (e-mail approvals are acceptable).

As of August 13, 2012
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)
Biochemistry and Molecular Biology

120.600.01 BIOCHEMISTRY -- AN INTRODUCTORY COURSE I
   Course offered this year
   (5 credits)
   Bryant, Randy
   Explores the structures of the principal cellular macromolecules and their roles in cellular processes. Emphasizes the forces that underlie specific recognition processes. Considers the mechanisms of enzyme action and biochemistry of nucleic acids.
   Information not required for this course type
   E-mail: fbryant@jhsph.edu
   Lecture: M W F 10:30 AM - 11:50 AM
   Enrollment minimum of 5
   Enrollment maximum of 42
   Public Health students will be given first priority for registration. All other students are required to get permission in order to register.
   Letter Grade or Pass/Fail
   Consent required for some students
   Public Health students will be given first priority for registration. All others need permission from contact to register.
   Prerequisite: Introductory organic chemistry.

120.602.01 INTRODUCTION TO MOLECULAR BIOLOGY
   Course offered this year
   (4 credits)
   Matunis, Michael
   Discusses synthesis of macromolecules, the genetic code, regulation of gene expression, and recent advances in biotechnology, emphasizing special contributions from microbial studies and cell-free systems.
   Upon successfully completing this course, students will be able to:
   1. Explain the molecular mechanisms underlying key biological processes
   2. Describe genome structure, gene regulation, and cell cycle control
   E-mail: mmatunis@jhsph.edu
   Lecture: T TH 1:30 PM - 2:50 PM
   Enrollment minimum of 10
   No Maximum
   Letter Grade or Pass/Fail
   Prerequisite: Introductory biochemistry or consent of instructor

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
120.620.01  **FUNDAMENTALS OF REPRODUCTIVE BIOLOGY**

Course offered this year
(3 credits)
Evans, Janice
Addresses the basic biological mechanisms that underlie male and female reproduction and that pertain to reproductive health issues, such as contraception, infertility, sexually transmitted diseases, and reproductive aging. Suitable for students with limited backgrounds in the biological sciences.

Information not required for this course type

E-mail: jpevans@jhsph.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
**Letter Grade or Pass/Fail**

120.800.01  **MPH CAPSTONE: BIOCHEMISTRY AND MOLECULAR BIOLOGY**

Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.

Information not required for this course type

Lecture: TBA
Enrollment minimum of 10
No Maximum
**Pass/Fail**
Consent required for all students
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**

Course offered this year
(2 credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
**Pass/Fail**

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics.
120.822.01  SEMINARS IN RESEARCH IN BIOCHEMISTRY AND MOLECULAR BIOLOGY
Course offered this year
(1 credits)
Coulombe,Pierre
Integrates academic training with current research in biochemistry and molecular biology, reproductive biology and cell and developmental biology. Researchers from JHU and other biomedical research institutions present results of state of the art investigations of problems and issues of public health significance, emphasizing experimental design and methodology for analysis and discussion.
Information not required for this course type

E-mail: coulombe@jhsph.edu
Lecture: M 12:00 PM - 12:50 PM
Enrollment minimum of 10
No Maximum
Pass/Fail

120.830.01  POSTDOCTORAL RESEARCH BIOCHEMISTRY
Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

120.840.01  SPECIAL STUDIES AND RESEARCH BIOCHEMISTRY
Course offered this year
(variable credits)
Based on other coursework taken.
Consists of presentations by speakers of scientific renown on important and current information in biochemistry, and molecular and cellular biology, and by faculty members from the university whose research efforts are of general interest to fellows, students, and faculty.
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

120.850.01  BIOCHEMICAL TECHNIQUES
Course offered this year
(6 credits)
All departmental students spend seven weeks participating in the research activities of a faculty member’s laboratory. During the academic year each student rotates through five laboratories.
Information not required for this course type

Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
120.852.01  CORE RESEARCH LITERATURE

Course offered this year
(variable credits)

BMB students taking this course should enroll for 2 credits. MMI students taking this course should enroll for 1 credit.

Hardwick, J.-Marie and Bryant, Randy

Provides a complement to the BCMB core curriculum. Student reads research papers relating to a core lecture topic. Discussions are led by a student while a faculty member from Biochemistry or MMI act as facilitator. Helps students to develop skills in reading the primary literature and provides an introduction to the experimental paradigms underlying the concepts presented in the core course.

Information not required for this course type

E-mail: mhardwic@jhsph.edu
Lecture: T 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum

Letter Grade or Pass/Fail

Consent required for all students

Jointly offered with Molecular Microbiology and Immunology

Requirement for students in the Departments of Biochemistry & Molecular Biology, and Molecular Microbiology & Immunology enrolled in core curriculum

120.872.01  SPECIAL STUDIES-CURRENT TOPICS IN BMB

Course offered this year
(1 credits)

Brown, Terry

Introduces students to the faculty and to current research being conducted in their respective laboratories within the Department of Biochemistry and Molecular Biology and by other training faculty of the Cancer Biology Training Program. Informs doctoral students about research opportunities in each laboratory and allows them to make informed decisions about their choices for laboratory rotations during their first year. Similarly, informs current MHS students who are considering the ScM Program during the second year about potential research opportunities in laboratories of BMB faculty. Provides time for faculty presentation, student questions and further discussion.

Information not required for this course type

E-mail: tbrown@jhsph.edu
Lecture: W F 12:00 PM - 12:50 PM
Enrollment minimum of 10
No Maximum

Pass/Fail
MPH Practicum: Biochemistry and Molecular Biology

Course offered this year
(variable credits)
Students who have not met the practicum requirement, must register for at least two credits.
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Student must receive faculty advisor approval

Biostatistics

Statistical Reasoning in Public Health I

Course offered this year
(3 credits)
McGready, John
Provides a broad overview of biostatistical methods and concepts used in the public health sciences, emphasizing interpretation and concepts rather than calculations or mathematical details. Develops ability to read the scientific literature to critically evaluate study designs and methods of data analysis. Introduces basic concepts of statistical inference, including hypothesis testing, p-values, and confidence intervals. Topics include comparisons of means and proportions; the normal distribution; regression and correlation; confounding; concepts of study design, including randomization, sample size, and power considerations; logistic regression; and an overview of some methods in survival analysis. Draws examples of the use and abuse of statistical methods from the current biomedical literature.

Upon successfully completing this course, students will be able to:
1. Discuss and give examples of different types of data arising in public health studies
2. Interpret differences in data distributions via visual displays
3. Calculate standard normal scores and resulting probabilities
4. Calculate and interpret confidence intervals for population means and proportions
5. Interpret and explain a p-value
6. Perform a two-sample t-test and interpret the results; calculate a 95% confidence interval for the difference in population means
7. Use Stata to perform two sample comparisons of means and create confidence intervals for the population mean differences
8. Discuss and interpret results from Analysis of Variance (ANOVA), a technique used to compare means amongst more than two independent populations
9. Choose an appropriate method for comparing proportions between two groups construct a 95% confidence interval for the difference in population proportions
10. Use Stata to compare proportions amongst two independent populations
11. Discuss and interpret relative risks and odds ratios when comparing two populations
12. Discuss why survival (timed to event) data requires its own type of analysis techniques
13. Construct a Kaplan-Meier estimate of the survival function that describes the “survival experience” of a cohort of subjects

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
14. Interpret the result of a log-rank test in the context of comparing the "survival experience" of multiple cohorts
15. Interpret output from the statistical software package Stata related to the various estimation and hypothesis testing procedures covered in the course

E-mail: jmcgread@jhsph.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment minimum of 9
No Maximum
Limited to degree candidates in SPH and students in the joint MSN/MPH program
Letter Grade or Pass/Fail
Course materials fee is $30.00.

Course Change Information:
CourseLearningObj, RecommendedNote, CourseOfferRationaleNote, ScheduleTypeId, StartDate, EndDate, .02/13/2012;

140.621.01 STATISTICAL METHODS IN PUBLIC HEALTH I
Course offered this year
(4 credits)
Diener-West, Marie
Introduces the basic concepts and methods of statistics as applied to diverse problems in public health and medicine. Demonstrates methods of exploring, organizing, and presenting data, and introduces fundamentals of probability, including probability distributions and conditional probability, with applications to 2x2 tables. Presents the foundations of statistical inference, including concepts of population, sample parameter, and estimate; and approaches to inferences using the likelihood function, confidence intervals, and hypothesis tests. Introduces and employs the statistical computing package, STATA, to manipulate data and prepare students for remaining course work in this sequence.

Upon successfully completing this course, students will be able to:
1. Use statistical reasoning to formulate public health questions in quantitative terms [1.1 Discuss the role of statistical reasoning within the scientific method. 1.2 Discuss and apply the counterfactual definition of causal effects in public health
2. Design and interpret graphical and tabular displays of statistical information [ 2.1 Create by hand and interpret stem and leaf plots, box plots, Q-Q plots and frequency tables. 2.2 Use the statistical analysis package Stata to make basic statistical com
3. Use probability models to describe trends and random variation in public health data 3.1 Use the statistical analysis package Stata to make basic statistical computations in combination with graphical displays; 3.2 Use the concepts of probability to describe the effect of a treatment on a health outcome in a randomized trial; 3.3 Use the binomial distribution and the Poisson approximation to the binomial to calculate probabilities of events; 3.4 Use the Gaussian or normal probability model to approximate the distribution of a continuous public health measure and assess the quality of this approximation; 3.5 Generate and interpret a quantile-quantile (Q-Q) plot to compare two distributions

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Enrollment minimum of 10
No Maximum
For MPH, DrPH, "special students" and MHS degree candidates in departments to be determined

Letter Grade or Pass/Fail
Consent required for some students
Consent Required for non-PH students
One 90-minute lab per week, lab is 140.921. As soon as you register for the course, please also register for one section of 140.921. Course Materials Fee is $40.00.

Course Change Information:
.07/02/2012; CourseOfferRationaleNote, LabScheduleTypeld, .07/02/2012; EnrollRestriction, .08/11/2010;

140.621.02 STATISTICAL METHODS IN PUBLIC HEALTH I

Course offered this year
(4 credits)
Bandeen-Roche,Karen
Introduces the basic concepts and methods of statistics as applied to diverse problems in public health and medicine. Demonstrates methods of exploring, organizing, and presenting data, and introduces fundamentals of probability, including probability distributions and conditional probability, with applications to 2x2 tables. Presents the foundations of statistical inference, including concepts of population, sample parameter, and estimate; and approaches to inferences using the likelihood function, confidence intervals, and hypothesis tests. Introduces and employs the statistical computing package, STATA, to manipulate data and prepare students for remaining course work in this sequence.

Upon successfully completing this course, students will be able to:

1. Use statistical reasoning to formulate public health questions in quantitative terms [1.1 Discuss the role of statistical reasoning within the scientific method. 1.2 Discuss and apply the counterfactual definition of causal effects in public health]
2. Design and interpret graphical and tabular displays of statistical information [2.1 Create by hand and interpret stem and leaf plots, box plots, Q-Q plots and frequency tables. 2.2 Use the statistical analysis package Stata to make basic statistical com

3. Use probability models to describe trends and random variation in public health data 3.1 Use the statistical analysis package Stata to make basic statistical computations in combination with graphical displays; 3.2 Use the concepts of probability to describe the effect of a treatment on a health outcome in a randomized trial; 3.3 Use the binomial distribution and the Poisson approximation to the binomial to calculate probabilities of events; 3.4 Use the Gaussian or normal probability model to approximate the distribution of a continuous public health measure and assess the quality of this approximation; 3.5 Generate and interpret a quantile-quantile (Q-Q) plot to compare two distributions

4. Use statistical methods for inference, including tests and confidence intervals, to draw public health inferences from data 4.1 Generate random numbers and appreciate the sources of variation among multiple observations of a random process; 4.2 Explain the implications of the Central Limit Theorem in determining the sampling distribution of the mean of n observations; 4.3 Use bootstrapping to determine confidence intervals and interpret them in a scientific context; 4.4 Use sampling distribution theory for the mean and for differences between two means to create confidence intervals and hypothesis tests; 4.5 Use stratification to eliminate the influence of a possible confounding variable in a study of the association of a risk factor and outcome; 4.6 Construct and interpret the appropriate two-sample confidence interval and t-test to assess whether average outcome is different between two groups; 4.7 Use the paired-sample t-test and confidence intervals

E-mail: kbandeen@jhsph.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment minimum of 10
No Maximum
For PhD, ScM and MHS degree candidates in departments to be determined

Letter Grade or Pass/Fail
Consent required for some students
Consent of instructor required for non-PH students
One 90-minute lab per week, lab is 140.921. As soon as you register for the course, please also register for one section of 140.921. Course Materials Fee is $40.00.
**140.636.01 PERL FOR BIOINFORMATICS**  

**Course offered this year**

(4 credits)  
Pineda, Fernando

Uses the PERL programming language to introduce skills and concepts needed to process and interpret data from high-throughput technologies in the biological sciences. Key concepts are introduced and reinforced through lectures with live computer demonstrations, weekly readings, and programming exercises. Exercises and examples draw heavily from biological sequence analysis as well as real-world problems in proteomics and genetics. Guest lecturers present case studies of PERL and UNIX usage in scientific investigations. Students are introduced to bioinformatics software-development resources available online and to necessary computer science fundamentals.

Upon successfully completing this course, students will be able to:

1. Operate the Perl programming language (including the ability to (1) read and write perl scripts, and (2) download and use perl bioinformatics libraries, e.g. bioperl);
2. Describe programming techniques and styles, e.g. top-down vs bottom-up programming, debugging and object oriented programming;
3. Explain key fundamental concepts from computer science including notions of data structures, algorithms and computational complexity
4. Organize the processing of large amounts of data from high-throughput biology experiments
5. Write automatic scripts that query local and web-based biological databases
6. Search and use the wealth of software development resources available on the web, e.g. cpan.org, sourceforge.net and bioperl.org

E-mail: fpineda@jhsph.edu

Lecture: M W F 1:30 PM - 2:20 PM

Enrollment minimum of 5

Enrollment maximum of 16

**Letter Grade or Pass/Fail**

Consent required for all students

Prerequisite: Required course for planned degree program (MHS) in bioinformatics.

Jointly offered with MMI
140.641.01 SURVIVAL ANALYSIS I
Course offered this year
(3 credits)
Wang, Mei-Cheng
Discusses basic concepts of survival analysis, including hazard functions, survival functions, types of censoring and truncation, Kaplan-Meier estimates, log-rank tests and their generalization. Parametric inference includes likelihood estimation and the exponential, Weibull, log-logistic and other relevant distributions. Statistical methods and theory for the proportional hazard models (Cox model) discussed in detail, with extensions to time-dependent covariates. Clinical and epidemiological examples included in class presentation and homework illustrate various statistical procedures.

Upon successfully completing this course, students will be able to:

1. Explain fundamental concepts in survival analysis
2. Describe statistical methods which are useful in medical follow-up studies and in general time-to-event studies

E-mail: mcwang@jhsph.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for some students
Consent required for non-Biostatistics students
Prerequisite: Biostatistics 140.651 or equivalent. Knowledge of probability and statistical theory is required. Non-biostatistics students need permission from instructor.

140.642.01 DESIGN OF CLINICAL EXPERIMENTS
Course offered this year
(3 credits)
Sugar, Elizabeth and Herson, Jay
Introduces the process for developing biomedical experiments from a statistical perspective. Stresses methods of controlling for bias and variability through outcome selection, design, sample size calculation, and analysis. Emphasizes clinical trials and other types of medical experiments likely to be encountered by biometric researchers. Discusses elements of analysis as related to the design principles.

Upon successfully completing this course, students will be able to:

1. Frame a scientific hypothesis that evaluates the question of interest and addresses issues of equipoise, feasibility, and the stage of development of the intervention.
2. Assess outcome variables for quantifying the scientific question of interest with an eye for bias, variability, duration, and availability
3. Discuss basic clinical trial design principles including bias control, random error control, randomization, blocking and masking
4. Describe specific types of designs of practical and historical interest including dose-finding, safety and efficacy, and comparative trials
5. Have a working knowledge of the quantitative properties of clinical trials including precision of estimation, power, and sample size
6. Discuss the importance of design and its relation to analysis of clinical trials
7. Describe the techniques for addressing analysis issues including missing data

E-mail: esugar@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment minimum of 10
Enrollment maximum of 40
Letter Grade or Pass/Fail
Prerequisite: 140.621-23 or 140.611-14

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
140.646.01 ESSENTIALS OF PROBABILITY AND STATISTICAL INFERENCE I: PROBABILITY

Course offered this year
(4 credits)
Rosenblum, Michael
Introduces students to the theory of probability and the formal language of uncertainty. Includes the basic concepts of probability; random variables and their distributions; expectations; moment generating functions; probability and expectation inequalities; convergence concepts and limit theorems; transformations of random variables; order statistics. Emphasizes rigorous analysis (including proofs), as well as interpretation of results and simulation for illustration.

Upon successfully completing this course, students will be able to:
1. Discuss the probabilistic foundation of modern statistics
E-mail: mrosenbl@jhsph.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for all students
Course intended for Biostatistics ScM and MHS candidates only
Prerequisite: Working knowledge of linear algebra, including the ability to invert a matrix; full year college level calculus, plus current working knowledge of it, meaning you can quickly do integration and differentiation of standard functions, which are needed for homework and exam questions.

140.651.01 METHODS IN BIOSTATISTICS I

Course offered this year
(4 credits)
Louis, Thomas A.

Presents fundamental concepts in applied probability, exploratory data analysis, and statistical inference, focusing on probability and analysis of one and two samples. Topics include discrete and continuous probability models; expectation and variance; central limit theorem; inference, including hypothesis testing and confidence for means, proportions, and counts; maximum likelihood estimation; sample size determinations; elementary non-parametric methods; graphical displays; and data transformations.

Upon successfully completing this course, students will be able to:
1. Discuss core applied statistical concepts and methods
2. Discuss the display and communication of statistical data.
3. List the distinctions between the fundamental paradigms underlying statistical methodology
4. Identify the basics of maximum likelihood
5. Identify the basics of frequentist methods: hypothesis testing, confidence intervals
6. Identify basic Bayesian techniques, interpretation and prior specification
7. Discuss the creation and interpretation of P values
8. Describe estimation, testing and interpretation for single group summaries such as means, medians, variances, correlations and rates
9. Describe estimation, testing and interpretation for two group comparisons such as odds ratios, relative risks and risk differences
10. Describe the basic concepts of ANOVA

E-mail: tlouis@jhsph.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment minimum of 10
No Maximum  
**Letter Grade or Pass/Fail**  
Prerequisite: Working knowledge of calculus and linear algebra  
Students will choose one lab time: Tuesday 1:30-2:20 OR Wednesday 3-3:50. 

Course Change Information:  
CourseLearningObj, RecommendedNote, CourseOfferRationaleNote, ContactPerson, ContactEmail, CPInstructor, .05/07/2012;

140.751.01 ADVANCED METHODS IN BIOSTATISTICS I  
Course offered this year  
(3 credits)  
Caffo,Brian  
Introduces students to applied statistics for biomedical sciences. Illustrates the motivations behind many of the methods explained in 140.752-756. Focuses on analyzing data and interpreting results relevant to scientific questions of interest. Presents various case studies in detail and provides students with hands-on experience in analyzing data. Requires students to present results in both written and oral form, which in turn requires them to learn the software package R and a handful of statistical methods. General topics covered include descriptive statistics, basic probability, chance variability, sampling, chance models, inference, and regression.  

Upon successfully completing this course, students will be able to:  
1. Review key concepts in linear algebra  
2. Lise random vectors and matrices  
3. Develop the least squares approach for linear models  
4. List projections in vector spaces  
5. Discuss the connection between least squares and maximum likelihood approaches  
6. Discuss estimability, and in particular, the Gauss Markov theorem  
7. Discuss the distribution theory under normality assumptions  
8. Compare least squares to generalized least squares  
9. Describe the concept of testing linear hypothesis  
10. Compare approaches to calculate simultaneous confidence intervals  

E-mail: bcaffo@jhsph.edu  
Lecture: T TH 10:30 AM - 11:50 AM  
Enrollment minimum of 10  
No Maximum  
Biostatistics 1st-year PhD students.  
**Letter Grade or Pass/Fail**  
Consent required for all students  
Consent required for students other than Biostatistics 1st-year PhD students.  
Prerequisite: 140.673-674 & elementary course in matrix algebra; students must also register for 140.752

140.755.01 ADVANCED METHODS IN BIOSTATISTICS V  
Course offered this year  
(4 credits)  
Crainiceanu,Ciprian  
Reviews the extension of linear models to generalized linear models. Includes exponential family models, link functions, and over-dispersion. Also introduces models and inferential methods for polytomous outcomes. Describes extension of models to account for clustering using explicit modeling via mixed effects framework and generalized estimating equations (GEE). Introduces methods and models for regression with covariates subject to measurement error. Describes and implements advanced computational algorithms, such as Markov Chain Monte Carlo (MCMC) and expectation maximization (EM).
Upon successfully completing this course, students will be able to:

1. Give examples of different types of data arising in public health studies
2. Use modern statistical concepts such as Generalized Linear Models for inference
3. Describe models for polytomous outcomes
4. Apply theoretical concepts to scientific data using R and WinBUGS software
5. Conduct and interpret logistic, conditional logistic, and probit regression inference
6. Extend models to account for clustering and correlation
7. Introduce the mixed effects framework and describe its relationship to multilevel models
8. Introduce models that account for measurement error in the covariates
9. Provide new computational tools for complex models including Markov Chain Monte Carlo (MCMC) and Expectation Maximization (EM) algorithms
10. Improve computational and analytic skills through analysis of simulated data sets

E-mail: ccrainic@jhsph.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment minimum of 10
No Maximum

**140.771.01 ADVANCED STATISTICAL THEORY I**

Course offered this year
(4 credits)
Scharfstein, Daniel

Examines statistics as a discipline along the path towards making decisions. First examines the justification of statistics from axioms on informed preferences and its close connection to Bayesian theory, and then examines the role of standardizing intermediate steps, through various additional restrictions on estimation, and studies the properties of the resulting methods.

