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 2017-18. 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 25, 2017. 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 Catalog 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/records-and-registration/

REGISTRATION INFORMATION
Continuing students may register for 1st Term through August 18, 2017 by logging on to Self-Service at https://sis.jhu.edu/ssw. To register via Self-Service, students must use their JHED ID (logon user ID) and password for authentication. 1st Term tuition payments are due via the web (https://sis.jhu.edu/ssw) by Saturday, September 23, 2017. Changes to 1st Term registrations for may be processed via Self-Service during the published Add/Drop period for 1st Term: Monday, August 28 – Friday, September 8, 2017.

School of Medicine Post Doctoral Fellows may not register via Self-Service; they must register in person prior to the August 18 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. Registration information is available at https://sites.google.com/site/jhpda2/home/links/sph.

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 registration requests will not be processed until instructor's permission for all courses is received. SSLs must submit permission to the Continuing Education Student Services Office by email to JHSHP.cess@jhu.edu or by fax to 410-614-8633. Payment for tuition and fees must be made prior to the first day of the term. Payments for tuition not received by the first day of the term will result in a dropped enrollment. Late re-registrations will be charged a $100 late registration fee. Registrations during the Add/Drop period require payment in full, including a $100 late registration fee.

Tuition is assessed at a rate of $1091 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 18 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 and should be forwarded to JHSHP.cess@jhu.edu).

As of August 22, 2017
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
140  Biostatistics
180-188  Environmental Health Engineering
220  International Health
260  Molecular Microbiology and Immunology
300-319  Health Policy and Management
330  Mental Health
340  Epidemiology
380  Population and Family Health Sciences
390  Clinical Investigation
410-415  Health Behavior and Society
550  Adjunct Studies
600  Online Programs for Applied Learning
700  Bioethics (Berman Institute)

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  Krieger School of Arts and Sciences (KSAS)
EN  Whiting School of Engineering (EN)
ME  School of Medicine (SOM)
NR  School of Nursing (SON)
BU  Carey Business School (Carey)
SA  School of Advanced International Studies (SAIS)

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

700.601.01 FOUNDATIONS OF BIOETHICS
3 credits - Course offered this year - East Baltimore

Geller, Gail

Offers an introduction to central approaches and issues in bioethics. Includes a discussion of the history of the field and the issues that led to its birth and growth internationally. Introduces philosophical, empirical and non-empirical approaches to bioethics and core ethical issues in clinical care, public health, science and research. Provides a foundation for future study in bioethics.

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

1. Discuss the history of bioethics and how it evolved as a field
2. Differentiate methods and approaches in bioethics including philosophical, empirical, and non-empirical approaches
3. Identify ethical issues in clinical practice, public health, science, and research and examine approaches to addressing them
4. Apply a global perspective to bioethics issues

Email: ggeller@jhsph.edu

Lecture: TH 3:30 PM - 6:20 PM
Enrollment: Minimum 6, Maximum 20, Waitlist Enabled: Yes
Enrollment priority given to MBE students
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for undergraduate students
Prerequisite: None
Course meets in Deering Hall in LLC Room

700.603.01 INTRODUCTION TO ETHICAL THEORY
3 credits - Course offered this year - East Baltimore

Rieder, Travis

Explores the relationship between philosophical ethical theory and the practical world of bioethics. In particular, examines the classical accounts of moral obligation and virtue in the context of a variety of contemporary bioethical problems. Further presents the distinction between individual bioethics and collective bioethics, with the goal of determining how the theoretical grounding for these fields differ. The motivating questions are both methodological and substantive: First, how does theory contribute to bioethical investigations? And second, does reflection on ethical theory tell us what to do concerning particular, bioethical problems?

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

1. Identify and articulate the theoretical underpinnings of particular moral claims
2. Apply various theoretical tools to particular, concrete cases
3. Identify the weaknesses of moral positions as a result of those positions’ theoretical assumptions
4. Defend a methodological position concerning the value and use of theory in bioethics
5. Defend a substantive position concerning the correct moral theory

Email: trieder@jhu.edu

Lecture: W 3:30 PM - 6:20 PM
Enrollment: Minimum 6, Maximum 20, Waitlist Enabled: Yes
Enrollment priority given to MBE students
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for undergraduate students
Prerequisite: None
Course meets in Deering Hall; LLC Room

Learning Materials:

- (Book) Moral Theory: An Introduction (Elements of Philosophy)
  Timmons, Mark
  Amazon.com $32.00

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 1 of 118
700.622.01 BIOETHICS, HUMAN RIGHTS, AND GLOBAL HEALTH
3 credits - Course offered this year - East Baltimore
DeCamp, Matthew; Rubenstein, Len
Explores the theoretical justifications of human rights and their relationship to the contemporary human rights movement based in positive law and how human rights are operationalized. Reviews theories of human rights, evolution of human rights as law, and common ground and tensions between bioethics and legal approaches to human rights. Illustrates how bioethics and human rights concepts apply to key public health issues of our time, particularly as they relate to problems of inequality and inequity. Discuss issues including access to essential medicines, women's health, disease surveillance and response to pandemics, and health claims of immigrants, refugees and prisoners.
Upon successfully completing this course, students will be able to:
1. Describe theoretical/conceptual foundations for the human right to health, including the basis for human rights in positive law
2. Illustrate how different theoretical/conceptual foundations affect the content of the right to health, including in “human rights-based programming” for health
3. Appraise challenges to the existence of a right to health
4. Compare and contrast basic bioethical principles used in public health with human rights-based principles
5. Apply human rights concepts to contemporary public health problems

Email: lrubenstein@jhu.edu
Lecture: F 1:30 PM - 3:20 PM
Enrollment: Minimum 6, Maximum 30, Waitlist Enabled: Yes
Enrollment priority given to MBE students
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for undergraduate students
Prerequisite: None
Course meets in Deering Hall; LLC Room

700.820.01 BIOETHICS PROGRAM THESIS RESEARCH
variable credits 1-6 - Course offered this year - East Baltimore
Departmental Faculty
Provides an opportunity for students to actively conduct research in bioethics.
Upon successfully completing this course, students will be able to:
1. Identify research questions of importance to bioethics
2. Review and critically evaluate existing literature
3. Edit and revise the MBE thesis project
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
MBE students only
Grading Options: Pass/Fail
Prerequisite: None

700.840.01 BIOETHICS PROGRAM INDEPENDENT STUDY
2 credits - Course offered this year - East Baltimore
Rieder, Travis
Provides students with a one-on-one independent study experience in which they independently review papers from the current literature and meet weekly with a departmental faculty member to discuss them. Offers opportunities for complementary activities which may include participating in related course discussions, seminars, conferences, etc. Culminates with the completion of a written document, typically a substantial paper.
Upon successfully completing this course, students will be able to:
1. Summarize and discuss specific fields of research
2. Formulate an original position on a bioethical issue
Email: trieder@jhu.edu
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
MBE students only

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 2 of 118
Grading Options: Pass/Fail
Consent required for all students; Consent required for all students

700.895.01 BIOETICS PROGRAM PRACTICUM
3 credits - Course offered this year - East Baltimore
Departmental Faculty
Provides mentored opportunities for field work with a practicing bio ethicist, or applying one's bioethical training to a real-world environment.
Upon successfully completing this course, students will be able to:
1. Participate in a bioethics research initiative
2. Integrate and apply bioethical reasoning to a real world problem
3. Develop a proposal, take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals
Enrollment: Minimum 2, Maximum 10, Waitlist Enabled: Yes
MBE students only
Grading Options: Pass/Fail
Consent required for all students; Consent required for all students

Biochemistry and Molecular Biology
120.600.01 BIOCHEMISTRY I
5 credits - Course offered this year - East Baltimore
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.
Upon successfully completing this course, students will be able to:
1. Describe the construction of the principal cellular macromolecules
2. Analyze the forces that determine the three-dimensional structure of these molecules in aqueous solution
3. Relate the structures of macromolecules to their functions
4. Identify the methods used to study these questions in detail
Email: fbryant1@jhu.edu
Lecture: M W F 10:30 AM - 11:50 AM
Enrollment: Minimum 5, Maximum 30, Waitlist Enabled: Yes
Priority registration will be given to students in the Bloomberg School of Public Health. All others need permission from contact to register.
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for non-Bloomberg students
Prerequisite: Introductory organic chemistry.