Upon successfully completing this course, students will be able to:

1. be introduced to the role of statistics as a path towards inference and making decisions
2. Discuss basic decision theory, including the properties of Bayes rules and other ordering of decision strategies
3. justify decision theory on simple axioms, and examine reasons for studying restricted estimation strategies
4. examine properties of unbiased estimation and functions

E-mail: dscharf@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment minimum of 2
No Maximum

**Letter Grade or Pass/Fail**

Prerequisite: 140.673-674, 140.692-694, and knowledge of laws of large numbers and central limit theorem

Multi-term with 140.772
Grade for 140.771 and 772 given at completion of 140.772.
140.776.01  STATISTICAL COMPUTING
Course offered this year
(3 credits)
Peng, Roger
Covers practical issues in statistical computing. Includes programming in R, calling compiled code from R, accessing R libraries, creating R packages with documentation, programming in C, debugging, organizing and commenting code, working in Emacs, and LATEX typesetting. Topics in statistical data analysis and optimization provide working examples.
Upon successfully completing this course, students will be able to:
1. install and configure software necessary for a statistical programming environment
2. Discuss generic programming language concepts as they are implemented in a high-level statistical language
3. write and debug programs using R and C
4. build and organize a software package with documentation for publishing on the internet
5. Discuss and implement basic statistical computing algorithms for optimization, linear regression, and Monte Carlo
E-mail: rpeng@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: 140.621 or equivalent

140.800.01  MPH CAPSTONE BIOSTATISTICS
Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.
Information not required for this course type
Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent from the Capstone Supervisor is Required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

140.820.01  THESIS RESEARCH BIOSTATISTICS
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>140.830.01</td>
<td>POSTDOCTORAL RESEARCH BIOSTATISTICS</td>
<td>Course offered this year (variable credits) Enrollment minimum of 10 No Maximum Pass/Fail</td>
</tr>
<tr>
<td>140.840.01</td>
<td>SPECIAL STUDIES AND RESEARCH BIOSTATISTICS</td>
<td>Course offered this year (variable credits) Enrollment minimum of 10 No Maximum Pass/Fail</td>
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<tr>
<td>140.850.01</td>
<td>ADVANCED SPECIAL TOPICS IN BIOSTATISTICS</td>
<td>Course offered this year (variable credits) Number of credits will depend on the material being covered Exposes Biostatistics PhD students to advanced special topics that are not covered in the core courses. Comprises two- and four-week modules, with revolving instructors and topics. Possible topics include: theory underlying analysis for correlated data; latent variable modeling; advanced survival analysis; image analysis; time series; and likelihood inference. Information not required for this course type Lecture: TBA Enrollment minimum of 10 No Maximum For Biostatistics PhD students only Pass/Fail Consent required for all students Consent required only if students have not already completed PhD core courses Prerequisite: Ph.D. core courses or consent from the instructors</td>
</tr>
</tbody>
</table>
140.860.01 MHS IN BIOINFORMATICS CAPSTONE PROJECT
Course offered this year
(variable credits)
Student and advisor determine the number of credits
Students experience a bioinformatics project in an active research laboratory. They gain practical bioinformatics experience in a research environment. Students interact with active researchers to complete a project that demonstrates their core bioinformatics competencies and skills.
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Instructor consent is required.
Prerequisite: Approval of project by academic advisor and project advisor
Students should register with their capstone advisor for this course
Course Change Information:
CreditNote, FrequencySchedule, CourseLocation, IRBSurvey, AuditorsAllowedId, CourseOfferRationaleNote, CourseSectionNote, ContactPerson, ContactEmail, StartingOfferYear, RepeatableRetakable, ScheduleTypeld, LabScheduleTypeld, .04/13/2011;

140.895.01 MPH PRACTICUM: BIOSTATISTICS
Course offered this year
(variable credits)
Students who have not met the practicum requirement, must register for at least two credits
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
Clinical Investigation

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
390.631.01 PRINCIPLES OF DRUG DEVELOPMENT
Course offered this year
(2 credits)
Flexner, Charles
Presents principles underlying preclinical and clinical development of new therapeutic drugs and procedures. Describes and evaluates specific examples, and discusses legal and ethical regulations that apply to drug development.
Upon successfully completing this course, students will be able to:
1. Describe how new drugs and devices are taken from the laboratory to the marketplace in the United States
2. Distinguish Phase I, II, III, and IV studies
3. Evaluate the balance between medical benefit, medical risk, economic reward, and economic risk in the decision making process as it relates to drugs and devices in development
E-mail: cflexner@jhsph.edu
Lecture: W 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum
Restricted to GTPCI students, and faculty and staff with active involvement in clinical research
Letter Grade or Pass/Fail
Jointly offered with School of Medicine

390.673.01 ETHICAL AND REGULATORY ISSUES IN CLINICAL RESEARCH
Course offered this year
(3 credits)
Adkinson, Franklin
Explores and examines the ethical issues central to clinical research, reviews current regulations for clinical investigation, promotes understanding of the function and procedures of Institutional Review Boards, and better appreciation of the role of good clinical practices for clinical trials.
Upon successfully completing this course, students will be able to:
1. Observe the ethical underpinnings of human subjects research
2. Identify good clinical practices for clinical trials, including the use of standard operating procedures
3. Identify the requirements and procedures for IRB approval of human subject research, including recent HPPA regulations
4. Integrate modern ethical standards and regulatory requirements into design of a clinical investigation
E-mail: fadkinso@jhsph.edu
Lecture: M 5:30 PM - 8:30 PM
Enrollment minimum of 10
Enrollment maximum of 30
Restricted to individuals in the SOCI certificate program or GTPCI students.
Letter Grade or Pass/Fail
Consent required for all students
Second in a five-course series in the science of clinical investigation.
Course Change Information:
CourseLearningObj, InstructorConsentId, InstructorConsentId, ConsentNote, CourseLocation, CourseFormat, IRBSurvey, AuditorsAllowedId, CourseOfferRationaleNote, ContactPerson, ContactEmail, ContactPerson2, ContactEmail2, StartingOfferYear, RepeatableRetakable, ScheduleTypeld, LabScheduleTypeld, .05/03/2010;

390.710.01 BIOMEDICAL WRITING I
Course offered this year

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
(2 credits)
Poynton, Sarah
Introduces the process of writing peer-reviewed research papers and provides a brief overview of grant proposal writing. Emphasizes a logical organization, clear writing, and an understanding of readers and reviewers expectations. Students prepare selected sections of a first draft of a research paper based on their own research, and they receive feedback on their drafts through in-class discussion and written comments from the instructor.
Information not required for this course type

E-mail: spoynton@jhsph.edu
Lecture: T 3:30 PM - 5:20 PM
Enrollment minimum of 4
No Maximum
Course is primarily for GTPCI students; a max of 2 non-GTPCI students may be admitted with prior approval of the instructor
Pass/Fail
Consent required for some students
Permission is required of all non-GTPCI students
Multi-term with 390.711
Final grade applies to all terms
Grade issued at the end of 2nd term after completion of 390.711
Course Change Information:
EnrollRestriction, EnrollMin, EnrollMax, TargetAud, GradingRestriction, ExpectedEnrollNumber, .06/25/2012; CourseDesc, MultiTerm, MultiTerm, MultiTerm, MultiTerm, RecommendedNote, EnrollRestriction, EnrollMin, EnrollMax, CourseOfferRationaleNote, MultiTermFinalGradeld, CourseLearningObjStartld, CourseLearningObj, .06/25/2012; InstructorConsentld, ConsentNote, GradingRestriction, ExpectedEnrollNumber, ContactPerson, ContactEmail, CPInstructor, .09/14/2010;
390.820.01  THESIS RESEARCH IN CLINICAL INVESTIGATION  
Course offered this year  
(variable credits)  
Information not required for this course type  
.  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

390.840.01  SPECIAL STUDIES AND RESEARCH IN CLINICAL INVESTIGATION  
Course offered this year  
(variable credits)  
Information not required for this course type  
.  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

Environmental Health Sciences

180.609.01  PRINCIPLES OF ENVIRONMENTAL HEALTH I  
Course offered this year  
(4 credits)  
Spannhake, Ernst

Presents concepts, principles, and applications of the main natural and social science disciplines that form the basis of environmental health and describes how these disciplines and their practitioners interact in the environmental health paradigm. Topics include the sources, pathways of exposure, and methods of control of the principal physical, chemical, biologic, and sociologic factors that impact human health in ambient, indoor and occupational environments. Familiarizes students with the processes associated with the translation of basic scientific and health data into public health policy and environmental law. Students gain first-hand experience with the multidisciplinary environmental health approach to the solution of current and emerging environmental problems that pose a risk to public health. Consists of lectures, case studies, and class discussions.

Upon successfully completing this course, students will be able to:

1. Define the main scientific and sociologic disciplines that form the basis of environmental health and explain how these disciplines and their practitioners interact within the environmental health paradigm
2. Describe the sources, pathways of exposure and methods of control of the principal physical, chemical, biologic and psychosocial hazards that impact human health in ambient, indoor and occupational environments
3. Explain the processes associated with the translation of scientific and health data into public health policy and environmental law
4. Identify and describe important current and emerging environmental problems that pose a risk to public health and describe the multidisciplinary environmental health approach to their solution

E-mail: espannha@jhsph.edu
Lecture: M W 1:30 PM - 3:20 PM
Enrollment minimum of 10

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Enrollment maximum of 36
Enrollment limited to degree-seeking students in SPH graduate programs. Permission from instructor required for non-EHS students.

**Letter Grade or Pass/Fail**
Consent required for some students
Consent is required for non-EHS degree candidates.
Prerequisite: None
EHS degree candidates are required to take both Principles of Environmental Health I & II.

**Course Change Information:**
EnrollRestriction, InstructorConsentId, FrequencySchedule, TargetAud, CourseLocation, CourseFormat, IRBSurvey, AuditorsAllowedId, CourseOfferRationaleNote, ContactPerson, ContactEmail, StartingOfferYear, ScheduleTypeld, LabScheduleTypeld, .09/14/2010;

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**180.611.01 THE GLOBAL ENVIRONMENT AND PUBLIC HEALTH**

Course offered this year
(4 credits)
Parker, Cindy and Schwartz, Brian

Explores how global environmental issues such as global warming, urban sprawl, deforestation, mining, environmental refugees, biodiversity loss, and food security may cause increasing human harm. Provides an overview of the science and policy issues related to the changing environment, how environmental problems affect human health, and emphasizes potential solutions and sustainable development methods essential for resolving a myriad of environment-health problems.

Upon successfully completing this course, students will be able to:

1. Identify a range of global environmental problems and their impacts on public health
2. Identify a range of global environmental problems and their impacts on public health
3. Explain the complexities and inter-relationships of a range of global environmental problems
4. Develop potential solutions to global environmental problems using the discussion gained in this course
5. Evaluate environment-related stories and claims in the lay press as to accuracy, relevance, and global importance

E-mail: ciparker@jhsph.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment minimum of 10
No Maximum
**Letter Grade or Pass/Fail**
180.800.01  MPH CAPSTONE ENVIRONMENTAL HEALTH SCIENCES
Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.
Upon successfully completing this course, students will be able to:
1. to synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent from the Capstone Supervisor is Required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

180.830.01  POSTDOCTORAL RESEARCH ENVIRONMENTAL HEALTH SCIENCES
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

180.840.01  SPECIAL STUDIES AND RESEARCH ENVIRONMENTAL HEALTH SCIENCE
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

180.820.01  THESIS RESEARCH ENVIRONMENTAL HEALTH SCIENCES
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail
180.880.01  SPECIAL STUDIES IN ENVIRONMENTAL HEALTH/COMMUNITY OUTREACH

Course offered this year
(variable credits)
Variable 1-3. Per instructor, number of units is decided based upon amount of participation/work the student and the instructor agree upon.

Trush, Michael
In the first and second terms, introduces concepts of environmental justice and community outreach in environmental health by emphasizing ongoing projects in Baltimore. Presentations are by researchers or project directors and their community partners as well as representatives from city and state government. In the third and fourth terms, students have the opportunity to participate in ongoing community-based research projects. This may serve as an MPH integrating experience.

Information not required for this course type

E-mail: mtrush@jhsph.edu
Lecture: T 4:00 PM - 6:00 PM
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students

180.895.01  MPH PRACTICUM: EHS

Course offered this year
(variable credits)
Students who have not met the practicum requirement, must register for at least two credits
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

182.631.01  PRINCIPLES OF OCCUPATIONAL SAFETY

Course offered this year
(2 credits)
Knowles, Emory
Introduces the organizational framework in which safety sciences are practiced in the U.S. Illustrates professional and scientific methodologies by focusing on selected, substantive areas of practice (systems safety, nature of accidents, electrical hazards, fire and fire suppression, explosions and explosives, and falls and walking and working surfaces).

Upon successfully completing this course, students will be able to:

1. describe the conceptual background on fundamentals of occupational safety via focusing on historical and current industry perspectives, selected literature, and high-hazard areas of study such as fire protection, confined spaces, electrical safety, etc
2. Discuss skills integration via utilization of demonstration materials from real-world incidents
3. become resource “Resourceful” via use of Internet and other communication vehicles
4. describe the skills and discuss of policies, procedures, programs, and regulations so that there is a Discussing of approaches that can be used to decrease probability of incidents and reduce costs for any type of organization
5. provide fundamental guidance on the management and evaluation of safety programs

E-mail: emory.knowles@ngc.com
Lecture: F 1:30 PM - 3:20 PM
Enrollment minimum of 6
Enrollment maximum of 30
Letter Grade or Pass/Fail
Consent required for all students

182.810.01 FIELD PLACEMENT ENVIRONMENTAL HEALTH ENGINEERING
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

182.820.01 THESIS RESEARCH ENVIRONMENTAL HEALTH ENGINEERING
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

182.830.01 POSTDOCTORAL RESEARCH ENVIRONMENTAL HEALTH ENGINEERING
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

182.840.01 SPECIAL STUDIES/RESEARCH ENVIRONMENTAL HEALTH ENGINEERING
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsphe.edu/C4/Academics/.
### 183.638.01 MECHANISMS OF CARDIOPULMONARY CONTROL

Course offered this year  
(2 credits)  
Fitzgerald, Robert  
Focuses on reflex control of the respiratory and cardiovascular systems. Discusses the various receptors, central integration, and effector mechanisms of the two systems, and examines their roles under resting and stressful conditions, e.g., factors involved in respiratory rhythmicity at rest, cardiopulmonary acclimatization to altitude, and adaptation to hemorrhage. Blends didactic material with student-led discussion of pertinent journal articles and monographic literature.  
Upon successfully completing this course, students will be able to:  
1. Identify and explain at least on a basic level the role of the various receptors, afferent pathways, centers, and efferent pathways to the effectors of the cardiopulmonary control system. This includes both the sympathetic and parasympathetic nervous sys
2. Explain in detail several examples of the interaction between the cardiovascular and pulmonary systems  
3. Demonstrate the effect of anesthesia on the control of the cardiopulmonary system’s response to stimuli (e.g., hypoxia)  
E-mail: rfitzger@jhsph.edu  
Lecture: TH 3:00 PM - 5:00 PM  
Enrollment minimum of 6  
No Maximum  
**Letter Grade or Pass/Fail**  
Prerequisite: 183.631 - Fundamentals of Physiology or Consent of Instructor; ME 360.720 - Physiology, recommended

### 183.820.01 THESIS RESEARCH PHYSIOLOGY

Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
**Pass/Fail**

### 183.830.01 POSTDOCTORAL RESEARCH PHYSIOLOGY

Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
**Pass/Fail**

### 183.840.01 SPECIAL STUDIES AND RESEARCH PHYSIOLOGY

Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
**Pass/Fail**
183.861.01  CURRENT RESEARCH IN RESPIRATORY BIOLOGY
Course offered this year
(1 credits)
An, Steven
Covers current research topics in environmental and medical physiology. At least once during the year students present a seminar describing their current research project.
Upon successfully completing this course, students will be able to:
1. assess ongoing research in environmental and medical pathophysiology
2. analyze how basic and cellular mechanisms contribute to the environmental and medical pathophysiology
E-mail: san@jhsph.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for some students
Consent required for students not in PhD PHYS program in EHS

187.610.01  PUBLIC HEALTH TOXICOLOGY
Course offered this year
(4 credits)
Trush, Michael and Yager, James
Examines basic concepts of toxicology as they apply to environmental toxicology. Discusses distribution, cellular penetration, metabolic conversion, and elimination of toxic agents, as well as the fundamental laws governing the interaction of foreign chemicals with biological systems. Focuses on the application of these concepts to the understanding and prevention of mortality and morbidity resulting from environmental exposure to toxic substances through a case study format.
Information not required for this course type
E-mail: mtrush@jhsph.edu
Lecture: W F 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Background in chemistry (particularly organic chemistry) and biology useful.
187.621.01  PUBLIC HEALTH TOXICOLOGY: ADVANCED TOPICS
Course offered this year
(1 credits)
Bressler, Joseph
Complements Public Health Toxicology and provides students with additional depth of information regarding topics discussed concurrently in the Toxicology core curriculum. Students are assigned review articles from the literature and primary research papers. Students discuss the data from such papers and an overview of the literature with Toxicology faculty at weekly meetings.

Upon successfully completing this course, students will be able to:
1. Critically read and review scientific papers in Toxicology
2. Analyze many of the laboratory techniques used in Toxicology research as they are presented in the literature

E-mail: jbressle@jhsph.edu
Lecture: M 4:00 PM - 5:20 PM
Enrollment minimum of 10
No Maximum
Only for PhD students in a laboratory based graduate program. Students must register for all four terms of this course.
Pass/Fail

187.830.01  POSTDOCTORAL RESEARCH TOXICOLOGICAL SCIENCES
Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

187.840.01  SPECIAL STUDIES AND RESEARCH TOXICOLOGICAL SCIENCES
Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

187.820.01  THESIS RESEARCH TOXICOLOGICAL SCIENCES
Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
187.861.01  TOXICOLOGY SEMINAR
Course offered this year
(2 credits)
Bressler, Joseph
Students, postdoctoral trainees, and faculty in EHS present scientific papers from the current literature dealing with biochemical and molecular mechanisms of toxicity agents.
Upon successfully completing this course, students will be able to:
1. Read and critically evaluate scientific papers
2. Assess new methodological approaches in the area of biochemistry, molecular biology, cell biology and genomics
3. Analyze pathways of toxicity at the molecular, cellular and tissue levels
E-mail: jbressle@jhsph.edu
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Prerequisite: 187.610 (previous or concurrent)

188.680.01  FUNDAMENTALS OF OCCUPATIONAL HEALTH
Course offered this year
(3 credits)
Cadorette, Maureen
Surveys the history of occupational health, the continuum from exposure to disease, the hierarchy of controls in the workplace, workplace medical screening and surveillance, occupational health hazards, legal and regulatory issues, the provision of occupational health services, the core disciplines in occupational health and safety, and current issues in occupational health.
Information not required for this course type
E-mail: mcadoret@jhsph.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment minimum of 6
No Maximum
Letter Grade or Pass/Fail

188.810.01  FIELD PLACEMENT OCCUPATIONAL AND ENVIRONMENTAL HEALTH
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
188.820.01  THESIS RESEARCH OCCUPATIONAL AND ENVIRONMENTAL HEALTH
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

188.830.01  POSTDOCTORAL RESEARCH OCCUPATIONAL AND ENVIRONMENTAL HEALTH
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

188.840.01  SPECIAL STUDIES AND RESEARCH OCCUPATIONAL AND ENVIRONMENTAL HEALTH
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

Epidemiology

340.601.01  PRINCIPLES OF EPIDEMIOLOGY

Course offered this year
(5 credits)
Moss, William and Celentano, David
Introduces principles and methods of epidemiologic investigation of infectious and noninfectious diseases. Illustrates methods by which 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, risk estimation and causal inferences. Demonstrates the relationship 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 disease in school, home, and community; epidemiological aspects of a noninfectious disease; vaccination; the epidemiological approach to health services evaluation; rates of morbidity and mortality; sensitivity and specificity; and life table methods. No auditors permitted.

Upon successfully completing this course, students will be able to:
1. describe basic epidemiologic methods and study design
2. critically review published epidemiologic papers and assess the validity of their design and their inferences
3. identify the place of epidemiology in preventive medicine and disease investigation
4. explain how epidemiologic methods are used to evaluate new drugs and other therapeutic modalities, the benefits of screening and early disease detection, and alternative ways of delivering health care

E-mail: wmoss@jhsph.edu
Lecture: M W F 10:30 AM - 11:20 AM
Lab: W F 8:30 AM-10:00 AM

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Lab: M F 8:30 AM-10:00 AM
Lab: M F 8:30 AM-10:00 AM
Lab: M F 8:30 AM-10:00 AM
Lab: M F 8:30 AM-10:00 AM
Special Lab Number: 340.901
Enrollment minimum of 5
Enrollment maximum of 275
Special students permitted with instructors permission only. No undergraduates permitted in this course.

**Letter Grade or Pass/Fail**
Course Fee: 20.0000
Labs are held Monday / Friday, Wednesday / Friday, or Monday / Wednesday. Students must register for one of the labs 340.901 when they register for class.

**Course Change Information:**
CourseFee, .06/21/2012; FeeDesc, .06/20/2012; CourseLearningObj, CourseOfferRationaleNote, CourseSectionNote, .02/23/2012;

**340.646.01 EPIDEMIOLOGY AND PUBLIC HEALTH IMPACT OF HIV AND AIDS**
Course offered this year
(4 credits)
Farzadegan, Homayoon
Provides an overview of the historical and public health aspects of the HIV/AIDS epidemic, with review and analysis of virology; immunology; clinical and laboratory manifestations; legal and ethical issues; economic impact; and needs for future research and intervention for global control of the HIV epidemic.

Upon successfully completing this course, students will be able to:

1. Establish a knowledge base on basic science of HIV infection and host response
2. Recognize and compare HIV/AIDS epidemics at the global level
3. Explain the basis of clinical management of HIV infection at individual and population levels
4. Analyze the economic impact of HIV treatments
5. Analyze the economic impact of HIV treatments
6. Analyze vertical transmission of HIV from pregnant women to their newborns in the U.S. and other parts of the world
7. Analyze critical transmission of HIV from pregnant women to their newborns in the U.S. and other parts of the world
8. Analyze intervention modalities used to interrupt vertical transmission of HIV
9. Discuss several aspects of legal issues in the HIV/AIDS field
10. Predict future issues and trends of HIV/AIDS by discussing the concept of HIV candidate vaccines, the economic burden of HIV/AIDS in the world, and the future projections of HIV/AIDS cases during the upcoming decade

E-mail: hfarzade@jhsph.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment minimum of 10
No Maximum

**Letter Grade or Pass/Fail**

**340.660.01 PRACTICAL SKILLS IN CONDUCTING RESEARCH IN CLINICAL EPIDEMIOLOGY AND INVESTIGATION**
Course offered this year
(3 credits)
Jacobson, Lisa and Zelaya, Carla

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Emphasizes the practical aspects of conducting and organizing a clinical research project. Focuses on developing skills to conduct and manage a research protocol, monitor the data collection, manage the data, and disseminate results. Covers basic components of a clinical research team, the components of good clinical practice, the responsibilities, expertise and tasks that each member is expected to perform, and organizational, logistical and attitudinal issues that need to be addressed in producing an effective research group specifically translational research and the kinds of issues that arise in the multi-disciplinary teams brought together to conduct it.

Upon successfully completing this course, students will be able to:

1. identify the required components of a clinical research study
2. prepare an informed consent for a clinical study
3. develop a plan for conducting clinical research
4. construct a recruitment strategy
5. distinguish among basic data collection procedures
6. develop data collection forms
7. assess quality assurance procedures for specific clinical study designs
8. define the requirements for conducting clinical trials
9. distinguish and identify reporting requirements for clinical studies

E-mail: ljacobso@jhsph.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment minimum of 5
Enrollment maximum of 40
Restricted to graduate students.
Letter Grade or Pass/Fail
Consent required for all students
Please contact Dr. Jacobson for consent.
340.728.01  ADVANCED METHODS FOR DESIGN AND ANALYSIS OF COHORT STUDIES

Course offered this year
(4 credits)
Munoz, Alvaro and Cox, Christopher
Explores advanced methods useful for the design and analysis of cohort studies. Emphasizes methods for analyzing time-to-event data subject to staggered entries using advanced parametric and semi-parametric methods including regression tree approaches; analytical methods for incomplete observations in cohort studies; methods to measure effects of exposures on time-to-event using relative times and relative hazards; parametric survival analysis methods and taxonomy of hazard functions; coefficients of determination based on parametric models for survival data; regression methods for trajectories of biomarkers including detection of inflexion points; methods for the analysis of interventions in observational studies: confounding by indication, marginal structural models for individual effectiveness and methods for estimating population effectiveness and the determination of the optimal time to intervene. Methods are based on published papers using data from cohort studies coordinated by

Upon successfully completing this course, students will be able to:

1. Analyze a moderately complicated real life data set from a large, long-term multicenter cohort study using advanced methods discussed in the lectures
2. write a scientific report with a “Methods” and a “Results” section of a publishable manuscript

E-mail: amunoz@jhsph.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment minimum of 5
No Maximum
Letter Grade or Pass/Fail
Prerequisite: 340.752; 140.622 or 140.652; Prior or concurrent enrollment 340.753. Knowledge of statistical package.

340.731.01  PRINCIPLES OF GENETIC EPIDEMIOLOGY 1

Course offered this year
(4 credits)
Kao, Wen Hong Linda and Wojciechowski, Robert
Presents fundamental concepts and methods in genetic epidemiology. Reviews terminology of genetics, introduces principles of population genetics, and provides an overview of various genetic epidemiology study designs, covering fundamental analyses, inferences, plus their strengths and limitations. Presents methods for assessing familial aggregation/correlation and genetic linkage and association analyses will be presented with an emphasis on how these are used in genetic epidemiology. Covers statistical techniques for modeling inheritance of complex phenotypes in family data. Explains various study designs commonly used in genetic epidemiology to identify the genetic basis of Mendelian as well as common, complex diseases. Discusses the role of high throughput genomics technologies within the context of genetic epidemiology studies.