120.600.02 BIOCHEMISTRY I
5 credits - Course offered this year - East Baltimore
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.
Upon successfully completing this course, students will be able to:
1. Describe the construction of the principal cellular macromolecules
2. Analyze the forces that determine the three-dimensional structure of these molecules in aqueous solution
3. Relate the structures of macromolecules to their functions
4. Identify the methods used to study these questions in detail
Email: fbryant1@jhu.edu
Lecture: M W F 1:30 PM - 2:50 PM
Enrollment: Minimum 5, Maximum 30, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introductory organic chemistry.

120.602.01 CONCEPTS OF MOLECULAR BIOLOGY
4 credits - Course offered this year - East Baltimore
Bailey, Scott; Leung, Anthony
Discusses synthesis of macromolecules, the genetic code, regulation of gene expression and gene function, and recent advances in biotechnology.
Upon successfully completing this course, students will be able to:
  1 Explain the molecular mechanisms underlying the central dogma
  2 Describe genome structure and gene regulation

Email: scott.bailey@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment: Minimum 10, Maximum 77, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introductory biochemistry or consent of instructor

120.604.81 INTRODUCTION TO MOLECULAR BIOLOGY
3 credits - Course offered this year - Internet
Bailey, Scott
Molecular biology deals with how nucleic acids and proteins interact within the cell to promote proper growth, division, and development. This course will provide an overview of these processes, including DNA replication, repair, transcription, splicing, protein synthesis, and gene regulation in different organisms. We will also explore many biological tools that have been developed from molecular biology processes, such as DNA sequencing and gene editing (CRISPR-Cas9).
Upon successfully completing this course, students will be able to:
  1 Compare and contrast bacterial and eukaryotic DNA replication, DNA repair, transcription, and translation
  2 Give examples of DNA and histone modifications and predict how they will affect gene expression.
  3 Describe how pre-mRNA splicing occurs and explain how alternative splicing can generate protein diversity.
  4 Explain how molecular biology processes like the CRISPR-Cas9 system are being used to modify eukaryotic genomes.
  5 Distinguish between different molecular biology techniques that are used to isolate, separate, and probe for specific nucleic acids, proteins, and their interactions.

Email: scott.bailey@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning. A strong college level background in the biological sciences is required.

120.620.01 FUNDAMENTALS OF REPRODUCTIVE BIOLOGY
3 credits - Course offered this year - East Baltimore
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.
Upon successfully completing this course, students will be able to:
  1 Explain the difference between peptide and steroid hormones and understand the mechanisms by which these hormones regulate reproductive function in their target tissues
  2 Explain how the integrated function of the hypothalamus, pituitary gland and gonads (testis/ovary) are critical for normal male and female reproduction
  3 Explain how spermatogenesis in the testis and oogenesis in the ovary are regulated during normal fertility as well as understand the various causes of infertility
  4 Understand how sperm fertilize the egg, how the zygote implants in the uterus and how early embryo development progresses
  5 Understand which factors determine the sex and phenotypic differentiation of the fetus
  6 Apply your understanding of reproductive function and hormonal regulation to the various methods for male and female contraception
Apply your understanding of reproductive function and fertilization to methods for assisted reproductive technologies to circumvent infertility

Email: jevans6@jhu.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: A previous college-level course in basic biology is very helpful.
The course material in the first few class sessions is designed with refresher material, to bring students with limited or rusty backgrounds in the biological sciences up to speed.

120.800.01 MPH CAPSTONE: BIOCHEMISTRY AND MOLECULAR BIOLOGY
2 credits Must have 1-4 credits per term for two terms. - Course offered this year - East Baltimore
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.
Upon successfully completing this course, students will be able to:
1 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 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
variable credits - Course offered this year - East Baltimore
Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

120.821.01 MHS STUDENT RESEARCH
3 credits - Course offered this year - East Baltimore
Departmental Faculty
Acquaints MHS students with basic research in the biomedical sciences through work under the guidance of a faculty member in the Department of Biochemistry and Molecular Biology, and provides an introduction to hands-on experience in laboratory research.
Upon successfully completing this course, students will be able to:
1 Identify a research question of significance in biomedical science.
2 Design hypothesis-driven or discovery-driven experimental studies to address the question
3 Maintain research notes, including summaries of results and data interpretation

Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for all students; Prospective students must make arrangements with a faculty member for this research experience.

120.822.01 SEMINARS IN RESEARCH IN BIOCHEMISTRY AND MOLECULAR BIOLOGY
1 credits - Course offered this year - East Baltimore
Coulombe, Pierre
Integrates academic training with current research in biochemistry and molecular biology, reproductive biology and cell and developmental biology. Features presentations by researchers from JHU and other biomedical research institutions on the results of state of the art investigations of problems and issues of public health significance, emphasizing experimental design and methodology for analysis and discussion.

Upon successfully completing this course, students will be able to:
1. Cite examples of current research, policy, or practice in the field of biochemistry and molecular biology
2. Identify areas of interest for current and future research
3. Recognize the features of engaging presentations and participate in discussions with fellow researchers

Email: coulombe@jhu.edu
Lecture: M 12:00 PM - 12:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only open to BMB Postdocs, PhD and ScM students.
Grading Options: Pass/Fail

120.830.01 POSTDOCTORAL RESEARCH BIOCHEMISTRY
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

120.840.01 SPECIAL STUDIES AND RESEARCH BIOCHEMISTRY
variable credits Based on other coursework taken. - Course offered this year - East Baltimore

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 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

120.850.01 BIOCHEMICAL TECHNIQUES
6 credits - Course offered this year - East Baltimore
Departmental Faculty
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 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

120.852.01 CORE RESEARCH LITERATURE
variable credits BMB students taking this course should enroll for 2 credits. MMI students taking this course should enroll for 1 credit. - Course offered this year - East Baltimore

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.

Upon successfully completing this course, students will be able to:
1. N/A

Email: fbryant1@jhu.edu
Lecture: T 1:30 PM - 2:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Any students not in the BMB or MMI core coursework need consent.
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
1 credits - Course offered this year - East Baltimore
Coulombe, Pierre; Matunis, Michael
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.

Upon successfully completing this course, students will be able to:
1. Understand the research interests and scientific approaches of the training faculty
2. Make informed decisions regarding laboratory rotations during the first year for doctoral students
3. Investigate areas of potential interest for master's students considering the option of pursuing laboratory research toward the ScM degree during their second year
4. Initiate a dialogue between students and faculty about various aspects of scientific research encompassed by the departmental training program

Email: mmatuni1@jhu.edu
Lecture: W F 12:00 PM - 12:50 PM

120.895.01 MPH PRACTICUM: BIOCHEMISTRY AND MOLECULAR BIOLOGY
variable credits Students who have not met the practicum requirement, must register for at least two credits. - Course offered this year - East Baltimore
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored public health practicum experience

Biostatistics

140.611.01 STATISTICAL REASONING IN PUBLIC HEALTH I
3 credits - Course offered this year - East Baltimore
McGready, John
Provides students with a broad overview of biostatistical methods and concepts used in the public health sciences. Emphasizes the interpretation and conceptual foundations of statistical estimation and inference.