Upon successfully completing this course, students will be able to:

1. Present fundamental concepts and methods in genetic epidemiology
2. review basic terminology in genetics and introduce various genetic epidemiology study designs, covering basic analysis, inferences, plus their strengths and limitations
3. Discuss basic terminology in the field of human genetics
4. Discuss the basic principles behind major molecular biology techniques, such as PCR, and their applications in genetic epidemiology studies
5. Discuss various exposures, or markers, used in genetic epidemiology studies
6. Discuss principles of Hardy-Weinberg Equilibrium and be able to estimate allele and genotype frequencies
7. Discuss and calculate simple statistics, such as odds ratios and LOD scores
8. Discuss the difference between linkage and association studies
9. Discuss the difference between family-based and population-based studies
10. Discuss the difference between direct and indirect association studies
11. Interpret results of a linkage study
12. Interpret results of an association study
13. Select an appropriate study design for addressing a particular question
14. Discuss the inferences drawn from the different genetic epidemiology studies

First offering in the Epidemiologic Methods sequence. Introduces students to history, principles, and concepts of epidemiologic research. Covers epidemiologic reasoning and causal inference, models of disease causation and prevention, and the cohort framework for characterizing the health of populations. Presents measures of population health, measures of association, and screening. Provides experience through laboratory problems with epidemiologic methods and inference, calculation of population health measures, and literature interpretation.

Upon successfully completing this course, students will be able to:

1. Explain the applicability of epidemiologic methods in biomedical and public health research
2. Describe epidemiologic principles for investigating health and disease in populations
3. Select, calculate and interpret population health measures
4. Apply causal reasoning to interpreting epidemiologic and other scientific evidence

E-mail: sgange@jhsph.edu
Lecture: M W F 8:30 AM - 9:50 AM
Enrollment minimum of 30
Enrollment maximum of 230
No auditors permitted.
Letter Grade or Pass/Fail
Consent required for some students
Consent required for special students and non-JHSPH students.

340.751.01 EPIDEMIOLOGIC METHODS 1
Course offered this year
(5 credits)
Gange, Stephen and Sutcliffe, Catherine
Prerequisite: Prior or concurrent enrollment in Statistical Methods in Public Health I (140.621) or Methods in Biostatistics I (140.651).

MPH students who earned a grade of "B" or higher in 340.601 PRINCIPLES OF EPIDEMIOLOGY in the summer term may opt to skip the course 340.751 and proceed into 340.752 EPIDEMIOLOGIC METHODS 2 during the 2nd term. While generally skipping 340.751 is not recommended there may be individual circumstances where it is appropriate, especially if additional preparatory work is done. Contact the Department of Epidemiology for more information: akhan@jhsph.edu. MPH students who have elected the Quantitative Sciences concentration may NOT skip the 340.751 course.

You must register for one lab 340.951 when you register for this course. Labs begin at 10:15 AM. Course Materials Fee is $20.00.

Course Change Information:
CourseOfferRationaleNote, PrimaryInstructor3, .08/10/2012; CourseOfferRationaleNote, CourseSectionNote, LabNumber, LabScheduleTypeId, LabTime, .08/08/2011;

340.800.01  MPH CAPSTONE EPIDEMIOLOGY
Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.
Information not required for this course type
.

Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent from the Capstone Supervisor is Required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

340.810.01  FIELD PLACEMENT EPIDEMIOLOGY
Course offered this year
(variable credits)
Information not required for this course type
.

Enrollment minimum of 10
No Maximum
Pass/Fail
340.820.01  THESIS RESEARCH EPIDEMIOLOGY
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

340.830.01  POSTDOCTORAL RESEARCH EPIDEMIOLOGY
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

340.840.01  SPECIAL STUDIES AND RESEARCH EPIDEMIOLOGY
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

340.845.01  SS/R APPLIED ASPECTS OF COHOIT STUDIES
Course offered this year
(4 credits)
Farzadegan, Homayoon
Provides a learning experience for students to understand the details of operational aspects of infectious disease cohort studies at clinical, laboratory, and data management levels. By direct observation and active participation in clinical and laboratory activities of the ongoing large cohort studies at Infectious Disease Program, students will have hands- and eyes-on daily field activities in the clinic and in the labs that are required for successful implementations of these studies.

Upon successfully completing this course, students will be able to:
1. conduct large epidemiological studies
2. Discuss practical aspects of the ongoing large cohort studies at clinics, labs and data management sites
3. list the details of daily operations of study participant contact during clinic visits and tracking, collecting questionnaire and physical exam data, blood drawing, diagnostic laboratory testing, specimen repository, and management of data
4. list potential problems in various components of conducting large cohort studies

E-mail: hfarzade@jhsph.edu
Lecture: TBA
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Offered This Year</th>
<th>Credits</th>
<th>Instructor</th>
<th>Description</th>
<th>Fees</th>
<th>Grading</th>
<th>Prerequisites</th>
<th>E-mail</th>
<th>Lecture Time</th>
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<tr>
<td>340.860.01</td>
<td>CURRENT TOPICS IN EPIDEMIOLOGIC RESEARCH</td>
<td>Yes</td>
<td>1</td>
<td>Tonascia, Susan</td>
<td>Provides overview of proposed and ongoing research within the Epidemiology department or field and offers an opportunity for discussion and clarification of epidemiologic methods as applied in research settings. Information not required for this course type. E-mail: <a href="mailto:stonasci@jhsph.edu">stonasci@jhsph.edu</a> Lecture: F 12:00 PM - 1:20 PM Enrollment minimum of 10 No Maximum Pass/Fail</td>
<td>1 credits</td>
<td>Pass/Fail</td>
<td>340.601-604 and department written comprehensive exam.</td>
<td><a href="mailto:stonasci@jhsph.edu">stonasci@jhsph.edu</a></td>
<td>F 12:00 PM - 1:20 PM</td>
<td>10</td>
<td>-</td>
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<tr>
<td>340.863.01</td>
<td>DOCTORAL SEMINARS IN EPIDEMIOLOGY</td>
<td>Yes</td>
<td>3</td>
<td>Glass, Thomas</td>
<td>Provides a forum in which the doctoral students present and discuss papers on topics relative to epidemiologic principles and practice. Proposed topics include issues in measurement, causal reasoning, confounding, and multilevel modeling. Faculty guides the selection of topics and readings, and facilitates active dialog among seminar participants. Upon successfully completing this course, students will be able to: 1. discuss epidemiology research, controversies, ethics, and help form their professional identities E-mail: <a href="mailto:tglass@jhsph.edu">tglass@jhsph.edu</a> Lecture: T 4:00 PM - 5:50 PM Enrollment minimum of 5 Enrollment maximum of 30 Restricted to second year doctoral students in Epi. Pass/Fail</td>
<td>3 credits</td>
<td>Pass/Fail</td>
<td>340.601-604 and department written comprehensive exam.</td>
<td><a href="mailto:tglass@jhsph.edu">tglass@jhsph.edu</a></td>
<td>T 4:00 PM - 5:50 PM</td>
<td>5</td>
<td>30</td>
<td>Restricted to second year doctoral students in Epi.</td>
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</tbody>
</table>
WELCH CENTER RESEARCH SEMINAR

Course offered this year

Selvin, Elizabeth

Students, postdoctoral fellows, and faculty present scientific papers from the current and/or classic literature dealing with epidemiologic research, focusing on clinical and cardiovascular epidemiology. Emphasizes presentation skills and the ability to critically evaluate scientific papers. Uses a journal-club format in which one or more papers are distributed in advance; participants are expected to read and discuss the assigned material.

Upon successfully completing this course, students will be able to:

1. read and critically evaluate scientific papers
2. give a presentation and lead a discussion related to a research article
3. critique analytic methods in the published literature
4. describe the strengths and weaknesses of various methodological approaches in clinical epidemiology and cardiovascular epidemiology

E-mail: lselvin@jhsph.edu

Lecture: T 12:00 PM - 1:20 PM

Enrollment minimum of 10

No Maximum

Pass/Fail

MPH PRACTICUM: EPIDEMIOLOGY

Course offered this year

(Variable credits)

Students who have not met the practicum requirement, must register for at least two credits. The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

Information not required for this course type

Enrollment minimum of 10

No Maximum

Pass/Fail

Extradepartmental

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
550.001.01  ENGLISH FOR ACADEMIC PURPOSES I
Course offered this year
(0 credits)
Hong Smith, Vicki
Focuses on academic writing skills including documentation styles, and combines Saturday class meetings with online assignments and one individual conference.
Upon successfully completing this course, students will be able to:
1. Apply strategies used in the three main stages of the Writing Process. Spiral strategies include brain storming, outlining, drafting, proofreading, rewriting and editing.
2. Formulate an effective thesis statement
3. Support thesis with concrete supporting details
4. Avoid global errors such as fragments, run-on/splice sentences, dangling modifiers
5. Avoid errors in tenses and agreements
6. Correctly incorporate quotation, summary, and paraphrase when citing outside sources
7. Correctly apply required parenthetical documentation and bibliographical documentation format
E-mail: vhongs@jhsph.edu
Lecture: TBA
Enrollment minimum of 5
Enrollment maximum of 15
**Letter Grade or Pass/Fail**
Consent required for some students
Consent of Student Affairs required. Please email Contact person.
Multi-term with 550.001
Final grade applies to all terms

550.600.01  RESPONSIBLE CONDUCT OF RESEARCH
Course offered this year
(1 credits)
Krag, Sharon
Fosters the responsible conduct of scientific research using a combination of lectures, discussion and analysis of case studies. Topics include: conflict of interest, scientific misconduct, data management and ownership, responsible authorship, peer review, collaborations with peers and industry, mentorship, research ethics and regulatory requirements of the conduct of animal and human research, and the scientist as a responsible member of society. Uses online resources to broaden and enhance the material covered in class.
Information not required for this course type
E-mail: skrag@jhsph.edu
Lecture: W 3:30 PM - 5:20 PM
Enrollment minimum of 10
No Maximum
Eligibility restricted to doctoral students. Other JHSPH students or fellows who are required to have in-person RCR training based on funding source may also enroll.
**Letter Grade or Pass/Fail**

550.630.01  PUBLIC HEALTH BIOLOGY
Course offered this year
(3 credits)
Zirkin, Barry and Brown, Terry
Discusses the molecular, cellular, physiological, genetic and immunological determinants of human diseases and disease susceptibility, including infectious disease, nutritional deficiencies, reproductive and developmental anomalies, and effects of exposures to toxic environmental agents. Explores ecological principles that determine the distribution of infectious disease in human populations, and how principles of the human immune system provide the rationale for methods of immunization. Focuses how biological principles help to understand the development, treatment and prevention of disease, and to assess risk from potentially hazardous agents and behaviors.

Upon successfully completing this course, students will be able to:

1. Describe the molecular, cellular, and physiological bases of selected human diseases and conditions.
2. Describe the ecological principles that determine the distribution of infectious disease in human populations.
3. Explain the role of genetic determinants in human disease and disease susceptibility.
4. Describe biological principles that underlie the development of disease prevention, control, and management programs.
5. Describe biological principles that underlie risk assessment from potentially hazardous agents and behaviors.

E-mail: brzirkin@jhsph.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum

**Letter Grade or Pass/Fail**
Prerequisite: A modern, college-level course in biology.
Jointly offered with BIOCHEM, MMI
Fulfills a core biology requirement of the MPH program.
550.870.01  SS/R: OCCUPATIONAL MEDICINE RESIDENCY-PRACTICUM YEAR
Course offered this year
(variable credits)
Depends on rotations, courses, and research workload.
Weaver, Virginia and Schwartz, Brian
Occupational medicine resident physicians perform a series of clinical, administrative, regulatory, and plant-based rotations throughout the year.
Information not required for this course type
E-mail: vweaver@jhsph.edu
Lecture: TBA
Enrollment minimum of 10
No Maximum
Residency training.
Pass/Fail
Consent required for all students
Must have approval of program director.

550.890.01  SS/R: GENERAL PREVENTIVE MEDICINE RESIDENCY-RESIDENCY YEAR
Course offered this year
(variable credits)
Range of 12-16 credits
Alexander, Miriam
Information not required for this course type
E-mail: mhalexan@jhsph.edu
Lecture: TBA
Enrollment minimum of 10
No Maximum
Restricted to GPMR during post MPH year.
Pass/Fail
Health Behavior and Society

550.880.01  SS/R: GENERAL PREVENTIVE MEDICINE RESIDENCY-MPH
Course offered this year
(1 credits)
Alexander, Miriam
Information not required for this course type
E-mail: mhalexan@jhsph.edu
Lecture: TBA
Enrollment minimum of 10
No Maximum
Restricted to MPH/GPMR during MPH year.
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
410.612.01  SOCIOLICAL PERSPECTIVES ON HEALTH

Course offered this year
(3 credits)
Smith,Katherine Clegg

Presents sociological concepts, paradigms, and theories frequently cited or used as sources of basic ideas and assumptions in contemporary analyses of health behavior and health systems. Discusses the social construction of concepts and theories, especially those that apply to our understanding of health and illness, and the implications of sociological perspectives for public health, including social stratification, deviance, social control, role performance, and stress.

Upon successfully completing this course, students will be able to:

1. analyze several theoretical perspectives drawn from the social sciences and how they have been applied to issues of public health
2. apply each perspective to a public health problem
3. demonstrate that the perspective one begins with influences the scientific questions analyzed
4. analyze the policy implications of each perspective

E-mail: kasmith@jhsph.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment minimum of 7
No Maximum
Undergraduate enrollment restricted to seniors with at least 2 social science courses.

Letter Grade or Pass/Fail

410.618.01  INTEGRATING SOCIAL AND BEHAVIORAL THEORY INTO PUBLIC HEALTH

Course offered this year
(4 credits)
Wissow,Lawrence

Introduces students to the ecologic framework of health behavior that integrates perspectives from anthropology, sociology, and cognitive sciences. Uses a combination of lectures, readings, discussions, and small group exercises to make the case that health behaviors often must be viewed simultaneously at multiple ecologic levels in order to craft effective interventions. Includes discussion of socio-economic status, culture, and race at the macro ecologic level, social networks and social capital at the mezzo level, and influences on rational decision-making at the micro level.

Upon successfully completing this course, students will be able to:

1. Explain the role of theory in explaining health behavior and behavior change, including its application to public health interventions
2. Take a challenging health behavior and describe from multiple theoretical vantage points the forces potentially shaping it or offering opportunities for interventions
3. Assess how constructs from different theories relate to each other and select appropriate theories based on audience characteristics, health issues, and desired behavior change
4. Apply different theories to interventions, depending on the ecological levels at which the problems are framed and solutions proposed

E-mail: lwissow@jhsph.edu
Lecture: M W 3:30 PM - 5:20 PM
Enrollment minimum of 20
No Maximum
Letter Grade or Pass/Fail

Combines content from 410.616
410.620.01  PROGRAM PLANNING FOR HEALTH BEHAVIOR CHANGE

Course offered this year
(3 credits)
Gielen, Andrea and Jones, Vanya
Provides an overview of the breadth of programs and diversity of settings in the field of health education in health promotion, and an opportunity to develop skills in program planning. Explains the importance of health behavior as a contributor to current public health problems and the role of health education and health promotion programs in addressing them, drawing examples from the literature on community-based health education, patient education, school health, and work-site health promotion. Also discusses issues of ethical standards and quality assurance in health education and health promotion.

Information not required for this course type

E-mail: agielen@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail

410.653.01  CONTEMPORARY ISSUES IN HEALTH COMMUNICATION

Course offered this year
(1 credits)
Borzekowski, Dina
Introduces the role of health communication in public health programs. Features health communication theory; the role of social marketing and mass media; management of communication programs; interpersonal communication; social networks and social change; and formative research and evaluation.

Upon successfully completing this course, students will be able to:
1. Know at least a half-dozen researchers/faculty at Johns Hopkins who conduct research in Health Communication
2. Be able to identify three or four different ways that contemporary Health Communication research is done
3. Learn about current domestic and international programs that utilize different Health Communication theories and approaches to influence and improve health behaviors
4. Be able to identify and critique important elements that affect the success of a Health Communication research and projects

E-mail: dborzeko@jhsph.edu
Lecture: W 5:30 PM - 6:30 PM
Enrollment minimum of 20
No Maximum
Pass/Fail

410.656.01  ENTERTAINMENT EDUCATION FOR BEHAVIOR CHANGE AND DEVELOPMENT

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Jacoby, Caroline

Examines and teaches ways in which education can be subtly but effectively worked into both new and time-honored genres of entertainment in order to foster positive behavior change and life improvement in both developing countries and local environments. Develops students' ability to understand the ingredients of successful entertainment: emotions, empathy, efficacy and empowerment, and how these can be employed to enhance social and personal health and life skills. Examines methodology and develops skills needed to create a successful Entertainment-Education (E-E) project in entertainment (story, drama, etc.) formats with effective behavior change messages.

Upon successfully completing this course, students will be able to:

1. analyze a societal or individual behavior problem that is to be improved through Entertainment-Education (E-E)
2. define the differences in E-E program types for different audiences, such as children, adolescents, adults
3. develop a detailed Design Document (guide for program writers and evaluators) showing the precise discuss that will be taught in the E-E project
4. construct the synopsis and character sketches for a TV or radio serial drama designed to encourage behavior or social change and create complete episodes of the drama for the intended audience
5. design and construct support materials, including Distance Education (Edu-tainment) materials for "on-the-ground" supporters of the intended audience of the E-E project

E-mail: c jacoby@jhsph.edu
Lecture: M W 1:30 PM - 3:20 PM

Enrollment minimum of 7
No Maximum
Restricted to graduate students
Letter Grade or Pass/Fail

410.733.01 COMMUNICATION NETWORK ANALYSIS IN PUBLIC HEALTH PROGRAMS

Course offered this year
(4 credits)
Boulay, Marc

Introduces the theory and method of network analysis, its application to public health, emphasizing the dissemination of public health information and the transmission of disease, and the influence of networks on health-related behavior.

Upon successfully completing this course, students will be able to:

1. Define essential terms related to social network concepts and analytic approaches
2. Describe methods for measuring the properties of social networks
3. Interpret books and articles that incorporate social network terminology, concepts, and analytic approaches
4. Apply social network concepts and analytic approaches in their own research

E-mail: mboulay@jhuccp.org
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment minimum of 5
No Maximum
Letter Grade or Pass/Fail
410.800.01  MPH CAPSTONE HEALTH, BEHAVIOR AND SOCIETY
Course offered this year
(2 credits)
Number of credits depends upon the scope and nature of their project.
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.
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail
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.

410.820.01  THESIS RESEARCH IN HEALTH BEHAVIOR AND SOCIETY
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

410.810.01  FIELD PLACEMENT HEALTH BEHAVIOR AND SOCIETY
Course offered this year
(variable credits)
McDonald, Eileen
Information not required for this course type
E-mail: emcdonal@jhsph.edu
Enrollment minimum of 10
No Maximum
Pass/Fail

410.830.01  POSTDOCTORAL RESEARCH IN HEALTH BEHAVIOR AND SOCIETY
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

410.840.01  SPECIAL STUDIES AND RESEARCH IN HEALTH BEHAVIOR AND SOCIETY
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
410.860.01  GRADUATE SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES
Course offered this year
(3 credits)
Kerrigan, Deanna
Reviews and critiques current literature in the behavioral sciences and evaluates studies from a methodological and conceptual basis.
Information not required for this course type
E-mail: dkerriga@jhsph.edu
Lecture: T 1:30 PM - 4:20 PM
Enrollment minimum of 5
Enrollment maximum of 20
Restricted to HBS doctoral students
Letter Grade or Pass/Fail

410.861.01  GRADUATE SEMINAR IN COMMUNITY-BASED RESEARCH
Course offered this year
(1 credits)
Bone, Lee and Bowie, Janice
Explores faculty-community partnership in community-based research (CBPR), education, and practice. Seminar topics may include CBPR principles and ethics, coalition and partnership building, implementation, dissemination, translation and sustainability, media and marketing, advocacy, policy, cultural diversity, collaborative grant writing, and publishing. Speakers include faculty, Kellogg scholars, and community patrons. This seminar is open to all divisions in the University and community.
Information not required for this course type
E-mail: ibone@jhsph.edu
Lecture: T 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
410.865.01  MSPH SEMINAR IN HEALTH EDUCATION AND HEALTH PROMOTION

Course offered this year
1 credits
McDonalд,Eileen
Introduces a variety of topics important to the profession of health education and health promotion, including both historical and current issues. Presents role definitions and competencies, health education certification, professional organizations representing the field, and other health education and promotion resources. Prepares students for the field placement requirement in the second year of the program.

Upon successfully completing this course, students will be able to:
1. develop your own definition for health education, health communication and health promotion
2. Discuss the historical and current issues related to the field of health education
3. name at least three different professional organizations within public health and describe their roles and membership
4. prepare a resume that best describes your skills and experiences to a potential employer

E-mail: emcdonal@jhsph.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
MSPH students in HBS
Pass/Fail

410.868.01  PROGRAM PLANNING FOR HEALTH BEHAVIOR CHANGE PRACTICUM

Course offered this year
2 credits
Jones,Vanya
Explores program planning application through project-based experiential learning. Includes work in small groups to apply the PRECEDE-PROCEED needs assessment planning framework in a real world setting with a community-based organization or local government agency. Focuses on the basic methods of working with communities and community organizations, types of needs assessment tools, and the skills needed to develop these tools, through four seminar sessions and weekly sessions with community based organization representatives.

Upon successfully completing this course, students will be able to:
1. Describe the components necessary to work on a community-based project.
2. Demonstrate the ability to obtain and incorporate feedback from the organization and course faculty to successfully complete deliverables for partner organization.
3. Complete a planning PRECEDE framework based on a public health problem in Baltimore City.
4. Explain their attitudes and values about working with communities and developing community partnerships.
5. Incorporate theoretical constructs into a program planning tool such as a focus group guide.
6. Develop a data collection tool based on the needs of a community-based organization.

E-mail: vjones@jhsph.edu
Enrollment minimum of 5
Enrollment maximum of 10
Graduate students only, with instructor consent.
Pass/Fail
Consent required for all students
Prerequisite: Concurrently enrolled in 410.620.

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
While this class meets every other week for an hour and a half during the term, students have two meetings at the CBO with a member of the teaching team present, and students work with the CBO representative for up to 6 additional meetings. Students must organize their own transportation when visiting the CBO.

410.870.01  HBS RESEARCH AND PROPOSAL WRITING PROCESS FOR DOCTORAL STUDENTS I

Course offered this year
(2 credits)

Davey-Rothwell, Melissa and Tobin, Karen

Acquaints doctoral students with the dissertation proposal and preparation for preliminary oral examination processes. Assists students in making progress on their own proposal through refinement of writing, literature synthesis and critique, and peer review skills. Each session focuses on a specific stage of proposal development for behavioral research including developing a comprehensive conceptual framework, formulating research questions and hypotheses, choosing appropriate study design and methodologies, identifying reliable and valid measures, developing a sound data analysis plan, and ensuring compliance with Human Subjects regulations. Reviews departmental and school-wide requirements for dissertation proposals and preliminary examinations. Discusses application of dissertation proposal and examination preparation skills to professional activities such as manuscript development and conference presentations.

Information not required for this course type

E-mail: mdavey@jhsph.edu,
Lecture: W 8:30 AM - 10:20 AM
Enrollment minimum of 10
No Maximum
HBS doctoral students
Pass/Fail
Multi-term with 410.871

Grade is given for both 410.870 and 410.871 upon completion of 410.871.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Enrollment</th>
<th>Maximum</th>
<th>Grade Option</th>
<th>Notes</th>
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</thead>
</table>
| 410.881.01  | MHS SEMINAR IN SOCIAL FACTORS IN HEALTH I        | Course offered this year  
(1 credits)  
German, Danielle  
Introduces students to social science concepts in public health and to ongoing social factors research at JHSPH. Also introduces students to key concepts and tools necessary to successfully complete the MHS in Social Factors in Health degree program.  
Upon successfully completing this course, students will be able to:  
1. Demonstrate the relevance of social science concepts for public health  
2. Identify examples of social factors in public health research  
3. Describe the steps involved in completing the MHS in Social Factors in Health degree program  
E-mail: dgerman@jhsph.edu  
Lecture: W 12:00 PM - 1:20 PM  
Enrollment minimum of 10  
No Maximum  
Restricted to MHS in Social Factors in Health students.  
Pass/Fail                                                                 |         | 10         |         | Pass/Fail    |                                                      |
| 410.895.01  | MPH PRACTICUM: HEALTH BEHAVIOR AND SOCIETY       | Course offered this year  
(variable credits)  
Students who have not met the practicum requirement, must register for at least two credits  
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail                                                                 |         | 10         |         | Pass/Fail    |                                                      |
FACILITATING FAMILY ADAPTATION TO LOSS AND DISABILITY I

Course offered this year
(2 credits)
Magyari, Trish
Provides theoretical constructs for understanding the meaning of loss in maternal and child health, and techniques for short-term counseling that facilitate a healthy grief reaction for the bereaved family. Case studies of typical and atypical reactions are discussed for losses such as perinatal loss (miscarriage, stillbirth, neonatal death, termination of pregnancy for genetic reasons); birth of a child with a genetic condition/birth defect; death of a child with a chronic illness; and infertility. Topics include the psychology of pregnancy; and perinatal loss; phases of grief reaction; the art of facilitating bereavement; practical interventions in the hospital; follow-up counseling and short-term psychotherapy; resources; special needs of family members; gender differences; grandparent and sibling issues; provider issues (counter-transference, self-care, and burn-out prevention). Includes lecture, discussion, role play, video, field trips, and presentations by bereaved parents.