Upon successfully completing this course, students will be able to:
1. Provide examples of different types of data arising in public health studies
2. Interpret differences in data distributions via visual displays
3. Calculate and interpret confidence intervals for population means and proportions and incident rates using data from single samples
4. Compute the mean difference and explain why a mean difference can be used to quantify differences in a continuous measure between two samples (and ultimately two populations)
5. Compute risk differences, relative risks and odds ratio
6. Compare, contrast, and interpret relative risks and odds ratios when comparing binary outcomes between two populations
7. Compute incidence rates and incidence rate ratios
8. Construct, and interpret, Kaplan-Meier estimates of the survival function that describes the "survival experience" of a cohort of subjects
9. Explain and unify the concept of a confidence interval whether it be for a single population quantity, or a comparison of populations
10. Perform hypothesis tests for populations comparisons and interpret the resulting p-values

Email: jmcgrea1@jhu.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment: Minimum 9, No maximum enrollment required, Waitlist Enabled: No
Limited to degree candidates in SPH and students in the joint MSN/MPH program
Grading Options: Letter Grade or Pass/Fail
Administrative Course Fee: 30.0000
Course materials fee is $30.00.

140.611.81 STATISTICAL REASONING IN PUBLIC HEALTH I
3 credits - Course offered this year - Internet
McGready, John
Provides students with a broad overview of biostatistical methods and concepts used in the public health sciences. Emphasizes the interpretation and conceptual foundations of statistical estimation and inference.
Upon successfully completing this course, students will be able to:
1. Provide examples of different types of data arising in public health studies
2. Interpret differences in data distributions via visual displays
3. Calculate and interpret confidence intervals for population means and proportions and incident rates using data from single samples
4. Compute the mean difference and explain why a mean difference can be used to quantify differences in a continuous measure between two samples (and ultimately two populations)
5. Compute risk differences, relative risks and odds ratio
6. Compare, contrast, and interpret relative risks and odds ratios when comparing binary outcomes between two populations
7. Compute incidence rates and incidence rate ratios
8. Construct, and interpret, Kaplan-Meier estimates of the survival function that describes the "survival experience" of a cohort of subjects
9. Explain and unify the concept of a confidence interval whether it be for a single population quantity, or a comparison of populations
10. Perform hypothesis tests for populations comparisons and interpret the resulting p-values

Email: jmcgrea1@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; non-degree seeking students need instructor’s consent
Prerequisite: Introduction to Online Learning.

140.621.01 STATISTICAL METHODS IN PUBLIC HEALTH I
4 credits - Course offered this year - East Baltimore
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 within the scientific method.

2. Design and interpret graphical and tabular displays of statistical information, including stem and leaf plots, box plots, Q-Q plots and frequency tables.

3. Distinguish probability models (binomial, Poisson, and Gaussian) for describing trends and random variation in public health data.

4. Use stratification to eliminate the influence of a possible confounding variable in a study of the association between a risk factor and outcome.

5. Use bootstrapping to construct confidence intervals and interpret them in a scientific context.

6. Explain the implications of the Central Limit Theorem in determining the sampling distributions of sample statistics.

7. Use sampling distribution theory for a single sample mean, difference between two sample means, paired mean difference, single sample proportion, and difference between two sample proportions for statistical inference.

8. Employ statistical methods for inference, including tests and confidence intervals, to draw public health inferences from data.

9. Use the Stata statistical analysis package to construct tables and graphs and perform statistical methods for inference.

Email: mdiener@jhu.edu

Lecture: T TH 10:30 AM - 11:50 AM
Lab Section: 01 M 1:30 PM-3:00 PM
Lab Section: 02 T 1:30 PM-3:00 PM
Lab Section: 03 W 1:30 PM-3:00 PM
Lab Section: 04 TH 1:30 PM-3:00 PM
Lab Section: 05 F 1:30 PM-3:00 PM
Lab Section: 06 M 3:30 PM-5:00 PM
Lab Section: 07 T 3:30 PM-5:00 PM
Lab Section: 08 W 3:30 PM-5:00 PM
Lab Section: 09 TH 3:30 PM-5:00 PM
Special Lab Number: 140.921

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
For MPH, DrPH, "special students" and MSPH degree candidates
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent Required for non-PH students
Administrative Course Fee: 40.0000
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.

140.621.02 STATISTICAL METHODS IN PUBLIC HEALTH I
4 credits - Course offered this year - East Baltimore
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 within the scientific method.

2. Design and interpret graphical and tabular displays of statistical information, including stem and leaf plots, box plots, Q-Q plots and frequency tables.
3 Distinguish probability models (binomial, Poisson, and Gaussian) for describing trends and random variation in public health data.

4 Use stratification to eliminate the influence of a possible confounding variable in a study of the association between a risk factor and outcome.

5 Use bootstrapping to construct confidence intervals and interpret them in a scientific context.

6 Explain the implications of the Central Limit Theorem in determining the sampling distributions of sample statistics.

7 Use sampling distribution theory for a single sample mean, difference between two sample means, paired mean difference, single sample proportion, and difference between two sample proportions for statistical inference.

8 Employ statistical methods for inference, including tests and confidence intervals, to draw public health inferences from data.

9 Use the Stata statistical analysis package to construct tables and graphs and perform statistical methods for inference.

Email: kbandee1@jhu.edu

Lecture: T TH 10:30 AM - 11:50 AM
Lab Section: 01 M 1:30 PM-3:00 PM
Lab Section: 02 T 1:30 PM-3:00 PM
Lab Section: 03 W 1:30 PM-3:00 PM
Lab Section: 04 TH 1:30 PM-3:00 PM
Lab Section: 05 F 1:30 PM-3:00 PM
Lab Section: 06 M 3:30 PM-5:00 PM
Lab Section: 07 T 3:30 PM-5:00 PM
Lab Section: 08 W 3:30 PM-5:00 PM
Lab Section: 09 TH 3:30 PM-5:00 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
For PhD, ScD, ScM and MHS degree candidates
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent of instructor required for non-PH students
Administrative Course Fee: 40.0000
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.

140.633.81 BIOSTATISTICS IN MEDICAL PRODUCT REGULATION (Cancelled - Department)

2 credits - Course offered this year - Internet
Foulkes, Mary
Addresses the application of many principles of biostatistics in the context of medical product development and regulation. Provides a basis for understanding international regulation as outlined in various guidance documents. Opportunities provided through presentations and discussions to learn about applications to study design, conduct, analyses, and inferences. Presents examples of products, product development processes, and opportunities for innovation in global product development.
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
Email: mfoulke1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Prerequisite: Basic epidemiology and biostatistics

140.636.01 PERL FOR BIOINFORMATICS
4 credits - Course offered this year - East Baltimore
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. Introduces key concepts, which are 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. Students will learn how to use a High Performance Compute Cluster and also how to create their own servers in the Amazon cloud. Guest lecturers present case studies of PERL and Linux usage in scientific investigations. Introduces students 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

Email: FERNANDO.PINEDA@jhu.edu
Lecture: M W F 1:30 PM - 2:20 PM
Lab Section: 01 F 10:30 AM-11:30 AM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; All students should confirm with instructor that they have the necessary prerequisites to take the course
Prerequisite: Students should be comfortable using a command line interface and have some experience programming in some other language.
Jointly offered with BIOSTAT,MMI

140.641.01 SURVIVAL ANALYSIS
3 credits - Course offered this year - East Baltimore
Wang, Mei-Cheng
Introduces fundamental concepts, theory and methods in survival analysis. Emphasizes statistical tools and model interpretations which are useful in medical follow-up studies and in general time-to-event studies. Includes hazard functions, survival functions, types of censoring and truncation, Kaplan-Meier estimates, log-rank tests and their generalization. For parametric inference, includes likelihood estimation and the exponential, Weibull, log-logistic and other relevant distributions. Discusses in detail statistical methods and theory for the proportional hazard models (Cox model), with extensions to time-dependent covariates. Includes clinical and epidemiological examples (through class presentations). Illustrates various statistical procedures (through homework assignments).

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
3. Properly use software and packages to conduct time-to-event data analysis

Email: mcwang@jhu.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for non-Biostatistics students
Prerequisite: Biostatistics 140.651 or equivalent. Knowledge of fundamental probability and statistical theory is required. Non-biostatistics students need permission from instructor.
Students must attend 2 one-hour lab sessions per week.

140.646.01 ESSENTIALS OF PROBABILITY AND STATISTICAL INFERENCE I: PROBABILITY
4 credits - Course offered this year - East Baltimore
Rohde, Charles
Introduces students to the theory of probability and the formal language of uncertainty. Includes the basic concepts of probability; random variables and their distributions; joint, marginal and conditional distributions; independence; distributions of functions of random variables; expectations; moment generating functions; probability and expectation inequalities; convergence concepts and limit theorems; 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
2. Solve basic probability problems

Email: crohde1@jhu.edu
Lecture: M W 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
4 credits - Course offered this year - East Baltimore
Crainiceanu, Ciprian
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

Email: ccraini1@jhu.edu
Lecture: T TH 10:30 AM - 11:50 AM
Lab Section: 01 T 1:30 PM-2:20 PM
Lab Section: 02 W 2:30 PM-3:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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.

140.711.01 ADVANCED DATA SCIENCE I
3 credits - Course offered this year - East Baltimore
Leek, Jeffrey; Muschelli, John

Email is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 12 of 118
Provides an intensive introduction to applied statistics and data analysis. Trains students to become data scientists capable of both applied data analysis and critical evaluation of the next generation next generation of statistical methods. Since both data analysis and methods development require substantial hands-on experience, focuses on hands-on data analysis.

Upon successfully completing this course, students will be able to:
1. Obtain, clean, transform, and process raw data into usable formats
2. Formulate quantitative models to address scientific questions
3. Organize and perform a complete data analysis, from exploration, to analysis, to synthesis, to communication
4. Apply a range of statistical methods for inference and prediction

Email: jtleek@jhu.edu
Lecture: M W 1:30 PM - 2:20 PM

Enrollment: Minimum 4, No maximum enrollment required, Waitlist Enabled: No
Biostatistics 2nd-year PhD and 2nd-year master's students only
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for anyone who is not a Biostatistics 2nd-year PhD or 2nd-year master's student
Prerequisite: R programming experience
Final grade applies to all terms
One 1-hour lab per week (time TBA)

140.721.01 PROBABILITY THEORY I
3 credits - Course offered this year - East Baltimore
Rosenblum, Michael
Presents the first part of the classical results of probability theory: measure spaces, LP spaces, probability measures, distributions, random variables, integration, and convergence theorems.

Upon successfully completing this course, students will be able to:
1. Rigorously define the probability measure corresponding to a given experiment
2. Define a random variable and the sigma-algebra it generates
3. Integrate with respect to a probability measure
4. Understand convergence of random variables, and the conditions required to prove convergence in expectation

Email: mrosen@jhu.edu
Lecture: T TH 3:30 PM - 4:50 PM

Enrollment: Minimum 2, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for any students who are not in the Biostatistics PhD program
Prerequisite: Calculus, real analysis
The course will include 30 minutes per week of lab (time TBA)

140.731.01 STATISTICAL THEORY I
4 credits - Course offered this year - East Baltimore
Ogburn, Elizabeth
Introduces probability and inference, including random variables; probability distributions; transformations and sums of random variables; expectations, variances, and moments; properties of random samples; and hypothesis testing.

Upon successfully completing this course, students will be able to:
1. Manipulate and describe random variables
2. Derive and describe the properties of hypothesis tests and point estimates from random samples

Email: eogburn@jhu.edu
Lecture: M W 1:30 PM - 2:50 PM

Enrollment: Minimum 2, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for any students who are not in the Biostatistics PhD program
Prerequisite: Linear algebra; matrix algebra; real analysis; calculus.

One 1-hour lab per week (time TBA)

140.751.01 ADVANCED METHODS IN BIOSTATISTICS I

3 credits - Course offered this year - East Baltimore

Lindquist, Martin

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. List 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

Email: mlindquist@jhu.edu

Lecture: T TH 10:30 AM - 11:50 AM

Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Biostatistics 1st-year PhD students.
Grading Options: 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 (Cancelled - Department)

4 credits - Course offered this year - East Baltimore

Zipunnikov, Vadim

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 Stan 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

Email: vzippun1@jhu.edu

Lecture: T TH 10:30 AM - 11:50 AM

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 14 of 118
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 140.751-4

140.771.01 ADVANCED STATISTICAL THEORY I
(Cancelled - Department)
4 credits - Course offered this year - East Baltimore
Scharfstein, Daniel
Focuses on drawing large sample inferences about "parameters" in statistical models. Develops asymptotic theory for maximum likelihood estimation, M-estimation, and generalized method of moment (GMM) estimation. Discusses formal techniques for constructing estimators in semi-parametric models. Pays particular attention to models for longitudinal and survival data. Special topics presented by guest lecturers. Involves rigorous mathematical arguments so that familiarity with concepts in advanced calculus, real analysis, and measure theory will be required.

Upon successfully completing this course, students will be able to:
1. Understand large sample theory underlying commonly used statistical procedures such as maximum likelihood, M-estimation, and GMM-estimation.
2. Understand the foundations of semi-parametric inference.
3. Understand the foundations of the counting process approach to survival analysis.

Email: dscharf@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM

Enrollment: Minimum 2, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Real Analysis, Measure-Theoretic Probability, Introduction to Statistical Theory I-II
Final grade applies to all terms
Grade for 140.771 and 772 given at completion of 140.772.

140.776.01 STATISTICAL COMPUTING
3 credits - Course offered this year - East Baltimore
Hansen, Kasper
Covers practical issues in statistical computing. Includes programming in R, calling complied code from R, accessing R libraries, creating R packages with documentation, debugging, organizing and commenting code. 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

Email: khanse10@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 140.621 or equivalent

140.800.01 MPH CAPSTONE BIOSTATISTICS
2 credits Must have 1-4 credits per term for two terms. - Course offered this year - East Baltimore
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

Upon successfully completing this course, students will be able to:
1. 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 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
variable credits - Course offered this year - East Baltimore
Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

140.830.01 POSTDOCTORAL RESEARCH BIOSTATISTICS
variable credits - Course offered this year - East Baltimore
Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

140.840.01 SPECIAL STUDIES AND RESEARCH BIOSTATISTICS
variable credits - Course offered this year - East Baltimore
Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

140.850.01 ADVANCED SPECIAL TOPICS IN BIOSTATISTICS
variable credits Number of credits will depend on the material being covered - Course offered this year - East Baltimore
Departmental Faculty
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.
Upon successfully completing this course, students will be able to:
1. Identify the central issues
2. Demonstrate knowledge of key models, estimation strategies, theoretical properties, and data displays
3. Describe steps for implementing analyses of relevant data
4. Engage in related statistical research

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
For Biostatistics PhD students only
Grading Options: 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

140.895.01 MPH PRACTICUM: BIOSTATISTICS
variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - East Baltimore
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored public health practicum experience
Clinical Investigation

390.631.01 PRINCIPLES OF DRUG DEVELOPMENT
2 credits - Course offered this year - East Baltimore
Flexner, Charles

Presents principles underlying preclinical and clinical development of new therapeutic drugs and devices. Describes and evaluates specific examples, and discusses legal and ethical regulations that apply to drug development. Uses a case-based class format.

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

Email: flex@jhmi.edu
Lecture: W 1:30 PM - 2:50 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to GTPCI students, CDSE (Pharmacoepidemiology) certificate students, and faculty and staff with active involvement in clinical research
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Students who are not GTPCI or CDSE (Pharmacoepidemiology) certificate students need permission.