E-mail: pmagyar1@jhu.edu
Lecture: W 1:30 PM - 3:20 PM
Enrollment minimum of 10
Enrollment maximum of 12
Letter Grade or Pass/Fail
Consent required for some students
Consent required for students not in ScM in Genetic Counseling program.
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with NIH

GENETIC COUNSELING CLINICAL SUPERVISION

Course offered this year
(1 credits)
Magyari, Trish
Individual supervision sessions assist the student in recognizing the impact of personal styles and biases on the counseling process. Uses audiotapes and/or videotapes of student counseling sessions to review, analyze, and process student-client interactions throughout the students clinical rotations, and develop strategies for addressing barriers in the counseling process.

Information not required for this course type

E-mail: pmagyar1@jhu.edu
Enrollment minimum of 10
Enrollment maximum of 15
ScM in Genetic Counseling Students
Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program; students must register for four terms.
Jointly offered with NIH

Health Policy and Management
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Description</th>
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<tbody>
<tr>
<td>300.711.01</td>
<td>HEALTH POLICY I: SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH</td>
<td>LaVeist, Thomas</td>
<td>Provides students with the theoretical and practical background to understand the complex web of social, economic, and political determinants of health. Introduces students to key theories from sociology, economics and political science; students learn to applied these theories as analytic tools enabling them to develop and evaluate policy solutions to public health problems. Students also learn various conceptual models that integrate social, economic and political factors as determents of health related outcomes and health policy formation. Upon successfully completing this course, students will be able to: 1. Discuss and identify primary theories from sociology, economics and political science as they apply to population health and health policy formation 2. Identify conceptual models linking social, economic and political context to population health and health policy formation 3. Evaluate research linking determinants of health with population health and health policy 4. Analyze and interpret how social, economic and political forces have affected health inequalities in the US and internationally E-mail: <a href="mailto:tlaveist@jhsph.edu">tlaveist@jhsph.edu</a> Lecture: T TH 9:00 AM - 10:20 AM Enrollment minimum of 10 No Maximum no undergraduates permitted in this course Letter Grade or Pass/Fail</td>
</tr>
<tr>
<td>300.721.01</td>
<td>HEALTH POLICY I: SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH PHD LAB</td>
<td>LaVeist, Thomas</td>
<td>Reviews and critiques current literature applicable to each week's lectures in Health Policy I. Upon successfully completing this course, students will be able to: 1. Discuss and identify the current literature from sociology, economics and political science as applied to population health and health policy E-mail: <a href="mailto:tlaveist@jhsph.edu">tlaveist@jhsph.edu</a> Lecture: TH 5:30 PM - 6:20 PM Enrollment minimum of 10 No Maximum ONLY PHD students in HPM permitted to register for this class Pass/Fail Prerequisite: concurrent registration in 300.711 PhD students in HPM ONLY Course Change Information: 10/14/2011;</td>
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<td>Course Code</td>
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<tr>
<td>300.731.01</td>
<td>HEALTH POLICY I: SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH MSPH LAB</td>
<td>Course offered this year</td>
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<td>(1 credits)</td>
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<td>LaVeist, Thomas</td>
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<td>Reviews and critiques current literature applicable</td>
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<td>to each week's lectures in Health Policy I.</td>
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<td>Upon successfully completing this course, students will be able to:</td>
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<td>1. identify the current literature from</td>
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<td>sociology, economics, and political</td>
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<td>science as applied to population</td>
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<td>health and health policy</td>
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<td>E-mail: <a href="mailto:tlaveist@jhsph.edu">tlaveist@jhsph.edu</a></td>
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<td>Lecture: TH 5:30 PM - 6:20 PM</td>
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<td>Enrollment minimum of 10</td>
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<td>Enrollment maximum of 30</td>
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<td>ONLY MSPH/health policy students in HPM permitted to register for this class</td>
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<td></td>
<td>Pass/Fail</td>
<td>Prerequisite: concurrent registration in 300.711</td>
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<tr>
<td>300.800.01</td>
<td>MPH CAPSTONE HEALTH POLICY AND MANAGEMENT</td>
<td>Course offered this year</td>
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<td>(2 credits)</td>
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<td>Must have 1-4 credits per term for two terms.</td>
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<td>The MPH Capstone is an opportunity for students</td>
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<td>to work on public health practice projects that are of</td>
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<td>particular interest to them.</td>
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<td>The goal is for students to apply the skills and competencies they have</td>
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<td>acquired to a public health problem that simulates a</td>
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<td>professional practice experience.</td>
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<td>Information not required for this course type</td>
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<td>Enrollment minimum of 10</td>
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<td>Pass/Fail</td>
<td>Consent required for all students</td>
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<td>Consent from the Capstone Supervisor is Required.</td>
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<td>Prerequisite: All other MPH core requirements must be</td>
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<td>taken before or concurrently with the capstone project.</td>
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<tr>
<td>300.830.01</td>
<td>POSTDOCTORAL RESEARCH HEALTH POLICY AND MANAGEMENT</td>
<td>Course offered this year</td>
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<td>(variable credits)</td>
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<td>credit registration is negotiated with faculty mentor</td>
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<td>Information not required for this course type</td>
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<td>Lecture: TBA</td>
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<td>Enrollment minimum of 10</td>
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<td></td>
<td>Pass/Fail</td>
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</tbody>
</table>
### 300.840.01 SPECIAL STUDIES AND RESEARCH IN HEALTH POLICY AND MANAGEMENT

Course offered this year  
(variable credits)  
student and faculty determine appropriate number of credits for each registration period  
Not required for this course type  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

### 300.895.01 MPH PRACTICUM: HPM

Course offered this year  
(variable credits)  
Students who have not met the practicum requirement, must register for at least two credits  
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

### 301.820.01 THESIS RESEARCH IN HEALTH POLICY AND MANAGEMENT

Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

### 301.861.01 GRADUATE SEMINAR IN HEALTH AND PUBLIC POLICY

Course offered this year  
(1 credits)  
Webster, Daniel  
Reviews and critiques current literature in health and public policy and evaluates studies from a methodological and conceptual basis.  
Information not required for this course type  
E-mail: dwebster@jhsph.edu  
Lecture: W 12:00 PM - 1:20 PM  
Enrollment minimum of 10  
No Maximum  
Restricted to Health & Pub Policy HPM doctoral students.  
Pass/Fail

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1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
305.610.01 ISSUES IN INJURY AND VIOLENCE PREVENTION

Course offered this year
(2 credits)
Vernick, Jon
Addresses prominent sources of injury, including motor vehicles, falls, fires, and firearms. Explores the biological, behavioral, and social issues relating to injury and violence prevention and policy. Emphasizes basic strategies for preventing injuries and deaths in the workplace, home, travel, and recreation, and the relative effectiveness of various types of approaches. Students who wish to write a paper may sign up for extra credit as special studies.

Information not required for this course type

E-mail: jvernich@jhsph.edu
Lecture: M W 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Jointly offered with Environmental Health Sciences

305.861.01 GRADUATE SEMINAR IN INJURY RESEARCH AND POLICY

Course offered this year
(1 credits)
Frattaroli, Shannon
Students attend weekly seminars offered by the Center for Injury Research and Policy and read literature provided to accompany each presentation. Seminar topics complement the content areas of current courses and include themes of global perspectives in injury control, contemporary thoughts in violence prevention, advanced methods in injury research, and updates in trauma and rehabilitation research. The last week of each course is devoted to an in-depth discussion of the terms' seminars.

Information not required for this course type

E-mail: sfrattar@jhsph.edu
Lecture: T 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.

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306.861.01  GRADUATE DOCTORAL SEMINAR IN BIOETHICS

Course offered this year
(1 credits)
Kass,Nancy
Familiarizes students with contemporary and classic literature in bioethics and demonstrates how to rigorously critique empirical and normative writings in the field of bioethics. Readings for the seminar include recent publications in bioethics and some classic pieces in the field. Students are primarily responsible for selection of articles and for presentation of articles for discussion.

Upon successfully completing this course, students will be able to:

1. have a deeper awareness of and understanding of the literature in bioethics and public health
2. analyze arguments in existing bioethics literature and respond to them independently
3. to synthesize literature across different content areas of bioethics in order to provide linkages in the field
4. to critique one another's work and scholarly arguments.

E-mail: nkass@jhsph.edu
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Students who are NOT doctoral students in the bioethics track require permission of the instructor.

308.810.01  FIELD PLACEMENT HEALTH POLICY-MSPH

Course offered this year
(variable credits)
program decision
King,Christine and Resnick,Beth A.
Information not required for this course type
Information not required for this course type

E-mail: chking@jhsph.edu
Enrollment minimum of 10
No Maximum
only matriculated msph/hp permitted
Pass/Fail
Consent required for all students
all students required to obtain permission to register

1st term information is correct as of August 14 , 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
**308.867.01  MSPH SEMINAR IN HEALTH POLICY**

Course offered this year  
(1 credits)  
King, Christine and Resnick, Beth A.  
Introduces work undertaken in health policy settings and prepares MSPH students in Health Policy and Management for the field placement requirement in the second year of the program.  
Upon successfully completing this course, students will be able to:  
1. Define Health Policy  
2. Identify major arenas of health policy work  
3. Discuss the scope of health policy work: what do health policy analysts do?  
4. Develop a professional resume targeted toward future employers  
5. Begin the process of career networking: start a jobs database, investigate interest areas, Discuss the power of personal contacts  
6. Begin the process of career networking: start a jobs database, investigate interest areas, Discuss the power of personal contacts  
E-mail: chking@jhsph.edu  
Lecture: W 3:30 PM - 4:50 PM  
Enrollment minimum of 10  
No Maximum  
Restricted to MSPH in Health Policy degree candidates  
**Pass/Fail**  
Consent required for all students  
MSPH students are required to obtain consent

**309.605.01  HEALTH ISSUES FOR AGING POPULATIONS**

Course offered this year  
(3 credits)  
Wolff, Jennifer and Leff, Bruce  
Provides an overview of issues in health and health care delivery for older persons. Students explore three modules: (1) broad social and policy implications of an aging society (demography, socially defined roles and expectations, disability dynamics and trends, housing and the built environment), (2) clinical issues in aging (aging and geriatric medicine, chronic care, long term care delivery, ethical issues in the health care of older adults, and death and dying), and (3) financial implications (financing of health and long-term care, retirement and economic security, sustainability of entitlement programs for older adults).  
Upon successfully completing this course, students will be able to:  
1. Discuss range of health issues that older persons, their health providers, government, and society will confront in the coming decades  
E-mail: jwolff@jhsph.edu  
Lecture: T TH 1:30 PM - 2:50 PM  
Enrollment minimum of 10  
No Maximum  
**Letter Grade or Pass/Fail**  
First of a series of five courses offered by the School as a concentration in Gerontology for master and doctoral students.  
Course Change Information: Changed lecture times Mar 2010
309.716.01  ADVANCED METHODS IN HEALTH SERVICES RESEARCH: ANALYSIS

Course offered this year
(3 credits)
Gaskin, Darrell J. and Thorpe, Roland
Discusses research questions typically asked in health services research. Students gain hand-on experience formulating these questions in terms that make them amenable to quantitative analysis. Topics include: defining causal pathways, choosing outcome variables, getting reliable model predictions, sample selection issues, and contending with partial observations.

Upon successfully completing this course, students will be able to:
1. Apply several econometrics techniques which are commonly used in health services research to their own research
2. Select appropriate econometrics models for their research questions and available data
3. Perform empirical analyses with survey data and administrative databases

E-mail: dgaskin@jhsph.edu
Lecture: T TH 9:00 AM - 10:20 AM
Enrollment minimum of 10
No Maximum

Letter Grade or Pass/Fail
Prerequisite: 140.621-624 or 140.651-654

309.861.01  GRADUATE SEMINAR IN HEALTH SERVICES RESEARCH AND POLICY

Course offered this year
(1 credits)
Weiner, Jonathan
Provides opportunity to learn about faculty research, review current literature, discuss issues and concepts relevant to the field of health services research, and prepare for comprehensive exams and proposal writing. Intended for doctoral students concentrating in health services and outcomes research or gerontology and long-term care.

Upon successfully completing this course, students will be able to:
1. describe the key substantive areas that comprise health services research
2. articulate how their own research interests align with the field of health services research

E-mail: jweiner@jhsph.edu
Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsp.edu/C4/Academics/.
311.820.01 THESIS RESEARCH HPM-DRPH
Course offered this year
(variable credits)
Students register for thesis research credits per consultation with advisor.
HPM/DrPH students conduct their thesis research.
Information not required for this course type
Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail

311.861.01 GRADUATE SEMINAR IN HEALTH CARE MANAGEMENT AND LEADERSHIP
Course offered this year
(1 credits)
Morlock,Laura and Engineer,Lilly
Provides opportunity to discuss concepts and issues related to organizational performance improvement, organizational performance indicators, and change strategies. Facilitates preparation for comprehensive exams and the design and conduct of dissertation projects. Intended for DrPH students concentrating in Health Care Management and Leadership. Student evaluation based on seminar presentations and participation.
Upon successfully completing this course, students will be able to:
1. Apply concepts and skills in organizational performance improvement
2. Develop and monitor organizational performance indicators on a variety of dimensions (clinical, services, financial)
3. Demonstrate change management, communication and leadership skills
E-mail: lmorlock@jhsph.edu
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students

312.601.01 FUNDAMENTALS OF MANAGEMENT FOR HEALTH CARE ORGANIZATIONS
Course offered this year
(5 credits)
Gundlach,Ann-Michele and Ward,William
Discusses how to manage in health care organizations, including management processes, organizational structures, and types of governance and management issues of U.S.-based health care delivery systems. Topics to be examined include introduction to health care systems; managing health care organizations; health care environments, administrative management responsibilities; approaches to performance improvement and financial management concepts.

Upon successfully completing this course, students will be able to:

1. Describe the functions and processes required to manage an effective health care organization
2. Discuss the role and role expectations of managers in health care organizations
3. Analyze health care organizations and their functions in order to facilitate change and performance improvement
4. Evaluate the technical and management challenges of managing health care organizations through the use of case studies
5. Apply management theories and tools to the analysis of a current health care organizational issues

E-mail: agundlac@jhsph.edu
Lecture: T TH 9:00 AM - 10:20 AM
Enrollment minimum of 20
Enrollment maximum of 50
Open to graduate students only

**Letter Grade or Pass/Fail**
Consent required for all students

Due to enrollment cap, all students must obtain permission. Priority is given to MHA, HPM/DrPH, and MPH/leadership & management concentrators

During the Wed discussion/lab sessions, students will practice concepts presented and developed during the T/Th lectures. Students who take this course should NOT register for 551.601.81.

Course Change Information:
InstructorConsentId, ConsentNote, CourseOfferRationaleNote, ContactPerson, ContactEmail, ContactPerson2, ContactEmail2, .08/10/2012;

**312.617.01  FUNDAMENTALS OF FINANCIAL ACCOUNTING**

Course offered this year
(3 credits)
Sokolowski, Paul

Provides both a theoretical foundation and practical application to contemporary accounting principles and practices. Emphasizes accounting as the “language of business” with the pragmatic approach of learning the types and uses of financial statements, both external and internal.

Topics include a review of the accounting cycle; understanding the environmental needs that drive the requirements for financial statements; a “hands on” review of how accounting events are recorded, resulting in the compilation of financial statements; and a review of external and internal financial statements.

Upon successfully completing this course, students will be able to:

1. Distinguish between financial and managerial accounting
2. Demonstrate a basic Discussing of where financial transactions originate, and how they are recorded and presented in the financial statements
3. Analyze accounts and discuss key changes in account balances
4. Explain changes in financial position, and results of operations
5. Discuss key elements of the statement of cash flows
6. Interpret and analyze the financial statements of a business, particularly those of a health care organization and be able to anticipate and comprehend the financial effects of managerial actions on the enterprise

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
E-mail: psokolow@jhsph.edu
Lecture: W 3:30 PM - 6:20 PM
Enrollment minimum of 10
Enrollment maximum of 40
Restricted to graduate students.

**Letter Grade or Pass/Fail**
Consent required for all students
Contact Jamila Savage for consent, jsavage@jhsph.edu

**312.810.01 FIELD PLACEMENT - HEALTH ADMINISTRATION**
Course offered this year
(variable credits)
this is a program decision
Schwartz, Teresa and Gundlach, Ann-Michele
Information not required for this course type.
Information not required for this course type.
E-mail: tschwart@jhsph.edu
Enrollment minimum of 10
No Maximum
Pass/Fail

**312.867.01 MHA SEMINAR IN HEALTH FINANCE AND MANAGEMENT**
Course offered this year
(1 credits)
Schwartz, Teresa and Gundlach, Ann-Michele
Introduces students to current health care finance and management issues through a series of discussion sessions with program directors and guest lecturers. Prepares students for the program’s fourth term case competition and the second year field placement requirement.

Upon successfully completing this course, students will be able to:

1. Discuss current and emerging health care issues; develop effective listening, questioning and critical thinking skills, and actively engage in small group discussions with health care leaders
2. Assume responsibility for developing a professional network
3. Work effectively in a team and produce a professional and persuasive presentation for a case competition
4. Develop a career strategy, write an effective resume and business letter, and perform effectively in job interviews.
5. Identify key issues related to the importance of developing effective relationships between clinicians and hospital administrators

E-mail: tschwart@jhsph.edu
Lecture: M W 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
Restricted to MHA students only
Pass/Fail
Course Fee: 25.0000
fee will cover course materials and expenses related to field trips
313.639.01  INTRODUCTION TO MICROECONOMICS

Course offered this year
(3 credits)
Sorkin, Alan
Introduces economics of the business enterprise, the household, and the industry. Topics include supply and demand, price and income elasticity, equilibrium of the firm, and the measurement of poverty and inequality
Upon successfully completing this course, students will be able to:
1. outline and explain the fundamental issues that underlie health economics
2. discuss the concepts of health production and demand for healthcare services
3. discuss the challenges of financing and providing healthcare
4. describe how hospitals and physician services are organized
5. discuss how market forces and public policy affects healthcare providers
E-mail: asorkin@jhsph.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
undergraduates are NOT permitted in this course.
Letter Grade or Pass/Fail
Jointly offered with IH

313.653.01  MICROECONOMIC MODELS IN PUBLIC HEALTH I

Course offered this year
(2 credits)
Herring, Bradley
Covers seminal publications in health economics and is targeted towards advanced Ph.D. students. Describes theoretical models in health economics for the determinants of health and demand for healthcare services, the foundations for cost-effectiveness analysis, the supply of healthcare services in competitive, monopolistic, and government-regulated markets, and the provision of private and public health insurance.
Upon successfully completing this course, students will be able to:
1. Describe the core concepts in health economics and some standard empirical techniques in employed in the literature
2. Apply comparative statics to health economic problems
3. Create your own models of health economic phenomenon
4. Produce advanced articles in health economics literature
E-mail: bherring@jhsph.edu
Lecture: F 1:30 PM - 3:20 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for all students
all students must obtain consent from instructor
Prerequisite: Health Economics I and II, 313.641 and 313.644
Multi-term with 313.654
Final grade applies to all terms
### Mathematical Microeconomics

**Course Offered This Year**

<table>
<thead>
<tr>
<th>Credits</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>John Bridges</td>
</tr>
</tbody>
</table>

Explores the essential topics of microeconomics: assumptions about markets, theory of the consumer, theory of the firm, market equilibrium, market failure, public goods, government intervention and game theory. Provides students with a graduate level introduction to microeconomics and will utilize both linear algebra and calculus. While discussion focuses predominately on first order conditions, students are encouraged to examine second order conditions, and other advanced theory and methods such as Kuhn-Tucker conditions, duality, and envelope theorems.

Information not required for this course type.

E-mail: jbridges@jhsph.edu

Lecture: T TH 3:30 PM - 5:20 PM

Enrollment minimum of 7

No Maximum

**Letter Grade or Pass/Fail**

Prerequisite: an undergraduate course in calculus and economics or permission of instructor

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### Public Health Economics Seminar

**Course Offered This Year**

<table>
<thead>
<tr>
<th>Credits</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>John Bridges</td>
</tr>
</tbody>
</table>

Exposes students to recent research in various areas of health economics. Provides opportunities for more in-depth study of the core economics courses being offered each term. Provides opportunities for professional development in the field.

Upon successfully completing this course, students will be able to:

1. list the theoretical and empirical techniques of health economics and their implication for health policy decisions
2. prepare written critiques of recent research in area of public health economics
3. Identify the health economics faculty and their research interests.
4. Cite the literature that pertains to health economics
5. Discuss the literature and describe relationships between health economics and other areas within public health.
6. Facilitate the translation of economics research into policy and practice.

E-mail: jbridges@jhsph.edu

Lecture: F 3:30 PM - 4:50 PM

Enrollment minimum of 10

No Maximum

no undergraduates permitted in this course

**Pass/Fail**
INTRODUCTION TO THE RISK SCIENCES AND PUBLIC POLICY

Burke, Thomas

Provides an introduction to the basic paradigm for quantitative risk assessment and illustrates its application in the public policy process using case studies. Examines risk assessment in a broad societal context, considering social, economic, and political factors that affect risk decision-making; evolution of risk assessment; and the use of risk assessment in regulatory processes. Students complete a risk assessment exercise.

Information not required for this course type

E-mail: tburke@jhsph.edu
Lecture: M W 5:00 PM - 6:50 PM
Enrollment minimum of 10
No Maximum

THE POLICY PROCESS I

Course offered this year

Examines the influence of political, organizational, and substantive complexities on the policy process. Specifically addresses the key stages of the policy process, the different frameworks for effective policymaking in complex political and bureaucratic environments, how issues get on the policy agenda, and the art behind policy implementation and sustainability.

After completing this course, you should be able to:

1. Describe the political, organizational and substantive complexities of the policy process;
2. Illustrate the different conceptual policy models;
3. Identify the areas of policy formulation, policy implementation, policy adoption, policy agendas and problem definition;
4. Differentiate the key stages of the policy process; and
5. Compare different frameworks for effective policymaking

Enrollment minimum of 10
Enrollment maximum of 30
undergraduates are not permitted in this course

Final grade applies to all terms
This course will be taught on the Homewood campus.

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
APPLIED MICROECONOMICS FOR POLICYMAKING I

Course offered this year
(3 credits)
Borkoski, Carey
Introduces the basic principles of microeconomics by emphasizing applications to the solutions of public problems. Students examine how markets operate and the role of government intervention. Acquaints students with public versus private goods, externalities, information asymmetry and other issues. Provides a theoretical framework for addressing policy problems.

After completing this course, you should be able to:

1. Define the terminology of microeconomics;
2. Identify the basic tools in microeconomic analysis;
3. Apply the economic way of thinking to policy problems;
4. Explain how markets operate and identify welfare outcomes for consumers and firms;
5. Assess the different types of government intervention using the tools of supply and demand;
6. Develop creative and critical thinking skills by applying economic concepts to real world problems; and
7. Communicate economic analysis in verbal, written and mathematical formats.

E-mail: cborkoski@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 30 undergraduates are not permitted in this course;
Letter Grade or Pass/Fail
Consent required for some students
students enrolled in programs other than the MPP must obtain permission of department prior to registering for this course

Multi-term with 318.604
Students must register for 318.603 and 318.604 in order to receive a grade
Final grade applies to all terms
This course will be taught on the Homewood campus.