390.673.01 ETHICAL AND REGULATORY ISSUES IN CLINICAL RESEARCH
3 credits - Course offered this year - East Baltimore
Adkinson, Franklin; Fost, Norman

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 HIPAA regulations
4. Integrate modern ethical standards and regulatory requirements into design of a clinical investigation

Email: fadkinso@jhsph.edu
Lecture: M 5:30 PM - 8:30 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to individuals in the SOCI certificate program or GTPCI students.
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; This course is geared toward GTPCI and SOCI students, however it is open to other scientists or clinicians.
Second in a five-course series in the science of clinical investigation.

390.820.01 THESIS RESEARCH IN CLINICAL INVESTIGATION
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Environmental Health and Engineering

180.609.01 PRINCIPLES OF ENVIRONMENTAL HEALTH I
4 credits - Course offered this year - East Baltimore
Bressler, Joseph; Latshaw, Megan
Presents concepts, principles, and applications forming the basis of the field of environmental health. Topics include contaminant sources, fate & transport, pathways of exposure, toxicology, health effects, policy, practice and systems. Discussions and exercises focus on current environmental health issues and opportunities for prevention and intervention. Students learn how to critically evaluate current environmental health literature and how to think about environmental health from a systems perspective.

Upon successfully completing this course, students will be able to:
1. Describe the field of environmental health and its interdisciplinary nature
2. Describe the sources and range of hazards to human health that exist within the environment
3. Explain the means through which toxic exposures induce adverse health effects in healthy and susceptible populations
4. Discuss the concept of environmental justice and identify potential environmental injustices
5. Develop and discuss application of strategies that effectively mitigate and prevent adverse health effects caused by environmental agents and conditions
6. Interpret, evaluate and summarize articles from the current environmental health literature and apply their findings to related environmental situations and conditions
7. Identify and describe important current and emerging environmental problems that pose a risk to public health
8. Develop and express an understanding of the contribution that environmental health practice makes within public health

Email: jbressl1@jhu.edu
Lecture: M W 1:30 PM - 3:20 PM
Enrollment: Minimum 10, Maximum 36, Waitlist Enabled: Yes
Enrollment limited to degree-seeking students in SPH graduate programs. Permission from instructor required for non-EHE students.
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent is required for non-EHE degree candidates.
Prerequisite:
MHS degree candidates in EHE are required to take both Principles of Environmental Health I & II; PhD candidates in EHE only take PEH I.

Email: cindyparker@jhu.edu
Lecture: T TH 8:30 AM - 10:20 AM

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 18 of 118
**180.622.01 SEAFOOD AND PUBLIC HEALTH: FROM PRODUCTION TO CONSUMPTION**

2 credits - Course offered this year - East Baltimore

Fry, Jillian

Explores trade-offs between sustainability and dietary recommendations to increase seafood intake based on health benefits. Introduces the complex nature of the changing global seafood supply, which is important to human nutrition but also raises concerns regarding environmental health, transparency, and human rights. Compares wild and farmed seafood production methods using a perspective grounded in food systems and public health. Examines approaches taken by governments and non-governmental organizations to address challenges in the global seafood supply, and the difficulty involved when focusing on the world's most traded food type. Emphasizes the importance of understanding the many ways seafood production and consumption impacts health, and roles for public health professionals in addressing these issues. Encourages application of critical thinking skills to complex issues through class discussions and written assignments.

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

1. Describe the current balance of wild and farmed seafood production and how this has changed in recent decades
2. Critique the main types of wild and farmed seafood production in terms of sustainability, environmental health, transparency, and equity
3. List the human health benefits of consuming moderate amounts of seafood
4. Analyze strengths and weaknesses of three programs or policies aimed at lessening negative impacts of seafood production
5. Identify two opportunities for public health professionals to support more sustainable and equitable seafood production

Email: jfry3@jhu.edu

Lecture: F 10:00 AM - 11:50 AM

Enrollment: Minimum 10, Maximum 20, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

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**180.662.01 WRITING SCIENTIFIC PAPERS II**

1 credits - Course offered this year - East Baltimore

Silbergeld, Ellen

Enables doctoral students to attain skills in writing successful scientific papers, including dissertations, grant, and papers that are accepted by peer-reviewed journals. Confers and utilizes skills acquired in Quarter 3 course to access and select relevant scientific literature from online information sources for writing. Informs participants on different publication options, including open source journals. Explains NIH requirements for notification and access to data. Through problem based learning and review of successful scientific papers, conveys the elements of successful scientific writing, including grammar, sentence structure, formats, data presentation, citations and acknowledgements. Demonstrates successful response to reviewer comments.

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

1. Use computer-based systems to build an archive of information and references.
2. Recognize the elements of scientific writing, including structure and language, data presentation, and citation management.
3. Critically review literature and identify what makes an effective publication.
4. Read and respond to literature reviews.
5. Explain open source publishing and NIH requirements for access.

Email: esilber2@jhu.edu

Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
EHE PhD students only
Grading Options: Pass/Fail
Prerequisite: Writing scientific papers I
Multi-term with 180.661
Final grade applies to all terms
Will be held in departmental space

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**180.820.01 DOCTORAL THESIS RESEARCH**

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 19 of 118
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Provides an opportunity to actively conduct research in environmental health
Upon successfully completing this course, students will be able to:
  1. Write a publishable manuscript
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

180.830.01 POSTDOCTORAL RESEARCH ENVIRONMENTAL HEALTH SCIENCES (Discontinued)
variable credits - Course offered this year - East Baltimore
Information not required for this course type
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

180.840.01 DOCTORAL SPECIAL STUDIES & RESEARCH
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Provides a forum for students to get feedback on their research ideas and projects. Acquaints students with research of leading environmental health experts.
Upon successfully completing this course, students will be able to:
  1. Identify areas of interest for current and future research
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

180.845.01 DOCTORAL SPECIAL STUDIES AND RESEARCH (Discontinued)
variable credits 0-16 - Course offered this year - East Baltimore
Departmental Faculty
Prepares students to identify and research the central issues in environmental health.
Upon successfully completing this course, students will be able to:
  1. Identify areas of interest for current and future research
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

180.860.01 EHE STUDENT SEMINAR & GRAND ROUNDS
1 credits - Course offered this year - East Baltimore
Departmental Faculty
Provides a forum for students to get feedback on their research and projects. Acquaints students with research of leading environmental health experts.
Upon successfully completing this course, students will be able to:
  1. Discuss and provide feedback on research proposals and projects
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

180.880.01 SPECIAL STUDIES IN ENVIRONMENTAL HEALTH/COMMUNITY OUTREACH (Discontinued)
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. - Course offered this year - East Baltimore
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.

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 20 of 118
Upon successfully completing this course, students will be able to:

Email: mtrush1@jhu.edu
Lecture: T 4:00 PM - 6:00 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for all students;

181.850.01 MHS ESSAY
1 credits - Course offered this year - East Baltimore
Departmental Faculty
Provides the opportunity for the student to work with his/her adviser to formulate, research, finalize, and gain approval of the required essay.
Upon successfully completing this course, students will be able to:

1. Identify and propose solutions to environmental health issues
2. Apply analytical and technical skills to conducting literature reviews
3. Produce a high quality written document

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
The student's adviser serves as course instructor.

182.615.81 AIRBORNE PARTICLES
4 credits - Course offered this year - Internet
Koehler, Kirsten
Describes the basics of airborne particles. Explores properties of gases, particle motion, size statistics, Brownian motion and diffusion, curvilinear motion of particles, particle deposition and clearance in the human respiratory system, filtration, aerosol samplers, and sampling methodology, optical properties and electrical properties of aerosols.
Upon successfully completing this course, students will be able to:

1. Calculate properties of gases, particle motion, size statistics, Brownian motion, and diffusion
2. Analyze particle deposition and clearance in humans
3. Assess particle filtration, aerosol samplers, and sampling
4. Assess the usefulness and limitations of optical and electric methods for aerosol sampling

Email: kkoehle1@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: College physics or consent of instructor

182.622.81 VENTILATION CONTROLS
4 credits - Course offered this year - Internet
Rule, Ana Maria
Covers the principles of industrial ventilation and engineering controls for airborne hazards. Provides competency in general ventilation and industrial ventilation design.
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 dilution ventilation
3. Analyze the performance of ventilation systems
4. Select an 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

Email: arule1@jhu.edu
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 21 of 118
182.631.01 PRINCIPLES OF OCCUPATIONAL SAFETY
2 credits - Course offered this year - East Baltimore
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

Email: eknowle1@jhu.edu
Lecture: F 1:30 PM - 3:20 PM
Enrollment: Minimum 6, Maximum 30, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; Consent required for all students

182.810.01 MSPH FIELD PLACEMENT
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Focuses on a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
MSPH-OEH students in EHE only
Grading Options: Pass/Fail

182.830.01 POSTDOCTORAL RESEARCH ENVIRONMENTAL HEALTH ENGINEERING (Discontinued)
variable credits - Course offered this year - East Baltimore
Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

182.840.01 SCM THESIS RESEARCH (Discontinued)
variable credits 0-16 - Course offered this year - East Baltimore
Departmental Faculty
Provides an opportunity for students to actively conduct research in environmental health.
Upon successfully completing this course, students will be able to:
1. Write a publishable manuscript

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only open for ScM students in EHE
182.845.01 MSPH SPECIAL STUDIES AND RESEARCH
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Prepares students to identify and research the central issues in environmental health.
Upon successfully completing this course, students will be able to:
1. Identify areas of interest for current and future research

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

182.850.01 MSPH ESSAY
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Students work with their adviser to formulate, research, finalize, and gain approval of their master’s essay, which is based on a required Independent Professional Project (IPP). Students write the essay as a professional report summarizing the findings of the IPP. This represents a substantive application of professional technical skills through the process of collecting and summarizing data and reviewing appropriate literature.
Upon successfully completing this course, students will be able to:
1. Augment their training by pursuing an independent project within their particular area of interest or specialized competency
2. Prepare a professional report on their findings
3. Present in an oral seminar setting

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for some students; Course only available to MSPH EHE students
The student’s adviser serves as course instructor. Successful completion of the MSPH essay is required for graduation from the program.

183.820.01 DOCTORAL THESIS RESEARCH (Discontinued)
variable credits 0-16 - Course offered this year - East Baltimore
Departmental Faculty
Provides an opportunity to actively conduct research in environmental health.
Upon successfully completing this course, students will be able to:
1. Write a publishable manuscript

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Doctoral students will register for this course after successfully passing the School-wide preliminary oral exam

183.825.01 SCM THESIS RESEARCH
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Provides an opportunity to actively conduct research in environmental health
Upon successfully completing this course, students will be able to:
1. Write a publishable manuscript

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

183.830.01 POSTDOCTORAL RESEARCH PHYSIOLOGY (Discontinued)
variable credits - Course offered this year - East Baltimore
Information not required for this course type
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

183.840.01 SCM SPECIAL STUDIES & RESEARCH
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Provides a forum for students to receive feedback on research ideas and projects. ScM students enroll in this course prior to passing the written comprehensive exam.

Upon successfully completing this course, students will be able to:
1. Identify areas of interest for current and future research

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

184.830.01 POSTDOCTORAL RESEARCH ENVIRONMENTAL HEALTH AND ENGINEERING
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Offers an opportunity for postdoctoral students to conduct research and write papers for publication

Upon successfully completing this course, students will be able to:
1. Conduct post-graduate research and write papers for publication

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

185.801.01 EXPOSURE SCIENCES & ENVIRONMENTAL EPI JOURNAL CLUB
1 credits - Course offered this year - East Baltimore
Buckley, Jessie; Smith, Genee
Provides a forum for students and multiple faculty to keep up-to-date on the latest environmental health research and get feedback on their research ideas and projects. Emphasizes active participation in discussions of the peer-reviewed literature, the most up-to-date research, and the process of research development.

Upon successfully completing this course, students will be able to:
1. Critique peer-reviewed manuscripts
2. Explain the peer review process
3. Discuss and provide feedback on research ideas and projects

Email: genee.smith@jhu.edu

Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for some students; Consent is required for students not in EHE
To be held in departmental space. Method of Assessment varies by term. Student assessment is a Self-Assessment unless the student is required to present that term.

185.805.01 TOXICOLOGY, PHYSIOLOGY & MOLECULAR MECHANISMS JOURNAL CLUB & SEMINAR
1 credits - Course offered this year - East Baltimore
Kohr, Mark; Tang, Winnie Wan-yee
Provides a platform for doctoral and postdoctoral students (postdoctoral fellows) and faculty to present and discuss impactful scientific papers from the current literature that deal with mechanisms underlying environmental disease along with accompanying methods. Papers are organized around a term-specific theme selected by the course directors.

Upon successfully completing this course, students will be able to:
1. Critically read and evaluate scientific papers, and identify criteria for assessing the quality of the science.
2. Analyze and assess new methodological approaches in the areas of biochemistry, physiology, biophysics, cell and molecular biology, genomics, epigenetics, proteomics, metabolomics, etc.

3. Evaluate the pathophysiologic pathways of environmental disease at the molecular, cellular, tissue, whole organ-whole animal, and individual-to-population levels.

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 24 of 118
4. Give a high quality presentation that effectively conveys scientific results.

Email: mkohr1@jhu.edu

Lecture: M 4:00 PM - 5:00 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

Consent required for some students; yes, for students not in EHE

Prerequisite:

Held in departmental space

**186.800.01 MPH CAPSTONE: ENVIRONMENTAL HEALTH & ENGINEERING**

2 credits - Course offered this year - East Baltimore

Departmental Faculty

The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

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

1. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: 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.

**186.895.01 MPH PRACTICUM: EHE**

variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - East Baltimore

Departmental Faculty

The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

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

1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

**187.610.01 PUBLIC HEALTH TOXICOLOGY**

4 credits - Course offered this year - East Baltimore

Trush, Michael; Yager, James

Students examine basic concepts of toxicology as they apply to the effects of environmental agents, e.g. chemicals, metals, on public health. We discuss the 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. Students focus on the application of these concepts to the understanding and prevention of morbidity and mortality resulting from environmental exposures to toxic substances through a case study format.

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

1. Describe the chemical properties and the biological processes which modulate the toxicokinetics of chemical agents of public health importance
2. Explain the significance of biotransformation reactions as a determinant of the toxicokinetic and toxicodynamic activities of chemicals
3. Describe molecular, cellular and pathophysiological responses resulting from exposure to chemical agents relevant to human health
4. Identify underlying susceptibility factors which contribute to the ability of chemicals to elicit bioeffects which contribute to human disease
5. Explain the science underlying testing for the ability of chemicals to elicit adverse human health effects
6. Put into perspective the role of toxicology in the risk assessment process
7. Discuss in depth the toxicology of selected organs and agents
FIRST TERM COURSE SCHEDULE 2017-2018 – August 28 - October 20, 2017

Email: mtrush1@jhu.edu
Lecture: W F 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Background in organic chemistry and/or biochemistry and cell biology useful.