318.605.01 POLICY ANALYSIS FOR THE REAL WORLD I

Course offered this year
(3 credits)
Newman, Sandee
Develops student analytical thinking through real-world problem applications including social, urban, and health policy. Prepares students to master the essential steps of any policy analysis: identify the problem, assessing the available evidence, specifying goals and constraints and examining policy alternatives. Emphasizes communicating in a simple, clear and direct way.

After completing this course, you should be able to:

1. Define the nature of the policy problem based on effective and critical review of multiple sources of information;
2. Assess the quality of evidence from secondary source policy analyses;
3. Identify and interpret patterns and trends in data;
4. Conduct surveys to assess perceptions and behaviors
5. Communicate policy analyses with precision, clarity and cogency; and
6. Engage in effective team work.

E-mail: sanewman@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 30 undergraduates are not permitted in this course;
Letter Grade or Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Consent required for some students
students enrolled in programs other than the MPP
must obtain permission of department prior to
registering for this course.
Multi-term with 318.606
Students must register for 318.605 and 318.606 in
order to receive a grade.
Final grade applies to all terms
This course will be taught on the Homewood
Campus.

### 318.610.01  **STATISTICAL ANALYSIS FOR POLICY MAKING**

Course offered this year
(3 credits)
Introduces the basic concepts and methods of
statistics as applied to public policy analysis.
Demonstrates methods of exploring, organizing and
presenting data, and introduces measures of
central tendencies, correlation, analysis of variance,
and multivariate analysis. Introduces and employs
the statistical package STATA, as well as Microsoft
Excel to manipulate data and prepare students for
the remaining course work in the sequence.

After completing this course, you
should be able to:

1. Demonstrate the ability to apply
   fundamental concepts to data
   analysis
2. Describe the basic concepts of
   probability and random variables
3. Define the foundations for
   classical inference involving
   confidence intervals and hypothesis
   testing
4. Apply inferential methods to the
   means of normal distributions
5. Apply and interpret basic
   summary and modeling techniques
   for data

Enrollment minimum of 10
Enrollment maximum of 30
undergraduates are not permitted.

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**Letter Grade or Pass/Fail**
Consent required for some students
Students enrolled in programs other than the MPP
must obtain permission of the department prior to
registering for this course.
Multi-term with 318.611
Students must register for 318.610 and 318.611 in
order to receive a grade.
Final grade applies to all terms
This course will be taught on the Homewood
campus.

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1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
ETHICS AND PUBLIC POLICY I

Course offered this year
(3 credits)
Explores the ethical challenges confronting public policymaking and the normative obligations of public actors in serving the public interest. Exposes a variety of ethical issues ranging from the big questions of justice and social equity, liberty and individual freedom, and globalization to issues that one might confront in a professional setting (e.g., conflict of interest, lying and deception, and whistleblowing). Case studies are used to highlight ethical demands that arise in the policy context.

After completing this course, you should be able to:
1. Identify a range of ethical challenges facing public policymaking;
2. Describe multiple normative ways in which questions of value can be examined; and
3. Present persuasive arguments about ethical principles and disagreements.

Enrollment minimum of 10
Enrollment maximum of 30
undergraduates are not permitted in this course;
Letter Grade or Pass/Fail
Consent required for some students
students enrolled in programs other than the MPP must obtain permission of department prior to registering for this course
Multi-term with 318.632
Students must register for 318.630 and 318.631 in order to receive a grade.
Final grade applies to all terms
This course will be taught on the Homewood campus.

MPP GRADUATE POLICY SEMINAR

Course offered this year
(1 credits)
Borkoski, Carey
Introduces work undertaken in public policy settings and prepares MPP students in Health Policy and Management for the internship requirement in the second year of the program and life after graduation.

After completing this course, you should be able to:
1. Define Public Policy;
2. Identify major arenas of public policy work;
3. Discuss the scope of public policy work: what do policy analysts do?;
4. Develop a professional resume targeted toward future employers;
5. Begin the process of career networking: start a jobs database, investigate interest areas; and
6. Discuss the power of personal contacts.

E-mail: cborkoski@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 30
Only MPP students will be permitted to enroll in this course
Pass/Fail
This course will be offered on the Homewood campus.

International Health

INTRODUCTION TO INTERNATIONAL HEALTH

Course offered this year
(4 credits)
Perry, Henry
Introduces approaches used by various countries in solving their health and medical care problems, and the role of major international health organizations. Analyzes some of the current important issues in international health.

Upon successfully completing this course, students will be able to:

1. Locate and correctly cite information on demography, health conditions, health programs and health research for a country from multiple sources including websites maintained by international health organizations and scientific journals

2. Characterize the demographic situation in a country using standard fertility and mortality indicators and the concept of demographic transition

3. Describe the pattern of burden of disease in a country using standard fertility and mortality indicators, estimates of disease burden measured in Disability-Adjusted Life Years (DALYs), data on disease incidence, prevalence, risk factors

4. Describe the pattern of nutritional well-being and under or overnutrition in a country using standard indicators, and discuss how the concept of nutrition transition applies to the country

5. List various criteria that can be used to define the health priorities of a country

6. Explain the strengths and weaknesses of different criteria for setting health priorities in terms of defining a plan for action and building partnerships to address a health problem

7. Select an appropriate model or framework to define alternative actions to address a health problem

8. Describe and Discuss the strengths and weaknesses of the following frameworks for defining possible actions: problem-solving framework, multi-level models of disease, mortality or fertility determinants, intervention development and evaluation framework

9. Describe the different categories of partner organizations that should be considered when determining responsibilities for implementing actions to address a health problem, and the strengths and weaknesses of each category of organization

10. Identify topical interests in international public health to pursue in further courses, the MPH Capstone Project, the MHS internship or a doctoral dissertation

11. Identify topical interests in international public health to pursue in further courses, the MPH Capstone Project, the MHS internship or a doctoral dissertation

E-mail: heperry@jhsph.edu
Lecture: T TH 1:30 PM - 3:20 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
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.

Information not required for this course type

Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent from the Capstone Supervisor is Required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

Enrollment minimum of 10
No Maximum
Pass/Fail

Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.

Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
220.895.01 MPH PRACTICUM: INTERNATIONAL HEALTH

Course offered this year
(variable credits)
Students who have not met the practicum requirement, must register for at least two credits.
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Student must receive faculty advisor approval

221.602.01 APPLICATIONS IN MANAGING HEALTH ORGANIZATIONS IN LOW AND MIDDLE INCOME COUNTRIES

Course offered this year
(3 credits)
Peters, David
Using case studies, a simulation, and group-based activities, supplemented by required weekly online lectures and readings, students explore a variety of settings found in low and middle-income countries in which to apply management concepts. Students examine: (1) organizational restructuring in response to decentralization, (2) environmental scanning, (3) systems behavior in hospital organizations, (4) multiple approaches to group decision making, (5) managing to achieve agreement in health organizations, (6) preparing, implementing, and communicating a budget that is based on limited resources within a business, (7) performance improvement concepts and tools in a healthcare organization, and (8) the construct of a “balanced score card” for a health organization. Students apply these concepts to the activities and assignments in this management skills learning lab.

Upon successfully completing this course, students will be able to:
1. Collaborate effectively in teams to tackle problems faced by managers in health organizations.
2. Apply SWOT analysis to evaluate the environmental and organizational factors influencing an organizational change
3. Value the communication and collaboration skills essential in addressing organizational systems issues
4. Develop a budget based on information regarding business or service volume, staffing levels, salary rates and supply usage and costs
5. Identify the strengths and weaknesses of different approaches to management decision making
6. Use quality improvement tools to analyze and resolve operational problems
7. Articulate the metrics required to create a balanced scorecard to monitor organizational performance

E-mail: dpeters@jhsph.edu
Lecture: TH 8:30 AM - 10:20 AM
Enrollment minimum of 10
Enrollment maximum of 50
No undergraduates. Experience working in the health sector in LMICs required for students not in IH
Pass/Fail
Consent required for some students
Required for students other than IH MSPH students in the Health Systems program
In addition to the weekly two hours of class time, students are required to complete a weekly one-hour online lecture or material as part of this 3 credit class.
221.613.01  INTRODUCTION TO HUMANITARIAN EMERGENCIES  
Course offered this year  
(2 credits)  
Burnham,Gilbert and Doocy,Shannon  
Introduces basic types of public health emergencies, both manmade and natural and reviews public health skills used for conflict and disasters. Informs students of the environment in which these emergencies occur and how public health responses to each differ. Students learn which skills are neeeded to address nutritional, water and sanitation, and health needs, as well as the role of surveillance and information systems. Explores mechanisms and management of response to emergencies.  
Upon successfully completing this course, students will be able to:  
1. define a disaster and list the types of public health needs they create  
2. list the common types of disasters and indicate the numbers of persons affected and dead from these in the previous year  
3. discuss the common public reactions to disasters and list the myths which are associated with disasters  
4. list the organizations and groups which take the lead in the response to disasters  
E-mail: gburnham@jhsph.edu  
Lecture: T 5:00 PM - 6:50 PM  
Enrollment minimum of 15  
No Maximum  
Letter Grade or Pass/Fail

221.722.01  QUALITY ASSURANCE MANAGEMENT METHODS FOR DEVELOPING COUNTRIES  
Course offered this year  
(4 credits)  
Burnham,Gilbert and Edward,Anbrasi  
Presents the principles and practice of total quality management methods for health systems in developing countries. Emphasizes integrated district-level health systems management; fostering a genuine team approach in the face of an authoritarian tradition; central importance of community governance; interventions performed according to standards and in an equitable fashion; introducing a measurement-based approach to problem solving, emphasizing analysis of service delivery process and outcome; and developing operational research as an integral component of the management system.  
Upon successfully completing this course, students will be able to:  
1. define what quality means from the standpoint of a variety of stakeholders  
2. identify the root cause of quality problems  
3. apply the problem solving cycle to quality shortfalls identified  
4. explain the relationship of costs to quality  
5. develop a monitoring approach to track the quality of health services  
E-mail: gburnham@jhsph.edu  
Lecture: M W 1:30 PM - 3:20 PM  
Enrollment minimum of 10  
Enrollment maximum of 40  
Letter Grade or Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
221.810.01  FIELD PLACEMENT HEALTH SYSTEMS  
Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

221.820.01  THESIS RESEARCH HEALTH SYSTEMS  
Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

221.830.01  POSTDOCTORAL RESEARCH HEALTH SYSTEMS  
Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

221.840.01  SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS  
Course offered this year  
(variable credits)  
Information not required for this course type  
Enrollment minimum of 10  
No Maximum  
Pass/Fail

221.860.01  HEALTH SYSTEMS PROGRAM SEMINAR  
Course offered this year  
(1 credits)  
Doocy, Shannon and Lewy, Daniela  
Familiarizes Health Systems students with ongoing faculty research and activities, professionals and organizations in the field of international health, and provides a forum for discussion for current topics in health systems and international health.  
Information not required for this course type  
E-mail: sdoocy@jhsph.edu  
Lecture: T 12:00 PM - 1:20 PM  
Enrollment minimum of 10  
No Maximum  
Enrollment is restricted to MHS students and doctoral students in the Health Systems program and DrPH students in the Department of International Health  
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
222.641.01  PRINCIPLES OF HUMAN NUTRITION  
Course offered this year  
(4 credits)  
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.  
Upon successfully completing this course, students will be able to:  
1. List the major macro and micronutrients relevant to human health  
2. Discuss the scientific rationale for defining nutritional requirements in healthy individuals and populations, with reference to specific conditions such as pregnancy, lactation, and older age  
3. Present current evidence for the role of key nutrients in the prevention of chronic diseases  
4. Discuss major nutrition-related diseases in a global context  
E-mail: bcaballe@jhsph.edu  
Lecture: M W 1:30 PM - 3:20 PM  
Enrollment minimum of 10  
No Maximum  
Letter Grade or Pass/Fail  
Prerequisite: Basic background in biology/medical sciences

222.651.01  ADVANCED NUTRIENT METABOLISM  
Course offered this year  
(3 credits)  
De Luca, Luigi  
Provides an in-depth review of the metabolism of major nutrients and its importance in disease states, such as teratogenesis, cardiovascular disease, ageing, cancer, obesity, and liver fibrosis. Focuses on regulatory mechanisms, integration of metabolic pathways, and biochemical and physiological aspects of nutrient metabolism at the whole body, tissue and cellular level. Includes both discussion and lectures.  
Upon successfully completing this course, students will be able to:  
1. apply basic concepts of whole body nutrient homeostasis to nutrient control at the cellular level  
2. critically evaluate new findings on the role of nutrients in functions such as cellular differentiation, bone remodeling and cognitive function  
3. gain a greater understanding of metabolic pathway interrelationships  
E-mail: ldeluca@jhsph.edu  
Lecture: T TH 3:30 PM - 4:50 PM  
Enrollment minimum of 7  
No Maximum  
Letter Grade or Pass/Fail  
Prerequisite: Previous course work in biochemistry and/or the course on Nutritional Biochemistry
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Description</th>
<th>Credits</th>
<th>Schedule</th>
<th>Enrollment</th>
<th>Gradeway</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>222.657.01</td>
<td>FOOD AND NUTRITION POLICY</td>
<td>Klemm, Rolf and West, Keith</td>
<td>Examines major governmental, bilateral, and multilateral agency food and nutrition policies and programs that directly or indirectly affect 1) the availability and quality of food and 2) the health and nutrition of populations. Examples are drawn from developing and developed countries. Discussions are led by faculty and guest lecturers with diverse experience in developing and implementing food and nutrition policies. Upon successfully completing this course, students will be able to: 1. identify food and nutrition problems amenable to policy intervention 2. define criteria of effective food or nutrition policies 3. critique a specific food and/or nutrition policy with respect to its evidence-base, adequacy of implementation, nutritional impact and forces which hinder or help the implementation of the specific policy.</td>
<td>2</td>
<td>M 3:30 PM - 5:20 PM</td>
<td>Minimum of 5</td>
<td>No Maximum</td>
<td>Letter Grade or Pass/Fail</td>
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<tr>
<td>222.658.01</td>
<td>CRITICAL THINKING IN NUTRITION</td>
<td>Cheskin, Lawrence</td>
<td>Introduces graduate students of nutrition to the seminal literature in the field. Teaches students how to interpret and evaluate literature, and foster discussion and debate among students and faculty on current issues. Faculty selects seminal papers and participates in the discussion. Students are expected to read each paper as well as discuss and explain the methods and results in class. Upon successfully completing this course, students will be able to: 1. how scientific discuss and experimental findings make their way into the nutritional literature through didactics and examination of selected peer-reviewed journal articles of importance 2. They will become skilled at critically analyzing journal articles pre-selected by several members of the Nutrition faculty through guided reading, in-class guided discussion and debate, and written follow-up assignments.</td>
<td>1</td>
<td>F 1:30 PM - 2:20 PM</td>
<td>Minimum of 2</td>
<td>Maximum of 20</td>
<td>Letter Grade or Pass/Fail</td>
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1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Enrollment</th>
<th>Credits</th>
<th>Professor(s)</th>
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<tr>
<td>222.810.01</td>
<td>FIELD PLACEMENT HUMAN NUTRITION</td>
<td>Minimum: 10</td>
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<tr>
<td>222.820.01</td>
<td>THESIS RESEARCH HUMAN NUTRITION</td>
<td>Minimum: 10</td>
<td>variable</td>
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<tr>
<td>222.830.01</td>
<td>POSTDOCTORAL RESEARCH HUMAN NUTRITION</td>
<td>Minimum: 10</td>
<td>variable</td>
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<td>Course offered this year (variable credits)</td>
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<tr>
<td>222.840.01</td>
<td>SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION</td>
<td>Minimum: 10</td>
<td>variable</td>
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<td>Course offered this year (variable credits)</td>
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<tr>
<td>222.850.01</td>
<td>GRADUATE NUTRITION SEMINAR</td>
<td>Minimum: 10</td>
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<td></td>
<td><a href="mailto:stalegaw@jhsph.edu">stalegaw@jhsph.edu</a></td>
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<td>Lecture:</td>
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<td>TH 12:00 PM - 1:20 PM</td>
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<td>Enrollment</td>
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<td></td>
<td>Pass/Fail</td>
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</table>

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
DOCTORAL SEMINAR IN PROPOSAL DEVELOPMENT

Course offered this year
(1 credits)
Caulfield,Laura
Facilitates doctoral students in the development of research ideas and their dissertation proposals. Topics will vary by term but will include the following: how to develop a research idea, and components of a solid research proposal – background, design, methods, sample size, analysis, writing to different audiences, research designs in nutrition, ethical review, funding sources and requirements, budgeting, staff management, thesis and manuscript preparation, and professional development.

Upon successfully completing this course, students will be able to:
1. Identify the differences between a resume and curriculum vitae
2. Identify the components of a research career that they would like to pursue and opportunities at JHU to support the process
3. Conduct a literature review in an area of interest
4. Develop a concept paper for a study in an area of interest
5. Write an NIH-style grant on a research topic of interest
6. Give presentations on a research topic of interest

E-mail: lcaulfie@jhsph.edu
Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail

FIELD PLACEMENT DISEASE CONTROL

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

THESIS RESEARCH DISEASE CONTROL

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

POSTDOCTORAL RESEARCH DISEASE CONTROL

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
223.840.01  SPECIAL STUDIES AND RESEARCH DISEASE CONTROL

Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

223.860.01  GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM SEMINAR

Course offered this year
(1 credits)
Charron,Karen
Global Disease Epidemiology and Control faculty present ongoing research and program activities and doctoral students present their research interests and findings. Seminar may be used occasionally for administrative or academic matters.
Information not required for this course type
E-mail: kcharron@jhsph.edu
Lecture: M 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
Restricted to Global Disease Epidemiology and Control MSPH students.
Pass/Fail
Consent required for all students
Limited to GDEC MSPH students

223.861.01  GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM DOCTORAL SEMINAR

Course offered this year
(1 credits)
Mullany,Luke
Strengthens research skills through critical appraisal of published research results and preparation of research protocols or projects.
Upon successfully completing this course, students will be able to:
1. Intelligently discuss the role of research in the improvement of the health status of populations throughout the world
2. Identify and compare aspects of the philosophy of science that are critical to the conduct of research
3. Constructively critique research methods employed by public health scientists
4. Formulate research questions that may develop into dissertation topics
E-mail: lmullany@jhsph.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment minimum of 10
No Maximum
IH doctoral students
Pass/Fail
Prerequisite: None

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Type</th>
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<th>Grade Options</th>
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<td>224.810.01</td>
<td>FIELD PLACEMENT SOCIAL AND BEHAVIORAL INTERVENTIONS</td>
<td>Variable credits</td>
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<td>Pass/Fail</td>
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<td>Variable credits</td>
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<tr>
<td>224.830.01</td>
<td>POSTDOCTORAL RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS</td>
<td>Variable credits</td>
<td>10</td>
<td></td>
<td>Pass/Fail</td>
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<td>224.840.01</td>
<td>SPECIAL STUDIES AND RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS</td>
<td>Variable credits</td>
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<td>Pass/Fail</td>
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<tr>
<td>224.860.01</td>
<td>SOCIAL AND BEHAVIORAL INTERVENTIONS PROGRAM SEMINAR I:APPLIED SOCIAL SCIENCE &amp; GLOBAL HEALTH</td>
<td>1 credit</td>
<td>5</td>
<td>25</td>
<td>Pass/Fail</td>
<td>SBI MSPH and SBI PhD students</td>
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**Mental Health**

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tr>
<td>330.602.01</td>
<td>EPIDEMIOLOGY OF DRUG DEPENDENCE</td>
<td>5</td>
<td>25</td>
<td>Pass/Fail</td>
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</table>

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Course offered this year
(3 credits)
Furr-Holden, Debra
Presents an overview of the epidemiology of drug and alcohol dependence and its relevance to public health. Reviews trends in estimates of prevalence and incidence of drug and alcohol use and problems related to use. Examines factors that might influence subgroup variation and health disparities in drug use outcomes using a dynamic approach that addresses changes over time and across the life course. Explores the universe of suspected causal influences and mechanisms ranging from genetic to societal influences using a model in which transitions in stages of drug involvement are influenced by interactions between individual susceptibility and social environmental factors. Presents research methodology and recent innovations in drug and alcohol epidemiologic research. The goal of this course is further understanding of the usefulness of epidemiology for shedding light on the natural history of drug and alcohol use and the relevance of epidemiologic research to basic and clinical research.

Upon successfully completing this course, students will be able to:

1. Identify appropriate data sources and approaches for addressing research questions about the epidemiology of drug use and dependence in the United States
2. Consider the role of epidemiology in informing and assessing policy and public health interventions targeting drug and alcohol dependence
3. Use epidemiologic approaches to describe the natural history of drug use and test for potential influences on transitions in stages of drug use
4. Describe conceptualizations of addiction and their importance for research

E-mail: dholden@jhsph.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment minimum of 10

330.617.01 THE PUBLIC HEALTH APPROACH TO PSYCHOPATHOLOGY
Course offered this year
(3 credits)
Spira, Adam
Examines the major mental disorders, emphasizing the current thinking regarding their essential features and their assessment in public health research. Class sessions include lectures by the instructor and by experts in particular disorders. Reviews commonly-utilized measures in public health and clinical contexts, including self- and informant-report measures, clinician-administered scales, and structured interviews.

Upon successfully completing this course, students will be able to:

1. Describe the organizational scheme of the current edition of the Diagnostic and Statistical Manual of Mental Disorders, as well as its limitations, and alternative perspectives
2. Describe the presentations and key features of major psychiatric syndromes, including anxiety and mood disorders, schizophrenia, substance use disorders and others
3. Identify the type and degree of disability associated with particular mental disorders
4. Describe and enumerate the strengths and weaknesses of different methods of assessing and classifying psychiatric syndromes
5. Identify appropriate measures for the assessment of particular disorders in public mental health research

E-mail: aspira@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Enrollment minimum of 10
No Maximum

**Letter Grade or Pass/Fail**
Consent required for some students
Consent is required for undergraduate students.

### 330.651.01 SEMINAR ON PROGRAM PLANNING IN DEVELOPING COUNTRIES ON DRUG ABUSE AND OTHER HEALTH PROBLEMS I

Course offered this year
(3 credits)
Alexandre,Pierre and Mancha,Brent

Reviews the scientific, social and political issues involved in resource allocation for programs to prevent and control drug abuse and other emergent public health problems in developing countries. Examines examples of major prevention program types, such as mass media awareness programs, school-based programs, community outreach networking programs, and public treatment programs. Students make presentations on the social and political factors influencing policy and resource allocation to reducing a selected drug, health or abuse problem in their own country.

Upon successfully completing this course, students will be able to:

1. use the internet to assemble information describing the geographic, political, economic and cultural parameters which may affect the types and level of psychoactive substance abuse in a developing country
2. conduct a national needs assessment using country based data on the extent and patterns of substance abuse and will be able to describe the policies, regulations and public health resp
3. develop and defend a proposal for improvement of a specific substance abuse problem in their country. In each term, students practice leadership skills in presenting and defending proposals for prevention, tre

E-mail: pialexan@jhsph.edu
Lecture: T TH 3:30 PM - 5:20 PM
Enrollment minimum of 5
Enrollment maximum of 15
Must be a Humphrey Fellows in drug abuse or have consent of instructor.

**Letter Grade or Pass/Fail**
Consent required for all students
Students not in Humphrey Fellows program.
Course is held in departmental space.

Course Change Information:
StudentEval, CourseLocation, CourseFormat, IRBSurvey, AuditorsAllowedId, CourseOfferRationaleNote, ContactPerson, ContactEmail, RepeatableRetakable, ScheduleTypeld, LabScheduleTypeld, CPInstructor, .08/08/2011;

### 330.655.01 FIELD VISITS IN DRUG ABUSE AND HEALTH PROGRAM PLANNING.

Course offered this year
(2 credits)
Mancha,Brent and Alexandre,Pierre

Students visit local, state and federal agencies and programs engaged in health and drug abuse risk factor/reduction through prevention, treatment, research and policy implementation programs. Visits are intended to deepen understanding of the array of program models for the prevention and control of public health and drug abuse risk factors that exist in the U.S.
Upon successfully completing this course, students will be able to:

1. Identify and describe exemplars of types of public health prevention and treatment programs current in the USA
2. Perform a critical review of current social, medical and psychological literature reporting evaluations of program effectiveness
3. Prepare a project proposal which includes an introduction, statement of problem and literature review for funding a treatment or prevention program taking into account their own country’s context

E-mail: bmancha@jhsph.edu
Lecture: F 1:30 PM - 3:50 PM
Enrollment minimum of 10
Enrollment maximum of 15
Must be a Humphrey Fellow in Drug Abuse or have consent of instructor.

**Letter Grade or Pass/Fail**
Consent required for all students
Consent required of undergraduates.

**Friday TBA**
Course Change Information:
TargetAud, CourseLocation, CourseFormat, IRBSurvey, AuditorsAllowedId,
CourseOfferRationaleNote, ContactPerson, ContactEmail, RepeatableRetakable,
ScheduleTypeld, LabScheduleTypeld, CPIntstructor, .08/08/2011;

**330.800.01 MPH CAPSTONE MENTAL HEALTH**
Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.
Information not required for this course type

Enrollment minimum of 10
No Maximum
**Pass/Fail**
Consent required for all students
Consent from the Capstone Supervisor is Required.
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

**330.802.01 SEMINAR ON AGING, COGNITION AND NEURODEGENERATIVE DISORDERS**
Course not offered until 2013 - 2014
(2 credits)
Rebok,George and Zandi,Peter
Addresses age-related cognitive and neuropsychiatric disorders that are of particular importance with the rapid expansion of the aging population. Focuses on the major domains of cognition and comparison of the age-related changes that occur in each cognitive domain. Includes emphasis on contrasting the major neurodegenerative disorders related to age and describing the clinical presentation and pattern of cognitive change in each condition. Participants address current strategies for maximizing cognitive function with age and treatment strategies for the primary neurodegenerative disorders. Participants examine and identify gaps in knowledge and research approaches to fill these gaps. Explores concepts of cognitive systems, animal and imaging models, and selective pathological change with age and disease.

Upon successfully completing this course, students will be able to:

1. classify the major domains of cognition and describe the age-related changes that occur in each cognitive domain
2. to classify the major neurodegenerative disorders related to age and describe the clinical presentation and pattern of cognitive change in each disorder
3. to identify gaps in discuss concerning age-related cognitive change and the primary neurodegenerative disorders and apply concepts to the development and evaluation of future interventions for age-related cognitive decline and neurodegenerative disorder

E-mail: grebok@jhsph.edu
Lecture: TH 3:30 PM - 5:20 PM
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students

Predoctoral and Postdoctoral students from A&S, SPH and SOM students participating in the NIA Training Program on Age-Related, Cognitive and Neuropsychiatric Disorders are required to take this course.

Course Change Information:
InstructorConsentId, TargetAud, CourseOfferRationaleNote, CourseSectionNote, CPInstructor, .08/08/2011;

330.805.01 SEMINAR ON STATISTICAL METHODS FOR MENTAL HEALTH
Course offered this year
(1 credits)
Stuart, Elizabeth
Students discuss recent advances in statistical methods in mental health. Class sessions include student and faculty presentations as well as discussions of recent articles in the literature. Topics include missing data, longitudinal data analysis, causal inference, and measurement.

Upon successfully completing this course, students will be able to:

1. Identify the key areas of research in statistical methods for mental health
2. describe recent developments in the field
3. critically evaluate studies in this area

E-mail: estuart@jhsph.edu
Lecture: M 12:00 PM - 1:20 PM
Enrollment minimum of 4
Enrollment maximum of 25
Pass/Fail
Consent required for some students
Master's students and undergraduates.
Prerequisite: 140.621-624 or 140.651-654, or consent of the instructor
Jointly offered with BIOSTAT
Will be held in department space.
<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Enrollment Minimum</th>
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<td>Course offered this year</td>
<td>(variable credits)</td>
<td>No Maximum</td>
<td>Pass/Fail</td>
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<td>330.830.01</td>
<td>POSTDOCTORAL RESEARCH MENTAL HEALTH</td>
<td>Course offered this year</td>
<td>(variable credits)</td>
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<td>330.840.01</td>
<td>SPECIAL STUDIES AND RESEARCH MENTAL HEALTH</td>
<td>Course offered this year</td>
<td>(variable credits)</td>
<td>No Maximum</td>
<td>Pass/Fail</td>
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<td>330.895.01</td>
<td>MPH PRACTICUM: MENTAL HEALTH</td>
<td>Course offered this year</td>
<td>(variable credits)</td>
<td>No Maximum</td>
<td>Pass/Fail</td>
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The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

Information not required for this course type.

Enrollment minimum of 10

No Maximum

Pass/Fail

Molecular Microbiology and Immunology

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
INTRODUCTION TO THE BIOMEDICAL SCIENCES

Course offered this year
(4 credits)
Rose, Noel and Levitskaya, Jelena
This two-week concentrated course, offered immediately prior to the first term for incoming students without adequate background or experience in the biomedical sciences, presents basic anatomy and physiology through a group learning process that utilizes selected reading assignments, explicit objectives, active group interaction reinforced by preceptors, and short objective tests with immediate feedback. Lectures focus on basic biologic principles relevant to the health of human populations.

Information not required for this course type

E-mail: nrrose@jhsph.edu
Lecture: M T W TH F 9:00 AM - 5:00 PM
Enrollment minimum of 15
No Maximum
Pass/Fail
Prerequisite: Restricted to full-time masters and doctoral students registered for first term
Scheduled the last two weeks before August orientation activities. Registrants must indicate this course on their FIRST term registrations, NOT their summer registrations.

PRINCIPLES OF IMMUNOLOGY I

Course offered this year
(4 credits)
Scott, Alan
Introduces biological concepts of immunology; molecular nature of antigens; molecular basis for antibody and T-cell receptor structure and diversity; complement; hypersensitivity reactions; cellular basis for the immune response; cell-mediated immunity; adhesion molecules and coreceptors cell activation; cytokines and other soluble mediators; major histocompatibility complex (MHC) antigens; tumor immunology; transplantation immunobiology; mechanisms of resistance to microorganisms; tolerance; autoimmunity; and immuno-deficiency.

Upon successfully completing this course, students will be able to:

1. Define the tissue, cellular and molecular components that constitute the vertebrate innate and adaptive immune system
2. Explain the generation of lymphocyte antigen receptors and the molecular and cellular basis for diversity and specificity of receptors on immune cells
3. Define the basis for antigen presentation to T cells
4. Define the basis for recognition of self and non-self recognition
5. Define the development and survival of lymphocytes
6. Explain the major signaling pathways used by immune cells
7. Define T cell-mediated and B cell-mediated immunity

E-mail: ascott@jhsph.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: A course in advanced biology Required for MMI students.

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
260.623.01 FUNDAMENTAL VIROLOGY
Course offered this year
(4 credits)
Griffin, Diane
Discusses cellular, molecular, genetic, and immunological principles that govern viral infection. Presents a survey of main virus groups with detailed discussion of several representative human pathogens. Topics include replication strategies, pathogenesis, carcinogenesis, vaccination, and the use of viruses as tools in molecular and cell biology. Emphasizes interactions of viral and host cell processes.
Upon successfully completing this course, students will be able to:
1. Discuss basic mechanisms of animal virus replication
2. Discuss basic cellular and host responses to viral infection
3. Become familiar with the major virus families that cause human disease
4. Discuss the mechanisms by which viruses in these families cause disease
5. Discuss how viruses in these families are transmitted and maintained in populations
E-mail: dgriffin@jhsph.edu
Lecture: M W F 3:30 PM - 4:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Required for MMI students.

260.636.01 EVOLUTION OF INFECTIOUS DISEASE
Course offered this year
(3 credits)
Klein, Sabra and Markham, Richard
Introduces students to the concept of how certain bacterial, parasitic, and viral pathogens have evolved and are still evolving to persist in both the developed and developing world. Enables public health workers to develop new strategies and approaches that can be used to aid in the control of the major infectious disease epidemics that continue to threaten both the developed and developing world.
Upon successfully completing this course, students will be able to:
1. apply a rudimentary understanding of the molecular bases of evolution to an understanding of the pathogenesis of infectious diseases
2. Students will be able to apply their discussion of the molecular bases of evolution to an understanding of why certain bacterial, parasitic, and viral pathogens persist or have emerged as major public health problems
E-mail: saklein@jhsph.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment minimum of 5
No Maximum
Letter Grade or Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.

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260.800.01  MPH CAPSTONE MOLECULAR MICROBIOLOGY AND IMMUNOLOGY
Course offered this year
(2 credits)
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.
Information not required for this course type
Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent from the Capstone Supervisor is Required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

260.801.01  TOPICS IN IMMUNOLOGY I
Course offered this year
(1 credits)
Scott, Alan
Employs a journal club presentation/discussion format to explore advanced topics in basic immunology, the tenants of experimental design in immunology and the theory and practice of immunological methods. This is the core discussion class for 260.611-.612.
Upon successfully completing this course, students will be able to:
1. Explain the basic elements in the experimental design of immunological studies
2. Define the theory and practice behind major methods and techniques used in modern immunological research
3. Describe the components of well-constructed tables and figures
E-mail: ascott@jhsph.edu
Lecture: T 10:30 AM - 11:50 AM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for all students
Prerequisite: Restricted to ScM and PhD graduate students in MMI.
This is the core discussion course for 260.611-.612; grades submitted at end of 2nd term.
<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Course Description</th>
<th>Credits</th>
<th>Instructor</th>
<th>Notes</th>
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<tr>
<td>260.810.01</td>
<td>FIELD PLACEMENT MOLECULAR MICROBIOLOGY AND IMMUNOLOGY</td>
<td>Course offered this year (variable credits) Information not required for this course type</td>
<td>variable</td>
<td>Griffin, Diane</td>
<td>Enrollment minimum of 10 No Maximum Pass/Fail</td>
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<tr>
<td>260.820.01</td>
<td>THESIS RESEARCH MOLECULAR MICROBIOLOGY AND IMMUNOLOGY</td>
<td>Course offered this year (variable credits) Information not required for this course type</td>
<td>variable</td>
<td>Griffin, Diane</td>
<td>Enrollment minimum of 10 No Maximum Pass/Fail</td>
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<tr>
<td>260.821.01</td>
<td>RESEARCH FORUM IN MOLECULAR MICROBIOLOGY AND IMMUNOLOGY</td>
<td>Course offered this year (1 credit) Griffin, Diane Departmental students organize and present research findings, resulting from laboratory investigations or literature review, to faculty and fellow students. These oral reports consist of rationale and background of the working hypothesis, experimental design, presentation of results, and analysis in the context of the hypothesis. Usually, each student presents twice a year and weekly attendance is required. Information not required for this course type E-mail: <a href="mailto:dgriffin@jhsph.edu">dgriffin@jhsph.edu</a> Lecture: M 12:00 PM - 1:20 PM Enrollment minimum of 10 No Maximum Pass/Fail Required for MMI students.</td>
<td>1</td>
<td>Griffin, Diane</td>
<td>1</td>
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</table>

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
260.822.01 SEMINARS IN RESEARCH IN MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

Course offered this year
(1 credits)
Griffin, Diane
Integrates academic training with current research in microbiology, immunology, and infectious diseases. Researchers from JHU and other biomedical research institutions present results of state of the art investigations of microbial diseases of public health significance, emphasizing experimental design and methodology for analysis and discussion.

Information not required for this course type

E-mail: dgriffin@jhsph.edu
Lecture: TH 12:05 PM - 1:05 PM
Enrollment minimum of 10
No Maximum
Pass/Fail
Required for MMI students.

260.840.01 SS/R: MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

260.851.01 LABORATORY ROTATIONS

Course offered this year
(4-8 credits)
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.

Information not required for this course type

Lecture: TBA
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent of rotation supervisor required.
Required for MMI students.

260.830.01 POSTDOCTORAL RESEARCH MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
260.852.01  MOLECULAR BIOLOGY LITERATURE

Course offered this year
(2 credits)
Hardwick, J.-Marie
Reviews and discusses, in depth, historic and current publications in the field of molecular biology. Required of departmental students concurrently enrolled in ME 260.800, Molecular Biology.
Information not required for this course type

E-mail: mhardwic@jhsph.edu
Lecture: W F 9:00 AM - 10:20 AM
Enrollment minimum of 10
No Maximum

Letter Grade or Pass/Fail
Consent required for all students
Required for 1st year PhD and ScM MMI students.
Consent of instructor required only if the student is not a first year MMI student.

260.895.01  MPH PRACTICUM: MMI

Course offered this year
(variable credits)
Students who have not met the practicum requirement, must register for at least two credits
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Information not required for this course type

E-mail: rblum@jhsph.edu
Lecture: M W 1:30 PM - 3:20 PM
Enrollment minimum of 10
No Maximum

Letter Grade or Pass/Fail

Population, Family and Reproductive Health

260.854.01  LIFE COURSE PERSPECTIVES ON HEALTH

Course offered this year
(4 credits)
Blum, Robert and Hughes, M. E.
Teaches students to frame public health issues using a life course perspective. Introduces and examines basic principles of human development across the life span, from the prenatal period through senescence, and the idea that health outcomes reflect developmental processes. Provides a conceptual framework with which to understand the interrelationships among biological, psychological, and social factors and their influence on development and health. Also illustrates the application of this perspective to gain a critical understanding of public health issues.

Upon successfully completing this course, students will be able to:

1. Describe the components of a life course perspective on health, the advantages of using this approach in public health, and the challenges involved in doing so

2. Demonstrate a basic knowledge of the life course and human development and its relationship to individual health. In particular, students should be able to identify the meaning and measurement of "health" at particular life stages and articulate inte

3. Develop a conceptual framework illustrating a life course approach to a specific outcome of concern to public health

E-mail: rblum@jhsph.edu
Lecture: M W 1:30 PM - 3:20 PM
Enrollment minimum of 10
No Maximum

Letter Grade or Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
380.641.01  Prenatal and Infant Growth and Development

Focuses on the core processes of physical growth and psychosocial development from conception through infancy. Addresses maturation, cognitive, social, and emotional development, and their assessment in the neonate and infant. Considers prenatal and postnatal risk factors for compromised growth and development, including the effects of prenatal teratogens and postnatal environmental factors.

Upon successfully completing this course, students will be able to:
1. Apply core concepts of basic biologic processes that guide growth and physical differentiation in humans to the embryonic, fetal, and infant periods
2. Describe the core constructs of developmental science as they apply to functional development of the fetus, infant, and young child
3. Identify factors that put individuals at risk for atypical growth and development, particularly those related to socioeconomic status

E-mail: jdipietr@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for some students
Undergraduates must have consent of the instructor before enrolling in the course.

380.655.01  Social and Economic Aspects of Human Fertility

Analyzes the correlates of fertility levels in societies and childbearing among individuals and couples. Examines classical theories of fertility change at the societal level and contemporary critiques of these theories. Also examines the determinants of fertility at the individual level, with an emphasis on differences in the timing first birth and total family size by social class and ethnicity in developed and developing countries.

Upon successfully completing this course, students will be able to:
1. Explain how the ideas advanced by Davis/Blake and Bongaarts can serve as a unifying conceptual framework for the study of human fertility
2. Distinguish among the "classic" theories of fertility decline
3. Delineate the major avenues by which these "classic" theories have been criticized
4. Identify key concepts from the literature on reproductive decision making
5. Describe how, within particular social and cultural contexts, distal factors such as gender inequality, ethnicity, religion, the family and social class affect fertility through the proximal determinants

E-mail: nastone@jhsph.edu
Lecture: T TH 8:30 AM - 9:50 AM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
380.767.01  COUPLES AND REPRODUCTIVE HEALTH
Course offered this year
(3 credits)
Becker, Stan
Reviews and discusses readings on couples and reproductive health such as: Definitions of couples and of reproductive health; sociological, anthropological and economic perspectives; fertility decision making; critiques of a couple approach from feminists and from those concerned primarily with less stable sexual partnerships for STD/AIDS prevention, and design of couple studies and service delivery interventions.

Upon successfully completing this course, students will be able to:
1. critique conceptual frameworks
2. prepare and give a presentation to the class
3. write a paper on a topic of choice (optional)
4. discuss the relevant literature in couples and reproductive health

E-mail: sbecker@jhsph.edu
Lecture: T 3:00 PM - 4:50 PM
Enrollment minimum of 6
No Maximum

Letter Grade or Pass/Fail
Consent required for all students
Consent required if 380.600 has not been taken.
Prerequisite: 380.600 or 380.755

380.800.01  MPH CAPSTONE POPULATION, FAMILY AND REPRODUCTIVE HEALTH
Course offered this year
(2 credits)
Must have 1-4 credits per term for two terms.
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.

Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Consent from the Capstone Supervisor is Required
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.

380.810.01  FIELD PLACEMENT POPULATION, FAMILY AND REPRODUCTIVE HEALTH
Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
380.820.01  THESS RESEARCH POPULATION, FAMILY AND REPRODUCTIVE HEALTH

Course offered this year
(variable credits)
Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail

380.821.01  PFRH PROPOSAL WRITING SEMINAR

Course offered this year
(2 credits)
Hindin, Michelle

Explores the process of developing a dissertation proposal to prepare PFRH students for departmental and preliminary oral exams. Covers the nuts and bolts of writing a proposal from developing a research question through completing a timeline and obtaining IRB approval. Combines readings and student presentations as well as occasional guest lectures. Intended only for students in the department of Population, Family and Reproductive Health.

Upon successfully completing this course, students will be able to:

1. Develop a research question, study aims, and hypotheses to be used in a dissertation proposal
2. Conduct a literature review which identifies current research and gaps as they relate to the study and research questions and aims
3. Identify an appropriate study design including study population and methodology- quantitative and qualitative
4. Identify data sets or setting for data collection
5. Examine frameworks and find appropriate frameworks for the study
6. Review analytic methods
7. Develop a feasible timeline for the study
8. Consider ethical issues and IRB approval
9. Identify potential funding sources

E-mail: mhindin@jhsph.edu
Enrollment minimum of 1
No Maximum
PFRH Doctoral Students only
Pass/Fail

Prerequisite: Must be PFRH Doctoral Student; must have completed second year comprehensive exams.

380.830.01  POSTDOCTORAL RESEARCH POPULATION, FAMILY AND REPRODUCTIVE HEALTH

Course offered this year
(variable credits)

Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
380.840.01  SPECIAL STUDIES AND RESEARCH POPULATION, FAMILY AND REPRODUCTIVE HEALTH
Course offered this year
(variable credits)
Blum, Robert
Information not required for this course type
E-mail: rblum@jhsph.edu
Enrollment minimum of 10
No Maximum
Pass/Fail

380.850.01  RESEARCH SEMINAR IN POPULATION AND HEALTH
Course offered this year
(2 credits)
Astone, Nan
Provides a forum for doctoral students and faculty in population studies to engage in critical review and discussion of both recent research and selected research classics in demography and population. The seminar uses a journal-club format in which one or more papers are distributed in advance. Participants are expected to read and discuss the assigned material. The seminar meets once every two weeks in the first, third, and fourth terms. Attendance is required of all first- and second-year PFRH doctoral students and encouraged for third-year students and above.
Information not required for this course type
E-mail: nastone@jhsph.edu
Enrollment minimum of 10
No Maximum
PFRH Department Students Only
Pass/Fail
Consent required for all students
Consent required for non-PFRH students

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
380.861.01 RESEARCH SEMINAR IN REPRODUCTIVE, PERINATAL, AND WOMENS HEALTH
Course offered this year
(2 credits)
Strobino, Donna and Tsui, Amy
A seminar format is used to discuss seminal articles in reproductive, perinatal, and women’s health. In depth discussions of questions related to one or more research articles in the field are used to develop critical analytic skills of students.
Upon successfully completing this course, students will be able to:
1. Describe and critique seminal articles in reproductive, perinatal and women’s health and
2. Be prepared to undertake an evaluation of questions related to research articles that address the methodological and conceptual underpinnings of the research as well as the policy and research implications of the research
E-mail: dstrobin@jhsph.edu
Enrollment minimum of 10
No Maximum
PFRH Department Students Only
Pass/Fail
Consent required for all students
Consent required for non-PFRH students

380.863.01 RESEARCH SEMINAR IN CHILD HEALTH AND DEVELOPMENT
Course offered this year
(2 credits)
Minkovitz, Cynthia
Provides experience in analytic evaluation of contemporary research regarding infant, child, and adolescent health, growth, and development across a range of academic disciplines and issues. Students and faculty critique and discuss empirical articles and examine their historical, methodological, and disciplinary perspectives. Highlights current controversies. Required for 2nd-year and above doctoral students in Child Health and Development track.
Information not required for this course type
E-mail: cminkovi@jhsph.edu
Enrollment minimum of 10
No Maximum
PFRH Department Students Only
Pass/Fail
Consent required for all students
Consent required for non-PFRH students

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
380.870.01  PFRH SPECIAL STUDIES IN PUBLIC HEALTH PRACTICE

Course offered this year
(variable credits)

Credits will vary according to scope of activity. The preceptor/advisor will determine the number of units.

Provides students with the opportunity to receive academic credit for direct involvement in public health practice activities such as: on-site placement with a public health agency, community organization, or academic center involving active participation in public health practice activities; Development of public health practice or policy recommendations based upon current research findings (translation); advocacy activities, for example, testifying in the legislature, and presenting data for the purpose of influencing public health policy or practice; preparation and conduct of a presentation related to a public health problem for a broad audience, including public health practitioners, community members, and other professionals; and direct participation in the activities of community boards or advisory groups.

Information not required for this course type

Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Must be approved by the faculty preceptor.

380.880.01  LESSONS IN LEADERSHIP: APPLICATIONS FOR POPULATION, FAMILY AND REPRODUCTIVE HEALTH I

Course offered this year
(1 credits)
Blum, Robert

Focuses on instruments and tools that assess leadership styles, strengths and weaknesses. Explores communication strategies used by effective leaders and interview public health leaders to identify how they approach their work. Opportunity to read studies in leadership.

Upon successfully completing this course, students will be able to:

1. Analyze the components of effective leadership strategies used by effective leaders
2. Explore their own leadership styles so as to identify personal strengths and limitations
3. Manage conflict and give effective feedback
4. Practice communication skills associated with leadership

E-mail: rblum@jhsph.edu
Lecture: M 4:30 PM - 7:00 PM
Enrollment minimum of 15
Enrollment maximum of 30
Restricted to graduate students. Preference is given to second year graduate students.

Letter Grade or Pass/Fail
Multi-term with 380.881
Final grade applies to all terms
Credit is only earned by completing 380.880 through 380.883; Grades are issued after completion of the series. Students must enroll consecutively. Failure to enroll consecutively will result in a grade of W.

Course Change Information:
CourseOfferRationaleNote, ScheduleTypId, StartDate, EndDate, .08/10/2012;

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
**MPH Practicum: PFRH**

Course offered this year
(variable credits)
Students who have not met the practicum requirement, must register for at least two credits
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

**INSTITUTE COURSE DURING REGULAR TERM**

**Epidemiology**

**340.662.17 EPIDEMIOLOGY OF TOBACCO CONTROL**

Course offered this year
(4 credits)
Tang, Erika
Applies epidemiologic principles to address questions relevant to tobacco control and tobacco-related research. Includes topics such as studying the determinants of tobacco use and cessation patterns, surveillance of tobacco-related indicators, interpreting burden of disease estimates, and evaluating the impact of tobacco control policies. After learning these epidemiologic principles, students apply these new skills through hands-on analysis of tobacco control surveillance data.
Information not required for this course type
E-mail: etang@jhsph.edu
Lecture: T W TH F 9:00 AM - 5:00 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for some students
For auditors and individuals new to the certificate
Prerequisite: Students must have prior exposure to epidemiology through coursework or professional experience

**Health Behavior and Society**

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
**410.641.17 ADVANCED METHODS IN GLOBAL TOBACCO CONTROL**

Course offered only this year

(2 credits)

Stillman, Frances A.

Studies global tobacco control methods in depth. Focuses on designing, implementing, and evaluating tobacco control interventions based on the need of a specific region or country. Highlights the use of multi-level solutions linking policy, communication, prevention, education, regulation, advocacy, and community organizing to address the interdisciplinary problem of tobacco use. Examines the aspects of tobacco use and tobacco control through lectures, case studies, presentations, and discussion.