187.621.01 PUBLIC HEALTH TOXICOLOGY: ADVANCED TOPICS *(Discontinued)*
1 credits - Course offered this year - East Baltimore
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

Email: jbressl1@jhu.edu
Lecture: M 4:00 PM - 5:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only for PhD students in a laboratory based graduate program. Students must register for all four terms of this course.
Grading Options: Pass/Fail

187.820.01 THESIS RESEARCH TOXICOLOGICAL SCIENCES *(Discontinued)*
variable credits - Course offered this year - East Baltimore

Information not required for this course type
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

187.840.01 SPECIAL STUDIES AND RESEARCH TOXICOLOGICAL SCIENCES *(Discontinued)*
variable credits - Course offered this year - East Baltimore

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

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

188.680.01 FUNDAMENTALS OF OCCUPATIONAL HEALTH
3 credits - Course not offered until 2018 - 2019 - East Baltimore
Cadorette, Maureen
Introduces selected important topics in occupational health through lectures, readings, and class discussion. Provides an overview of the field, providing a survey of the history of occupational health; analysis of case studies in the history of asbestos, coal workers pneumoconiosis, and uranium mining; identification of the burden of occupational injuries and diseases; application of the toxicologic paradigm to activities in occupational health; analysis of occupational health hazards; identify the association between social, behavioral, and organizational factors and health outcomes in the workplace; identification of legal, regulatory, and ethical issues; analysis and research in clinical and non-clinical emerging issues in occupational health; and an introduction to the concepts of occupational health in developing countries.

Upon successfully completing this course, students will be able to:
1. Describe some of the historical aspects of occupational health and safety (OHS) and define how these events helped to shape OHS today
2. Discuss the societal costs of occupational illnesses and injuries and the importance of prevention in the field of OHS
3. Identify the association between social, behavioral, and organizational factors and health outcomes in the workplace

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 26 of 118
4. Illustrate how the concepts of exposure assessment, the hierarchy of controls, biological monitoring, medical screening and surveillance are used to prevent occupational injuries and illnesses

5. Determine the contributions of the core OHS disciplines to the multi-disciplinary OHS team

6. Discuss and compare the key laws that govern the workplace and the executive agencies that are responsible for the regulation and enforcement of these laws

7. Assess the complex environment in which the occupational health professional works

8. Judge the rationale for health promotion/improvement activities in the workplace

9. Compare and contrast OHS as practiced in the U.S. to OHS practiced in international workplaces

Email: mcadore1@jhu.edu

Lecture: T TH 3:30 PM - 4:50 PM

Enrollment: Minimum 6, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

188.680.81 FUNDAMENTALS OF OCCUPATIONAL HEALTH
3 credits - Course offered this year - Internet
Cadorette, Maureen
Introduces selected important topics in occupational health through lectures, readings, and class discussion. Provides an overview of the field, including a survey of the history of occupational health; analysis of case studies in the history of asbestos, coal workers pneumoconiosis, and uranium mining; identification of the burden of occupational injuries and diseases; application of the toxicologic paradigm to activities in occupational health; analysis of occupational health hazards; identification of the association between social, behavioral, and organizational factors and health outcomes in the workplace; and an introduction to the concepts of occupational health in developing countries.

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

1. Describe some of the historical aspects of occupational health and safety (OHS) and define how these events helped to shape OHS today

2. Discuss the societal costs of occupational illnesses and injuries and the importance of prevention in the field of OHS

3. Identify the association between social, behavioral, and organizational factors and health outcomes in the workplace

4. Illustrate how the concepts of exposure assessment, the hierarchy of controls, biological monitoring, medical screening and surveillance are used to prevent occupational injuries and illnesses

5. Determine the contributions of the core OHS disciplines to the multi-disciplinary OHS team

6. Discuss and compare the key laws that govern the workplace and the executive agencies that are responsible for the regulation and enforcement of these laws

7. Assess the complex environment in which the occupational health professional works

8. Judge the rationale for health promotion/improvement activities in the workplace

9. Compare and contrast OHS as practiced in the U.S. to OHS practiced in international workplaces

Email: mcadore1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Prerequisite: Introduction to Online Learning

188.694.81 HEALTH OF VULNERABLE WORKER POPULATIONS
3 credits - Course offered this year - Internet
Agnew, Jacqueline; 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.

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. Describe the application of research findings to the practice of health professionals, including safety specialists, nurses, physicians, health educators, and others
3. Examine the contribution of workplace exposures to home environment contamination and implications for workers and their families
4. Analyze the occupational health needs of a specific vulnerable worker population
5. Prepare written and oral testimony to advocate for the needs of a vulnerable worker group

Email: jagnew@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning

188.810.01 FIELD PLACEMENT OCCUPATIONAL AND ENVIRONMENTAL HEALTH (Discontinued)
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

188.820.01 THESIS RESEARCH OCCUPATIONAL AND ENVIRONMENTAL HEALTH (Discontinued)
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

188.830.01 POSTDOCTORAL RESEARCH OCCUPATIONAL AND ENVIRONMENTAL HEALTH (Discontinued)
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

188.840.01 SPECIAL STUDIES AND RESEARCH ENVIRONMENTAL HEALTH & ENGINEERING
variable credits 1-22 - Course offered this year - East Baltimore
Departmental Faculty
Prepares students to identify and research the central issues in environmental health
Upon successfully completing this course, students will be able to:

1. Identify areas of interest for current and future research

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

Epidemiology

340.612.01 EPIDEMIOLOGIC BASIS FOR TUBERCULOSIS CONTROL
2 credits - Course offered this year - East Baltimore

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 28 of 118
Chaisson, Richard; Golub, Jonathan

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. Lectures, Group Projects and review of the tuberculosis literature are primary components.

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

Email: jegolub@jhsph.edu

Lecture: T 1:30 PM - 3:20 PM

Enrollment: Minimum 6, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Jointly offered with IH

340.616.01 EPIDEMIOLOGY OF AGING

3 credits - Course offered this year - East Baltimore

Gross, Alden

Addresses the rapidly increasing need for specialized knowledge among epidemiologists in order to effectively promote the health of the aging society in the US (in 2020, 20% of the US population will be 65 or older). Introduces the epidemiology of aging and age-related disorders, including overviews of the public health impact of an aging society and the demographics and biology of aging. Covers the descriptive and analytic epidemiology of prevalent chronic conditions in the aged, methodologic challenges essential to consider in research on older adults, and strategies for prevention of age-related disorders.

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

1. Discuss and evaluate the public health significance and challenges of an aging population and the associated of changes that make health issues for older persons unique.
2. Describe the epidemiology of major geriatric syndromes, including physical disability, falls, and cognitive decline and their public health implications
3. Discuss opportunities for prevention of diseases and syndromes in the context of the aging phenotypes of older adults
4. Integrate general epidemiologic methods and specific gerontology knowledge when evaluating epidemiological literature pertaining to older adults.

Email: agross14@jhu.edu

Lecture: M W 1:30 PM - 2:50 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Consent required for some students; Auditors only are required to obtain consent

Prerequisite: 1 graduate course each in Epidemiology and Biostatistics (340.601 & 140.621 recommended).

340.616.81 EPIDEMIOLOGY OF AGING (Discontinued)

3 credits - Course offered this year - Internet

Gross, Alden

Addresses the rapidly increasing need for specialized knowledge among epidemiologists in order to effectively promote the health of the aging society in the US (in 2020, 20% of the US population will be 65 or older). Introduces the epidemiology of aging and age-related disorders, including overviews of the public health impact of an aging society and the demographics and biology of aging. Covers the descriptive and analytic epidemiology of prevalent chronic conditions in the aged, methodologic challenges essential to consider in research on older adults, and strategies for prevention of age-related disorders.

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

1. Discuss and evaluate the public health significance and challenges of an aging population and the associated of changes that make health issues for older persons unique.
2. Describe the epidemiology of major geriatric syndromes, including physical disability, falls, and cognitive decline and their public health implications
3. Discuss opportunities for prevention of diseases and syndromes in the context of the aging phenotypes of older adults.

4. Integrate general epidemiologic methods and specific gerontology knowledge when evaluating epidemiological literature pertaining to older adults.