Upon successfully completing this course, students will be able to:

1. Understand potential barriers and challenges in implementing tobacco control research projects and interventions, both policy and programmatic
2. Describe solutions to overcoming challenges like those experienced
3. Describe the benefits of networks and partnerships in implementing tobacco control policies and programs
4. Describe the benefits of program evaluation for improving programs and assessing impact and developing sustainable programs
5. Learn how to effectively communicate public health interventions and policy suggestions to key policymakers, the media, and the public

E-mail: fstillma@jhsph.edu

Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail

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**410.642.17 TOBACCO CONTROL LEADERSHIP**

Course offered only this year

(2 credits)

Tamplin, Stephen

Through lectures, discussion, and exercises, students develop an understanding of the role of the tobacco control leader in policy development and implementation, and the essential knowledge and skills this role requires. Provides a framework for understanding the process of working effectively with and leading others. Emphasizes the role of the leader in leading change and developing a vision for the future of tobacco control.

Upon successfully completing this course, students will be able to:

1. Assess and influence tobacco control policy development and implementation issues
2. Lead and coordinate the efforts of an interdisciplinary team in identifying and applying best practices in tobacco control
3. Adapt and apply diverse leadership styles to complex public health problem-solving situations
4. Develop leadership capacity in others

E-mail: stamplin@jhsph.edu

Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail

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1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
410.643.17  APPLIED APPROACHES FOR TOBACCO CONTROL

Course offered this year
(2 credits)
Stillman, Frances A.
Introduces students to applied research techniques used in tobacco control including direct observational studies, interviewing and focus groups, and analysis of tobacco industry documents. Guides students on the use of qualitative data collection techniques and provides examples of usage of these techniques. Introduces students to the use of the on-line databases and repositories of tobacco industry documents. Classroom sessions include lectures, discussions, and group work.

Upon successfully completing this course, students will be able to:
1. describe common applied research designs used in tobacco control
2. articulate the relative appropriateness of an applied research technique and data analysis approach per a particular research question
3. understand how applied research may be used to create compelling scientific and advocacy documents

E-mail: fstillma@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 40

Letter Grade or Pass/Fail

Dates and times for the course are TBA. Course will be held off-campus sometime during the last week of September/first week of October.

Course Change Information:
SectionNumber, TermId, CourseOfferRationaleNote, ScheduleTypeId, StartDate, EndDate, 02/23/2012;

INTERNATIONAL COHORT

Extradepartmental

550.845.20  COMPREHENSIVE OR PRELIMINARY ORAL EXAM FOR PART TIME INTERNATIONAL DRPH STUDENTS

Course offered this year
(2 credits)
Since US Immigration laws require that all International students must be enrolled full time when on campus, students must complete their departmental/program comprehensive examination or their School preliminary oral examination enrolled as a full-time student during the time period of the exam.

Information not required for this course type

Enrollment minimum of 10
No Maximum
Enrollment restricted to international part time Doctor of Public Health degree students who intend to be on campus to complete their departmental/program comprehensive exam or their Departmental or School preliminary oral exam.

Pass/Fail

Please enroll with your advisor. Full time enrollment for part time students engaged in on campus/in person academic activities is defined as 2 term credits (16 contact hours) per week.

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/

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Biostatistics

140.611.81 STATISTICAL REASONING IN PUBLIC HEALTH I

Course offered this year
(3 credits)
McGready, John

Provides a broad overview of biostatistical methods and concepts used in the public health sciences, emphasizing interpretation and concepts rather than calculations or mathematical details. Develops ability to read the scientific literature to critically evaluate study designs and methods of data analysis. Introduces basic concepts of statistical inference, including hypothesis testing, p-values, and confidence intervals. Topics include comparisons of means and proportions; the normal distribution; regression and correlation; confounding; concepts of study design, including randomization, sample size, and power considerations; logistic regression; and an overview of some methods in survival analysis. Draws examples of the use and abuse of statistical methods from the current biomedical literature.

Upon successfully completing this course, students will be able to:

1. Discuss and give examples of different types of data arising in public health studies
2. Interpret differences in data distributions via visual displays
3. Calculate standard normal scores and resulting probabilities
4. Calculate and interpret confidence intervals for population means and proportions
5. Interpret and explain a p-value
6. Perform a two-sample t-test and interpret the results; calculate a 95% confidence interval for the difference in population means
7. Use Stata to perform two sample comparisons of means and create confidence intervals for the population mean differences
8. Discuss and interpret results from Analysis of Variance (ANOVA), a technique used to compare means amongst more than two independent populations
9. Choose an appropriate method for comparing proportions between two groups construct a 95% confidence interval for the difference in population proportions
10. Use Stata to compare proportions amongst two independent populations
11. Discuss and interpret relative risks and odds ratios when comparing two populations
12. Discuss why survival (timed to event) data requires its own type of analysis techniques
13. Construct a Kaplan-Meier estimate of the survival function that describes the "survival experience" of a cohort of subjects
14. Interpret the result of a log-rank test in the context of comparing the "survival experience" of multiple cohorts
15. Interpret output from the statistical software package Stata related to the various estimation and hypothesis testing procedures covered in the course

E-mail: jmcgread@jhsph.edu
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Author(s)</th>
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</tr>
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<tr>
<td>140.633.81</td>
<td><strong>BIOSTATISTICS IN MEDICAL PRODUCT REGULATION</strong></td>
<td>2</td>
<td>Foulkes, Mary and Day, Simon</td>
<td>Provides a broad understanding of the application of biostatistics in a regulatory context. Reviews the relevant regulations and guidance documents. Includes topics such as basic study design, target population, comparison groups, and endpoints. Addresses analysis issues with emphasis on the regulatory aspects, including issues of missing data and informative censoring. Discusses safety monitoring, interim analysis and early termination of trials with a focus on regulatory implications. Upon successfully completing this course, students will be able to: 1. Explain the relevance and application of statistics to the regulatory process 2. Differentiate between well-designed and conducted clinical research in the development and evaluation of new medical products 3. Locate internet sources for regulatory requirements, and regulatory review and evaluation information</td>
</tr>
<tr>
<td>182.622.81</td>
<td><strong>VENTILATION CONTROLS</strong></td>
<td>4</td>
<td>Rule, Ana Maria</td>
<td>Presents principles of air flow as applied to design and evaluation of industrial ventilation systems. Laboratory sessions illustrate fundamental aspects of system components. Upon successfully completing this course, students will be able to: 1. Discuss the occupational/environmental health approach to risk management 2. Define the characteristics of local exhaust and general dilute ventilation 3. Analyze the performance of ventilation systems 4. Select a appropriate exhaust hood, balance flow in ducts, determine exhaust fan requirements, and choose the appropriate air cleaning technology to use for standard industrial operations 5. Design a balanced local exhaust ventilation system integrating all components</td>
</tr>
</tbody>
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**Environmental Health Sciences**

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
188.680.81  **FUNDAMENTALS OF OCCUPATIONAL HEALTH**  
Course offered this year  
(3 credits)  
Cadorette, Maureen  
Surveys the history of occupational health, the continuum from exposure to disease, the hierarchy of controls in the workplace, workplace medical screening and surveillance, occupational health hazards, legal and regulatory issues, the provision of occupational health services, the core disciplines in occupational health and safety, and current issues in occupational health.  
Information not required for this course type  
E-mail: mcadoret@jhsph.edu  
Enrollment minimum of 10  
No Maximum  
**Letter Grade or Pass/Fail**  
Prerequisite: Introduction to Online Learning.

Upon successfully completing this course, students will be able to:  
1. Identify, for selected vulnerable subgroups, factors that influence the need for specific occupational health services  
2. Discuss examples of interaction between occupational and environmental risk factors and host factors that affect health and work performance  
3. Describe the application of research findings to the practice of health professionals, including safety specialists, nurses, physicians, health educators, and others  
4. Examine the contribution of workplace exposures to home environment contamination and implications for workers and their families  
5. Analyze the occupational health needs of a specific vulnerable worker population

188.694.81  **OCCUPATIONAL HEALTH AND VULNERABLE WORKER POPULATIONS**  
Course offered this year  
(3 credits)  
Agnew, Jacqueline and Fitzgerald, Sheila  
Discusses occupational health program considerations, (including all levels of prevention), for vulnerable populations, using examples such as the health needs of women workers, shift workers, aging workers, families of workers, and workers with chronic diseases and impairments. Focuses on strategies for identifying and removing barriers that affect health and work performance; program development and management responsibilities; and cost issues related to implementing selected preventive and rehabilitative programs. Presents relevant research findings on the ability of vulnerable populations to benefit from safe and healthy working lives.

E-mail: jagnew@jhsph.edu  
Enrollment minimum of 10  
No Maximum  
**Letter Grade or Pass/Fail**  
Prerequisite: Introduction to Online Learning

**Epidemiology**
### 340.612.81 EPIDEMIOLOGIC BASIS FOR TUBERCULOSIS CONTROL
Course offered this year
(2 credits)
Golub, Jonathan and Chaisson, Richard
Considers subjects and epidemiologic principles relevant to control measures against tuberculosis. Topics include source and interpretation of tuberculin sensitivity; risk factors; prevention by case-finding and treatment, vaccination, and chemoprophylaxis; and elements of control programs in developed and undeveloped areas. Presentation of assigned reading topics provides the basis for group discussions.
Upon successfully completing this course, students will be able to:
1. Describe the epidemiology of tuberculosis
2. Explain the basic concepts of tuberculosis infection, disease, prevention and treatment, and the correlation between HIV infection and tuberculosis
3. Evaluate tuberculosis literature and apply it to tuberculosis control needs of the present and future in both industrialized and non-industrialized populations
E-mail: jegolub@jhsph.edu
Enrollment minimum of 10
No Maximum
**Letter Grade or Pass/Fail**
Prerequisite: Introduction to Online Learning
Jointly offered with IH

### 340.645.81 INTRODUCTION TO CLINICAL TRIALS
Course offered this year
(3 credits)
Holbrook, Janet and Drye, Lea
Introduces clinical trial design in the context of epidemiological concepts, covers various topics in the design and conduct of clinical trials, and profiles clinical trials that illustrate these issues. Topics include the definition and history of clinical trials; trial designs, including phase I-IV, cross-over, factorial, and large, simple designs; internal and external validity; controls, randomization, and masking; ethical issues; data analysis principles; monitoring of accumulating safety and efficacy data; and use of data from randomized trials.
Upon successfully completing this course, students will be able to:
1. Present the scientific rationale for conducting clinical trials
2. Assess various clinical trial designs
3. Discuss randomization and the principle of analysis by assigned treatment
4. Discuss ethical issues in clinical trials and with related U.S. regulations and guidelines for the conduct of trials
5. Illustrate topics with examples of clinical trials
E-mail: jholbroo@jhsph.edu
Enrollment minimum of 10
No Maximum
**Letter Grade or Pass/Fail**
Prerequisite: Introduction to Online Learning plus 340.751 or 340.601.

### 340.654.81 EPIDEMIOLOGY AND NATURAL HISTORY OF HUMAN VIRAL INFECTIONS
Course offered this year
(6 credits)
Farzadegan, Homayoon
1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Emphasizes biology, epidemiology, and pathogenesis of diseases caused by human viruses. Discusses virus interaction with host, diagnostic methodologies, immunization, and treatment of viral infections. Examines relationships between viral infections and oncogenesis such as hepatitis/liver cancer, HPV/cervical cancer, EBV/lymphoma, and HTLV/leukemia. Also covers biology and natural history of major viral families such as retroviruses, rabies, and others.

Upon successfully completing this course, students will be able to:

1. Describe the common structures and functions of viruses and their components, including genetics, etc.
2. Identify the main steps of viral pathogenesis
3. Discuss virus-host interactions
4. Recognize the advantages and limiting factors related to antiviral treatment options
5. List several viruses and describe the processes by which they can cause cancer
6. Recall the interaction between viral agents and other factors in the disease pathway
7. Compare the pathogenesis of retroviruses with other viruses, including the mechanisms of invasion and integration and synthesis of new viral particles
8. Recognize and describe the issues of treatment, prevention, and future concerns of human immunodeficiency virus and AIDS
9. Compare and contrast the epidemiology and natural history of other human viral pathogens, including influenza, herpes simplex virus, bovine spongiform encephalitis and others

E-mail: hfarzade@jhsph.edu
Enrollment minimum of 10
No Maximum

Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.
Content similar to 260.623-624
Course Change Information:
JointlyOffered, CourseOfferRationaleNote, .10/12/2010;

340.664.81 INTRODUCTION TO GENETIC EPIDEMIOLOGY
Course offered this year
(4 credits)
Kao,Wen Hong Linda
First in a four-term series. Presents fundamental concepts and methods in genetic epidemiology. Reviews basic terminology of genetics, introduces basic principles of population genetics, and provides an overview of various genetic epidemiology study designs, covering basic analysis, inferences, plus their strengths and limitations. Presents methods for assessing familial aggregation/correlation, and covers statistical techniques for modeling inheritance of complex phenotypes on family data. Presents both linkage and association analyses, with emphasis on how these are used in genetic epidemiology. Explains different study designs commonly used in genetic epidemiology to identify the genetic basis of common, complex diseases.

Upon successfully completing this course, students will be able to:

1. Present fundamental concepts and methods in genetic epidemiology
2. Discuss and give examples of different types of study designs used in the field of genetic epidemiology
3. Discuss and give examples of different types of study designs used in the field of genetic epidemiology; be familiar with basic terminology in the field of human genetics

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
4. Discuss the basic principles behind major molecular biology techniques, such as PCR, and their applications in genetic epidemiology studies

5. Discuss various exposures, or markers, used in genetic epidemiology studies

6. Discuss principles of Hardy-Weinberg Equilibrium and be able to estimate allele and genotype frequencies

7. Discuss and calculate simple statistics, such as odds ratios and LOD scores

8. Discuss the difference between linkage and association studies

9. Discuss the difference between family-based and population-based studies

10. Discuss the difference between direct and indirect association studies

11. Interpret results of a linkage study

12. Interpret results of an association study

13. Select an appropriate study design for addressing a particular question

14. Discuss the inferences drawn from the different genetic epidemiology studies

E-mail: wkao@jhsph.edu

Enrollment minimum of 10

No Maximum

Letter Grade or Pass/Fail

Prerequisite: Introduction to Online Learning and College-level biology or genetics.

Extradepartmental

550.694.81  FUNDAMENTALS OF EPIDEMIOLOGY I

Course offered this year

(3 credits)

Kanchanaraksa, Sukon and Diener-West, Marie

Introduces students to the basic concepts of biostatistics and epidemiology as applied to public health problems. Emphasizes descriptive statistics, probability concepts, and methodology used in the conduct of epidemiologic studies. Topics include appropriate summary measures of morbidity and mortality, direct and indirect methods of adjustment, abridged and clinical life tables, and measures of association. Presents various epidemiologic study designs used to investigate associations between risk factors and diseases outcomes, culminating with criteria for casual inferences. Provides examples of applications of epidemiologic and biostatistical methods in health services, genetics and public policy.

Upon successfully completing this course, students will be able to:

1. Distinguish the roles and relationships between epidemiology and biostatistics in the prevention of disease and the improvement of health

2. Compute basic descriptive statistics and explore data analytic methods

3. Demonstrate a basic understanding of epidemiologic methods and study design

4. Combine appropriate epidemiological concepts and statistical methods

5. Perform exploratory data analysis using descriptive statistics

6. Evaluate morbidity and mortality using ratios, proportions, and rates

7. Perform direct and indirect methods of adjustment of overall rates

8. Construct life tables in epidemiologic studies

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
9. Recognize the assumptions associated with construction of a life table
10. Calculate probabilities and conditional probabilities of health-related events
11. Calculate sensitivity, specificity, and predictive values
12. Recognize and describe the elements in the design and conduct of a randomized clinical trial, a cohort study, a case-control study, and a cross-sectional study
13. Calculate measures of association in identifying risk factors of diseases
14. Calculate a chi-square statistic to test the significance of a measure of association and interpret it using probability concepts
15. Identify biases and their consequences in published literature

E-mail: skanchan@jhsph.edu
Enrollment minimum of 10
No Maximum
No auditors permitted.

**Letter Grade or Pass/Fail**
Consent required for some students
Special student-limited or regular requires instructor consent.
Prerequisite: Introduction to Online Learning
Jointly offered with BIOSTAT
This is a multi-term course. Grades are given upon completion of the second part: 550 695.81.

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**550.862.81 CURRENT ISSUES IN PUBLIC HEALTH**
Course offered this year
(1 credits)
Schoenrich, Edyth
Senior faculty present public health topics of current interest, such as health problems of industrialized and developing nations, health promotion and disease prevention, health care delivery systems, environmental problems and the spectrum of factors influencing the health status of populations and communities.
Upon successfully completing this course, students will be able to:
1. Describe four major current issues in public health. This will include discuss of the magnitude of the problem, recent relevant research findings, and intervention strategies

E-mail: eschoenr@jhsph.edu
Enrollment minimum of 10
No Maximum

**Letter Grade or Pass/Fail**
Prerequisite: Introduction to Online Learning
This is the Internet version of 550.861.

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**551.603.81 FUNDAMENTALS OF BUDGETING AND FINANCIAL MANAGEMENT**
Course offered this year
(3 credits)
Ward, William
Explains the role of budgeting as a key component of the administrative process. Students learn to develop a budget and evaluate the financial status of a department or operating unit and determine what, if any, corrective actions need to be taken. Presents various analytical methods in management decision making, including benefit/cost ratio analysis, variance analysis, and break-even analysis. Also includes approaches to benchmarking, productivity improvement techniques, and methods for building cost standards.

Upon successfully completing this course, students will be able to:

1. Demonstrate an understanding of budgeting’s role as a key component of the administrative process
2. Develop budgets for revenues, staffing and salaries, supplies and services, and equipment
3. Evaluate the financial status of a department or operating unit using volume adjusted variance analysis to determine the cause(s) of performance deviation
4. Use a variety of analytical methods to support sound business decision-making: marginal analysis, benefit:cost ratio analysis, and breakeven analysis
5. Demonstrate an understanding of revenue, cost, and productivity improvement techniques
6. Build cost standards, perform bilateral performance mapping, and analyze process flow
7. Demonstrate an understanding of how to perform useful benchmarking analysis
8. Develop effective action/implementation plans

E-mail: wward@jhsph.edu
Enrollment minimum of 10
No Maximum

Restricted to graduate students
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.
Jointly offered with HPM, IH

Health Policy and Management

300.600.81 INTRODUCTION TO HEALTH POLICY
Course offered this year
(4 credits)
Anderson, Gerard
Introduces the material covered in the Department of Health Policy and Management. Focuses on four substantive areas that form the analytic basis for many of the issues in Health Policy and Management. The areas are: (1) economics and financing, (2) need and demand, (3) politics/ethics/law, and (4) quality/effectiveness. Illustrates these issues using three specific policy issues: (1) injury, (2) medical care, and (3) public health preparedness.

Information not required for this course type
E-mail: ganderso@jhsph.edu
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning

311.615.81 QUALITY OF MEDICAL CARE
Course offered this year
(3 credits)
Dy, Sydney M. and Wu, Albert
Introduces quality issues, including the extent to which customary care for specific health problems improves quality of life and reduces mortality, and quality assessment and assurance performed by caregivers, professional societies, government-sponsored professional review organizations, and government and other third party organizations who pay for care. Provides a basis to judge the effectiveness of quality assessment and assurance activities and to begin to develop programs.

Upon successfully completing this course, students will be able to:

1. Describe a framework for analyzing and improving the quality of medical care
2. Explain how to assess quality of care for a medical condition, including: -Relative advantages/disadvantages of measuring structure, process, outcome -Different assessment methods and need for risk adjustment -Advantages and methods for assessing patients
3. Describe the fundamental elements of quality assurance in the United States
4. Discuss how to develop a workable quality improvement and evaluation plan, including: -Theoretical framework -Quality assessment -Evaluating assessment results and developing goals for improvement -Changing individual health professionals’ behavior

E-mail: sdy@jhsph.edu

Enrollment minimum of 10
Enrollment maximum of 80
Restricted to graduate students

Letter Grade or Pass/Fail

Prerequisite: Introduction to Online learning

(3 credits)

Segal, Jodi

Introduces students to the motivation and methods of comparative effectiveness research. Reviews the problems faced by decision makers across the US health care system, and the priority topics for investigation. Explains the role of stakeholders, including payors, manufacturers, health care organizations, professional groups, providers and patients. Explains study designs and methods used in effectiveness research, focusing in particular on observational studies. Also describes the policy implications of this research.

Upon successfully completing this course, students will be able to:

1. Describe the role of comparative effectiveness research and outcomes research in improving health, which includes the place of comparative effectiveness research in the US research portfolio, the identity and agendas of stakeholders, and the policy implications of this research.
2. Illustrate the difference between efficacy and effectiveness research
3. Develop study designs and methodologies unique to effectiveness research
4. Choose appropriate outcomes and match outcomes to design options to address priority topics

E-mail: jsegal@jhsph.edu

Enrollment minimum of 10

No Maximum

undergraduates not permitted in this course

Letter Grade or Pass/Fail

CER is the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat and monitor a clinical condition, or to improve the delivery of care. The purpose of CER is to assist consumers, clinicians, purchasers, and policy makers to make informed decisions that will improve health care at both the individual and population levels.
315.703.81  HEALTH SCIENCES INFORMATICS - EVALUATION
Course offered this year
(3 credits)
Roderer, Nancy
Health Informatics Evaluation provides an overview and introduction to basic methods for evaluating health information systems. It provides students opportunities to find and review evaluation studies as well as to learn and then apply standard models and methods used in the evaluation of health information systems. The course is recommended for students who will be selecting/designing, building, implementing and improving health information systems in clinical, public health and basic sciences domains. It is also useful to policy makers making decisions about health information systems.

Upon successfully completing this course, students will be able to:
1. plan and evaluate methods used in health informatics
2. find and critically review informatics planning and evaluation projects
3. identify the need for evaluation of an informatics system and develop an evaluation plan relevant to that need

E-mail: nrodere1@jhmi.edu
Enrollment minimum of 15
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online learning
Jointly offered with ME
This is the same course as SOM 600.703.
Course Change Information:
CourseDesc, CourseLearningObj, CourseOfferRationaleNote, .09/14/2010;

315.707.81  INTRODUCTION TO BIOMEDICAL AND PUBLIC HEALTH INFORMATICS
Course offered this year
(3 credits)
Lehmann, Harold
This course will contrast differences in roles, needs, and solutions among major players in the national and commercial health IT and informatics communities. The course will define public health informatics and explain why things do or don't happen in IT at the national and institutional levels. The course will apply available sources of data, information, and knowledge to address healthcare and public health problems.

Upon successfully completing this course, students will be able to:
1. articulate strategic direction for public health informatics within the enterprise
2. describe components of discuss management tools for the enterprise
3. identify discuss, information, and data needs of project or program users and stakeholders
4. identify core concepts and frameworks in the area of information science, computer science, computer technology and standards
5. recognize core features of procedural programs and web-based technology

E-mail:
Enrollment minimum of 15
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Introduction to online learning
Jointly offered with ME
This is the same course as SOM 600.707.
317.605.81 METHODS IN QUANTITATIVE RISK ASSESSMENT

Course offered this year
(4 credits)
Fox, Mary
Introduces students to a variety of quantitative and qualitative methods used in hazard identification/characterization, exposure and dose-response assessment for chemical and microbial risk assessments. Students gain experience with selected methods through the assignments including probabilistic exposure assessment modeling, qualitative weight-of-evidence evaluation, and guided review and critique of existing risk analyses. Students learn to identify and evaluate assumptions used to bridge data gaps and to conceptualize and communicate variability and uncertainty. Guest speakers discuss current and emerging issues in chemical and microbial risk assessment and management.

Upon successfully completing this course, students will be able to:
1. Create, document, and describe a probabilistic exposure assessment model
2. Recognize and evaluate information gaps and models and assumptions used to fill them
3. Recognize and describe the influence of variability and uncertainty on risk estimates
4. Critique risk analyses

E-mail: mfox@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 30
Letter Grade or Pass/Fail
Prerequisite: 317.600 and Introduction to On-line learning
Jointly offered with EHS

221.639.81 REFUGEE HEALTH CARE

Course offered this year
(3 credits)
Burnham, Gilbert
Addresses provision of basic health requirements for refugees and coordination of care among agencies concerned with them. Topics include epidemiologic assessment and control of communicable disease; nutrition and environmental sanitation; logistical support; and resettlement issues. Students or guest speakers present topics for group discussion.

Upon successfully completing this course, students will be able to:
1. conduct an initial assessment of a refugee population to determine priority health needs
2. name the key organizations which respond to refugee crises and list their mandates and responsibilities
3. apply your epidemiological skills to assess nutritional status of a displaced population
4. appropriately follow ethical guidelines in providing assistance
5. take appropriate measures to prevent and control outbreaks of epidemic diseases among displaced populations

E-mail: gburnham@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 50
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.

International Health

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
221.722.81 QUALITY ASSURANCE MANAGEMENT METHODS FOR DEVELOPING COUNTRIES
Course offered this year
(4 credits)
Edward, Anbrasi and Morrow, Richard
Presents the principles and practice of total quality management methods for health systems in developing countries. Emphasizes integrated district-level health systems management; fostering a genuine team approach in the face of an authoritarian tradition; central importance of community governance; interventions performed according to standards and in an equitable fashion; introducing a measurement-based approach to problem solving, emphasizing analysis of service delivery process and outcome; and developing operational research as an integral component of the management system.
Upon successfully completing this course, students will be able to:
1. define what quality means from the standpoint of a variety of stakeholders
2. identify the root cause of quality problems
3. apply the problem solving cycle to quality shortfalls identified
4. explain the relationship of costs to quality
5. develop a monitoring approach to track the quality of health services

E-mail: aedward@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 35
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.

223.672.81 DATA MGMT METHODS IN HEALTH RESEARCH STUDIES
Course offered this year
(5 credits)
Holt, Elizabeth
Presents data management techniques needed to implement a health research study in domestic and international settings. Discusses methods of designing and monitoring patient data flow, with an emphasis on data collection, editing, documentation, management, and preparation for analysis using database software packages. Involves lectures and completion of a tutorial designed to build data management skills. Geared to students preparing to undertake research.
Upon successfully completing this course, students will be able to:
1. Develop a coding guide for a data collection instrument
2. Edit collected data and document edit decisions
3. Design a double data entry system
4. Design a system to identify out-of-range and illogical values, document the related edit decisions, and produce a cleaned data table in preparation for analysis
5. Prepare administrative reports
6. Prep data for analysis
7. Evaluate an operations manual for a research study
8. Evaluate questionnaires for format, design, content, wording, coding, etc
9. Evaluate questionnaires for format, design, content, wording, coding, etc

E-mail: eholt@jhsph.edu
Enrollment minimum of 5
Enrollment maximum of 30
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning; 340.601 - Principles of Epidemiology.
No audits.

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
223.810.81  FIELD PLACEMENT DISEASE CONTROL  
Course offered this year  
(variable credits)  
Charron,Karen  
Information not required for this course type  
.  
E-mail: kcharron@jhsph.edu  
Enrollment minimum of 10  
No Maximum  
Pass/Fail  

Mental Health  

330.601.81  PERSPECTIVES OF PSYCHIATRY: THE PUBLIC HEALTH FRAMEWORK  
Course offered this year  
(3 credits)  
McHugh,Paul  
Describes the basic features of mental disorders using an epistemological framework that facilitates understanding in the context of public health research and practice. Includes discussion of the distinction between neurological activity and mental life, and briefly presents the historical as well as current state of knowledge of the most common psychiatric conditions. Framework includes four fundamental perspectives for understanding mental disturbances: disease, dimension, behavior, and life story, with explanation of the distinct etiopathologic nature each perspective brings to bear on the problem of defining, classifying, and measuring mental disorders.  
Upon successfully completing this course, students will be able to:  
1. Distinguish between neurological activity and mental life.  
2. Describe the epistemological approach to psychiatric conditions  
3. Distinguish between normal human responsiveness and psychiatric symptoms, behaviors, syndromes, disorders, and diseases  
4. Discuss the practical utility of viewing psychiatric conditions from four perspectives  
5. Describe the key elements of, and the distinctions between, a psychiatric history and a mental status examination  
6. Describe principles of ascertainment, measurement, and classification of psychiatric signs and symptoms (strengths and weaknesses)  
7. Distinguish between a psychiatric nomenclature, nosology, and diagnostic classification  
8. List presentations, types, ranges and key features of major psychiatric syndromes; dementias, schizophrenia, affective disorders, psychoactive substance use disorders, mental retardation, and disorders of adjustment to life circumstances  
9. Describe the difficulties in assessing and comparing degrees of impairment associated with the different major psychiatric syndromes  
10. Describe the relationships among all four psychiatric perspectives in knowing, assessing, measuring, and treating major psychiatric syndromes  
E-mail: pmchugh@jhsph.edu  
Enrollment minimum of 10  
No Maximum  
Letter Grade or Pass/Fail  
Prerequisite: Introduction to Online Learning  

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
330.657.81  STATISTICS FOR PSYCHOSOCIAL RESEARCH: MEASUREMENT
Course offered this year
(4 credits)
Leoutsakos, Jeannie-Marie
Presents quantitative approaches to measurement in the psychological and social sciences. Topics include the principles of psychometrics, including reliability and validity; the statistical basis for latent variable analysis, including exploratory and confirmatory factor analysis and latent class analysis; and item response theory. Draws examples from the social sciences, including stress and distress, social class and socioeconomic status, personality; consumer satisfaction, functional impairment and disability, quality of life, and the measurement of overall health status. Intended for doctoral students.

Upon successfully completing this course, students will be able to:
1. read and evaluate scientific articles as regards measurement in public health
2. to design simple measurement protocols
3. to design and conduct studies of reliability and validity
4. conduct and present standard quantitative analyses of measurement accuracy

E-mail: jsheppar@jhsph.edu
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for some students
Consent is required for Special Student Limited, undergrads and for those students without the prerequisite stats
Prerequisite: Introduction to Online Learning, and 140.621-624, former 140.601-604, or 140.651-654, or consent of instructor
Jointly offered with BIOSTAT

380.604.81  LIFE COURSE PERSPECTIVES ON HEALTH
Course offered this year
(4 credits)
Blum, Robert and Hughes, M. E.
Teaches students to frame public health issues using a life course perspective. Introduces and examines basic principles of human development across the life span, from the prenatal period through senescence, and the idea that health outcomes reflect developmental processes. Provides a conceptual framework with which to understand the interrelationships among biological, psychological, and social factors and their influence on development and health. Also illustrates the application of this perspective to gain a critical understanding of public health issues.

Upon successfully completing this course, students will be able to:
1. Describe the components of a life course perspective on health, the advantages of using this approach in public health, and the challenges involved in doing so
2. Demonstrate a basic knowledge of the life course and human development and its relationship to individual health. In particular, students should be able to identify the meaning and measurement of “health” at particular life stages and articulate inte
3. Develop a conceptual framework illustrating a life course approach to a specific outcome of concern to public health

E-mail: rblum@jhsph.edu
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.
380.744.81 NUTRITION AND GROWTH IN MATERNAL AND CHILD HEALTH
Course offered this year
(2 credits)
Paige, David
Examines the impact of nutritional status on growth, development, intellectual performance, health status, and the onset and progress of chronic diseases. Considers ethnic, cultural, and environmental issues related to food intake as well as the relationship between physical activity and health. Examines the origin and basis for the identification and assessment of community need using the national nutrition monitoring system. Reviews federally funded nutrition program outcomes and their policy implication.
Information not required for this course type
E-mail: dpaige@jhsph.edu
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail

REGULAR COHORT

550.860.82 RESEARCH ETHICS
Course offered this year
(1 credits)
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).
Information not required for this course type
E-mail: jdipietr@jhsph.edu
Enrollment minimum of 10
No Maximum
Auditing not permitted
Pass/Fail
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.

BETHESDA, MD, NOT A HOPKINS FACILITY

Health Behavior and Society
415.610.92  PRACTICAL GENETIC COUNSELING

Course offered this year
(2 credits)
Sapp, Julie

415.610 addresses the chromosomal basis of heredity, chromosomes and genes, tools of human molecular genetics, single gene inheritance, variation, polymorphism and mutation, genes in populations and genes in families. 415.611 presents the role of genetic counseling in health care and emphasizes the essential components of prenatal, pediatric, and adult genetics services. Indications for referral and genetics education and counseling components are illustrated using case examples. Clinical skills and tools are taught including family, medical and development history taking and pedigree construction. Additional case management skills such as the choice of laboratory and test interpretation, and issues in billing and reimbursement of genetic counseling services are addressed. 415.612 -613 expand on the previous two courses to examine the Hemoglobinopathics and Thalassemias as models of molecular pathology, the molecular/biochemical basis of genetic disease, genetics of cancer, gene mapping

E-mail: sappj@mail.nih.gov
Lecture: M 5:30 PM - 7:30 PM
Enrollment minimum of 4
Enrollment maximum of 8
Course restricted to ScM in Genetic Counseling students
Letter Grade or Pass/Fail
Jointly offered with NIH

415.611.92  GENETIC COUNSELING PRACTICE I

Course offered this year
(2 credits)
Madeo, Anne

Compares definitions of genetic counseling (GC) with objectives and service outcomes. Explores counselor values as they relate to roles and responsibilities toward clients. Introduces ethical and policy issues specific to GC in conjunction with a research agenda. Discusses and practices basic tools, including interviewing, history gathering, and case assessment, and nondirective counseling approaches.

Information not required for this course type

E-mail: amadeo@jhsph.edu
Lecture: F 12:00 PM - 2:00 PM
Enrollment minimum of 4
Enrollment maximum of 10
Letter Grade or Pass/Fail
Consent required for all students
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program
Multi-term with 315.621
Jointly offered with National Inst. Health

415.670.92  DEVELOPMENTAL BIOLOGY AND HUMAN MALFORMATIONS I

Course not offered until 2013 - 2014
(1 credits)
Biesecker, Leslie

Familiarizes students with modern developmental biology and the use of this knowledge to understand common human malformations. Includes lectures on the methodology and model systems of developmental biology; a review of preimplantation development and gastrulation, and embryogenesis/organogenesis. Subsequent lectures focus on the development of organ systems.

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Upon successfully completing this course, students will be able to:

1. explain the different ways to analyze birth defects: analytically, embryologically, and by developmental biological analysis
2. describe the basic stages of development: preimplantation, gastrulation, organogenesis, and fetal growth
3. describe the basic genetic molecular control mechanisms of development
4. describe the basic concept of evolutionary conservation of ontogeny
5. define the concepts of homologous genes and structures
6. describe the mechanism of laterality determination in vertebrates
7. analyze a congenital anomaly including the embryology and developmental biology of the genesis of the abnormality using sources including appropriate textbooks, journal articles and online resources

E-mail: leslieb@helix.nih.gov
Lecture: TBA
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for all students
Multi-term with 415.671
Jointly offered with National Inst. Health

415.701.92  ADVANCED GENETIC COUNSELING I
Course offered this year
(2 credits)
Biesecker, Barbara
This literature-driven course applies interactive genetic counseling techniques to specific settings and client needs. Faculty and students present key issues in client education for various medical specialties, and identify research needs related to genetic counseling. Explores counseling issues through role-play.

Upon successfully completing this course, students will be able to:

1. practice genetic counseling in a specific setting using a challenging case example
2. utilize role play to integrate peer feedback and critique
3. outline educational objectives and create innovative application of tools found in the literature
4. compare potential teaching methods
5. explore psychological theory as applied to the case/setting
6. evaluate relevant research and develop research questions

E-mail: barbarab@mail.nih.gov
Lecture: TBA
Enrollment minimum of 4
Enrollment maximum of 12
Letter Grade or Pass/Fail
Consent required for all students
Prerequisite: 415.630-631; Must be enrolled in ScM in Genetic Counseling Program
Multi-term with 315.702
Jointly offered with National Inst. Health

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsp.edu/C4/Academics/.
415.710.92  MEDICAL GENETICS AND GENOMIC MEDICINE: FROM DIAGNOSIS TO TREATMENT I
Course offered this year
(2 credits)
Examines advances in the diagnosis of genetic disorders and treatments that result from genomic medicine. Focuses on examples from multiple malformation syndromes, autoinflammatory diseases, deletion/duplication syndromes, and Rasopathies.
Upon successfully completing this course, students will be able to:
1. Contrast features among groups of disorders that lead to diagnosis.
2. Identify a variety of successful treatments using chemical genomics.
3. Assess the potential role of genomic sequencing in improvements in both diagnosis and treatment.
4. Utilize medical history-taking skills toward diagnosis of genetic conditions.
Lecture: W 5:30 PM - 7:30 PM
Enrollment minimum of 5
Enrollment maximum of 50
Letter Grade or Pass/Fail
Consent required for some students
Consent required for students other than ScM in Genetic Counseling students.
Prerequisite: 415.613.92
Multi-term with 415.711
Final grade applies to all terms
Jointly offered with NIH

415.820.92  THESIS RESEARCH: GENETIC COUNSELING
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

415.840.92  SS/R: GENETIC COUNSELING
Course offered this year
(variable credits)
Information not required for this course type
Enrollment minimum of 10
No Maximum
Pass/Fail

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
SUPERVISED CLINICAL ROTATIONS: GENETIC COUNSELING
Hooker, Gillian
Clinical placements in adult, pediatric, and prenatal genetic centers in the Baltimore-Washington area provide opportunity to learn about genetic conditions by their impact on individuals and their families, and about roles of the genetic counselor. Individual rotations are scheduled to achieve a wide range of clinical experiences.
Information not required for this course type
E-mail: ghooker@jhsph.edu
Enrollment minimum of 10
Enrollment maximum of 15
ScM in Genetic Counseling students
Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with NIH

GENETIC COUNSELING SEMINAR: TOPICS IN THE FIELD
Biesecker, Barbara
Case discussions highlight psychological, social, and ethical issues in genetic counseling. Review of recent relevant literature enhances critical thinking skills. Clients who have had personal experiences with a genetic condition or risk expose students to a variety of reactions and circumstances presented from the consumers perspective. Various professionals share services, research, and expertise relevant to genetic counselors. Students in related graduate or medical genetics programs are encouraged to enroll to maximize the opportunity for exchange between disciplines.
Information not required for this course type
E-mail: barbarab@mail.nih.gov
Lecture: F 2:30 PM - 4:20 PM
Enrollment minimum of 10
Enrollment maximum of 25
ScM in Genetic Counseling students
Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with NIH

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
415.870.92  GENETIC COUNSELING CLINICAL SUPERVISION
Course offered this year
(1 credits)
Biesecker, Barbara and Magyari, Trish
Individual supervision sessions assist the student in recognizing the impact of personal styles and biases on the counseling process. Uses audiotapes and/or videotapes of student counseling sessions to review, analyze, and process student-client interactions throughout the students clinical rotations, and develop strategies for addressing barriers in the counseling process.
Information not required for this course type

E-mail: barbarab@mail.nih.gov
Enrollment minimum of 10
Enrollment maximum of 15
ScM in Genetic Counseling Students
Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program; students must register for four terms.
Jointly offered with NIH

415.881.92  GENETIC COUNSELING PROGRAM THESIS PROPOSAL DEVELOPMENT II
Course offered this year
(2 credits)
Erby, Lori
Information not required for this course type

E-mail: lerby@jhsph.edu
Lecture: T 1:30 PM - 3:20 PM
Enrollment minimum of 3
Enrollment maximum of 6
Pass/Fail
Consent required for all students
Prerequisite: 415.880. Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with National Inst. Health

Discontinued
SEMINARS IN BIOINFORMATICS

Course offered this year
(1 credits)
Ruczinski, Ingo
Students attend the weekly Genomics Working Group meeting, where researchers from JHU and other biomedical research institutions present and discuss approaches and results of problems arising in computational biology, bioinformatics and related topics.
E-mail: iruczins@jhsph.edu
Lecture: W 2:30 PM - 3:20 PM
Enrollment minimum of 10
No Maximum
Pass/Fail
Consent required for all students
Per instructor's request
Will be held in departmental space. This is a special studies offering designed for students formally appointed to the Bioinformatics Training Grant and/or enrolled in the MHS in bioinformatics program.
Course Change Information:
CatalogStatus, CourseLearningObjStartId, 02/10/2012;

MANAGING HEALTH SERVICES ORGANIZATIONS

Course offered this year
(4 credits)
Ward, William and Edward, Anbrasi
Presents a framework for understanding and managing health services and health sector organizations. Discusses strategic and organizational management [e.g., health care environment, stakeholders and customers, missions, vision and values, governance, organizational structure and design]; management & performance improvement tools [e.g., budgeting and financial management, logistics, continuous quality improvement, balanced scorecard, logical framework, learning networks and collaboratives; management role and functions [e.g., leadership style, employee performance, decision-making, human resource management]
E-mail: wward@jhsph.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment minimum of 10
No Maximum
Course restricted to graduate students only.
Letter Grade or Pass/Fail
Jointly offered with HPM, IH

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
Approaches to Managing Health Service Organizations: Cases and Applications

Course offered this year
(2 credits)

Ward, William and Gundlach, Ann-Michele

Using case studies, a simulation, and group-based activities, explores a variety of settings in which to apply concepts learned in the course "Managing Health Services Organizations". Examines the following: (1) organizational restructuring, (2) environmental scanning (3) systems behavior in hospital organizations, (4) multiple approaches to group decision making, (5) managing to achieve agreement in healthcare organizations, (6) preparing, implementing, and communicating a budget that is based on limited resources within a business, (7) performance improvement concepts and tools in a healthcare organization, and (8) the construct of a "balanced score card" for a healthcare organization. This course is designed as a management skills learning lab in which students are expected to apply these concepts and MHSO readings to the activities and assignments in the course.

E-mail: wward@jhsph.edu
Lecture: W 10:00 AM - 11:50 AM
Enrollment minimum of 10
No Maximum

students with a US focus should register for this section

Letter Grade or Pass/Fail
Prerequisite: 551.601 must be taken prior to or concurrently with 551.602.
Jointly offered with HPM, IH

Approaches to Managing Health Service Organizations: Cases and Applications

Course offered this year
(2 credits)
Peters, David

Using case studies, a simulation, and group-based activities, explores a variety of settings in which to apply concepts learned in the course "Managing Health Services Organizations". Examines the following: (1) organizational restructuring, (2) environmental scanning (3) systems behavior in hospital organizations, (4) multiple approaches to group decision making, (5) managing to achieve agreement in healthcare organizations, (6) preparing, implementing, and communicating a budget that is based on limited resources within a business, (7) performance improvement concepts and tools in a healthcare organization, and (8) the construct of a "balanced score card" for a healthcare organization. This course is designed as a management skills learning lab in which students are expected to apply these concepts and MHSO readings to the activities and assignments in the course.

E-mail: dpeters@jhsph.edu
Lecture: W 10:00 AM - 11:50 AM
Enrollment minimum of 10
No Maximum

students with an international focus should register for this section

Pass/Fail
Jointly offered with HPM, IH

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
306.863.01  GREENWALL SEMINAR SERIES

Course offered this year  
(1 credits)  
Geller, Gail  
Explores the history of bioethics in the U.S. by examining its effects on health policy. Readings and discussion focus on federal commissions, federal and state court decisions, the ethics committee movement, federal and state regulations, professional organizations, and grassroot bioethics movements. Students meet with policy makers and scholars in bioethics and health policy.  
E-mail: ggeller@jhsph.edu  
Lecture: TBA  
Enrollment minimum of 3  
No Maximum  
Restricted to Greenwall fellows and senior doctoral students in ethics program  
Pass/Fail  
Consent required for all students

415.650.92  FACILITATING FAMILY ADAPTATION TO LOSS AND DISABILITY I

Course offered this year  
(2 credits)  
Wray, Andrea  
Provides theoretical constructs for understanding the meaning of loss in maternal and child health, and techniques for short-term counseling that facilitate a healthy grief reaction for the bereaved family. Case studies of typical and atypical reactions are discussed for losses such as perinatal loss (miscarriage, stillbirth, neonatal death, termination of pregnancy for genetic reasons); birth of a child with a genetic condition/birth defect; death of a child with a chronic illness; and infertility. Topics include the psychology of pregnancy; and perinatal loss; phases of grief reaction; the art of facilitating bereavement; practical interventions in the hospital; follow-up counseling and short-term psychotherapy; resources; special needs of family members; gender differences; grandparent and sibling issues; provider issues (counter-transference, self-care, and burn-out prevention). Includes lecture, discussion, role play, video, field trips, and presentations by bereaved parents.  
Information not required for this course type  
E-mail: Andrea.Wray@med.navy.mil  
Lecture: F 9:00 AM - 10:50 AM  
Enrollment minimum of 10  
Enrollment maximum of 12  
Letter Grade or Pass/Fail  
Consent required for all students  
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program  
Grades submitted at the end of the term.  
Course Change Information:  
RecommendedNote, CatalogStatus, .06/25/2012;  
EnrollRestriction, InstructorConsentId,  
ConsentNote, CourseOfferRationaleNote, .08/09/2011;
Cancelled - Department

140.671.01  INTRODUCTION TO PROBABILITY I
Course offered this year
(4 credits)
Rohde, Charles
Introduces probability theory, including basic concepts in measure theory and probability; random variables and their distributions; moments of random variables and probability inequalities; moment-generating and characteristic functions; convergence concepts and limit theorems; transformation and order statistics.
E-mail: crohde@jhsph.edu
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Prerequisite: Facility with calculus
Multi-term with 140.672
Grade for 140.671 and 672 given at completion of 140.672
Course Change Information:
CourseOfferRationale, CatalogStatus, CourseLearningObjStartId, CourseLearningObj, .06/21/2012; StartingOfferYear, CatalogStatus, .05/10/2011;

224.863.01  DOCTORAL SEMINAR IN RESEARCH METHODS IN APPLIED MEDICAL ANTHROPOLOGY I
Course offered this year
(4 credits)
Winch, Peter
Discusses advanced topics in qualitative research including 1) different ways in which the concept of ethnography as a methodology is operationalized in qualitative studies on health, 2) Michael Crotty’s framework for the research process (epistemology, theoretical framework, methodology, method); 3) Grounded Theory and Phenomenology; 4) Approaches to managing textual data; 5) Discourse analysis; and 6) Cognitive anthropology theory and methods.
E-mail: pwinch@jhsph.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment minimum of 5
Enrollment maximum of 15
Pass/Fail
Consent required for all students
Prerequisite: 224.690 and 224.691 Qualitative Research or equivalent

1st term information is correct as of August 14, 2012. For updated information please use Course Search at my.jhsph.edu/C4/Academics/.
330.601.01  PERSPECTIVES OF PSYCHIATRY: THE PUBLIC HEALTH FRAMEWORK
Course offered this year
(3 credits)
Spira, Adam and McHugh, Paul
Describes the basic features of mental disorders using an epistemological framework that facilitates understanding in the context of public health research and practice. Includes discussion of the distinction between neurological activity and mental life, and briefly presents the historical as well as current state of knowledge of the most common psychiatric conditions. Framework includes four fundamental perspectives for understanding mental disturbances: disease, dimension, behavior, and life story, with explanation of the distinct etiopathologic nature each perspective brings to bear on the problem of defining, classifying, and measuring mental disorders.
E-mail: aspira@jhsph.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for all students

330.657.01  STATISTICS FOR PSYCHOSOCIAL RESEARCH: MEASUREMENT
Course offered this year
(4 credits)
Leoutsakos, Jeannie-Marie and Xue, Qian-Li
Presents quantitative approaches to measurement in the psychological and social sciences. Topics include the principles of psychometrics, including reliability and validity; the statistical basis for latent variable analysis, including exploratory and confirmatory factor analysis and latent class analysis; and item response theory. Draws examples from the social sciences, including stress and distress, social class and socioeconomic status, personality; consumer satisfaction, functional impairment and disability, quality of life, and the measurement of overall health status. Intended for doctoral students.
Upon successfully completing this course, students will be able to:
E-mail: jsheppar@jhsph.edu
Lecture: M W 10:30 AM - 11:50 AM
Enrollment minimum of 10
No Maximum
Letter Grade or Pass/Fail
Consent required for all students
Prerequisite: 140.621-624, former 140.601-604, or 140.651-654, or consent of instructor
Jointly offered with BIOSTAT