Email: agross14@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Consent required for some students; Auditors only are required to obtain consent

Prerequisite: 1 graduate course each in Epidemiology and Biostatistics (340.601 & 140.621 recommended).

Student who are unable to attend the live talk sessions will be asked to listen to the recorded version of the talk(s) and answer assigned questions.

340.645.81 INTRODUCTION TO CLINICAL TRIALS

3 credits - Course offered this year - Internet

Holbrook, Janet; Mayo-Wilson, Evan

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

Email: jholbro1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Prerequisite: Introduction to Online Learning and one of the following: 340.601, 340.721 or 340.751.

The course 340.613.11 is a subset of this course and may present duplicate information.

340.646.01 EPIDEMIOLOGY AND PUBLIC HEALTH IMPACT OF HIV AND AIDS

4 credits - Course offered this year - East Baltimore

Farzadegan, Homayoon

Provides an overview of the historical and public health aspects of the AIDS epidemic with review and analysis of virology, immunology, clinical and laboratory manifestations, legal issues, clinical management, coinfection, 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 economics of HIV treatments

5. Analyze vertical transmission of HIV from pregnant women to their newborns in the U.S. and other parts of the world
6. Analyze intervention modalities used to interrupt vertical transmission of HIV
7. 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

8. Identify and discuss several HIV-1 co-infection with other important infectious agents
9. Compare risk factors for HIV infection and the behavioral interventions for prevention of HIV infection

Email: hfarzad1@jhu.edu

Lecture: T TH 8:30 AM - 10:20 AM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: There are no prerequisites for this course. However, an understanding of basic science concepts and biology will be assumed. Basic epidemiologic principles and other quantitative skills will prove handy in understanding the distribution of the disease and in interpreting research findings.

**340.654.81 EPIDEMIOLOGY AND NATURAL HISTORY OF HUMAN VIRAL INFECTIONS**

6 credits - Course offered this year - Internet
Farzadegan, Homayoon

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 oncogenesis and viral infections, such as Hepatitis/liver cancer, HPV/cervical cancer, EBV/Burkitt's lymphoma and HTLV/leukemia. Covers the biology and natural history of major viral families (such as retroviruses, rabies, and others). Also covers Prion diseases, which are similar to, but not viral infections.

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

1. Describe the common structures and functions of viruses and their components, including genetics.
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

Email: hfarzad1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.
Content similar to 260.623-624

**340.660.01 PRACTICAL SKILLS IN CONDUCTING RESEARCH IN CLINICAL EPIDEMIOLOGY AND INVESTIGATION**

3 credits - Course offered this year - East Baltimore
Jacobson, Lisa; McKay, Heather

Emphasizes the practical aspects of conducting and organizing a clinical research project. Focuses on developing skills to develop and manage a research protocol, monitor the data collection, manage the data, and disseminate results. Lectures cover the basic components of a clinical research team, the components of good clinical research practice, the responsibilities, expertise and tasks that each research team member is expected to perform, and organizational, logistical and attitudinal issues that need to be addressed when creating an effective research group. Additionally, explores translational research and the kinds of issues that arise when multi-disciplinary teams are brought together.

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 research 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. Distinguish and identify reporting requirements for clinical studies

Email: ljacobst@jhu.edu
Lecture: T TH 10:30 AM - 11:50 AM

Enrollment: Minimum 5, Maximum 40, Waitlist Enabled: Yes
Restricted to graduate students.
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; Please contact Dr. Jacobson for consent.
Prerequisite: 340.752 Epidemiologic Methods II and 140.622 Statistical Methods in Public Health or 140.652 Methods in Biostatistics

340.687.01 EPIDEMIOLOGY OF KIDNEY DISEASE
2 credits - Course offered this year - East Baltimore
Appel, Lawrence; Fadrowski, Jeffrey
Since kidney disease is characterized as an epidemic worldwide, and the prevalence continues to rise, learners study kidney disease comprehensively, emphasizing chronic and end-stage kidney disease. In addition to the basics of kidney disease epidemiology, highlights controversies and areas of ongoing and future research by reviewing findings from cohort studies, clinical trials, and landmark studies. Lectures emphasize methodological issues specific to the study of kidney disease.

Upon successfully completing this course, students will be able to:
1. Assess the scope of kidney disease in the U.S. and worldwide in terms of prevalence, causes, and societal- and patient-level impacts
2. Identify common co-morbidities associated with chronic and end-stage kidney disease and understand their impact
3. Recognize and problem-solve methodological challenges related to the study of kidney disease and its progression
4. Describe effective strategies to slow chronic kidney disease progression and current controversies due to lack of evidence and/or limitations in existing studies
5. Review trends in kidney transplantation/acute kidney injury and the evidence for current management practices

Email: lappel@jhsph.edu
Lecture: T 1:30 PM - 3:20 PM
Enrollment: Minimum 8, Maximum 40, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail

340.696.01 SPATIAL ANALYSIS I: ARCGIS
3 credits - Course offered this year - East Baltimore
Shields, Timothy
Examines the use of ArcGIS Geographic Information System (GIS) software as a tool for integrating, manipulating, and displaying public health-related spatial data. Covers mapping, geocoding, and manipulations related to data structures and topology. Introduces the spatial science paradigm: Spatial Data, GIS, and Spatial Statistics. Uses selected case studies to demonstrate concepts along this paradigm. Focuses on using GIS to generate and refine hypotheses about public health-related spatial data in preparation for a formal statistical analysis. Although not a required part of the curriculum, discusses topics related to spatial statistical modeling throughout. Includes both lecture and lab formats with GIS concepts and software specific details demonstrated during the lab portions.

Upon successfully completing this course, students will be able to:
1. Conduct GIS spatial analysis by inputting, manipulating, querying, and displaying spatial data with use of the ArcGIS software
2. Perform Geocoding and create appropriate maps for the different kinds of spatial data
3. Identify the key differences between a GIS spatial analysis and a spatial statistical analysis

Email: tshields@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

Jointly offered with BIOSTAT
The use of personal laptops to follow along is strongly encouraged. A time restricted free version of the software is available. Limit number of laptops are available during class to be shared when needed. Replaces course Spatial Analysis and GIS 1, 140.662. Do not take the course if you have completed 140.662.

340.721.60 EPIDEMIOLOGIC INFERENCE IN PUBLIC HEALTH I
5 credits - Course offered this year - East Baltimore
Celentano, David; Deal, Jennifer
Introduces principles and methods of epidemiologic investigation of disease and other health states. Presents different types of study designs, including randomized trials, cohort and case-control studies; measurement of exposures and outcomes; risk estimation; surveillance; program evaluation; and causal inference. Links epidemiologic inferences with the development of policy. Activities provide experience in applying epidemiologic methods, interpreting findings, and drawing inferences.

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

1. Define epidemiology, describe how it is used in public health, and recognize how exposure, disease and health states may vary based on person, place and time
2. Identify, calculate and interpret measures of disease frequency, validity and reliability, and associations (relative and absolute) as appropriate to the research question and study design
3. Describe and compare and contrast the strengths and weaknesses (biases) of epidemiologic study designs, including ecologic, cross-sectional, case-control, cohort, and clinical trials
4. Explain the role of epidemiologic methods and inferences in determining the etiology of disease and other health states (e.g., aging, injury, mental health) in preventing disease and improving health
5. Summarize how epidemiologic methods and inferences are used in public health practice, including in conducting outbreak investigation and surveillance, evaluating screening programs and health interventions, and in developing health and environmental policy

Email: dcelent1@jhu.edu

Lecture: M W 10:30 AM - 11:20 AM
Lab Section: 01 M 8:30 AM-10:00 AM
Lab Section: 02 M 8:30 AM-10:00 AM
Lab Section: 03 M 8:30 AM-10:00 AM
Lab Section: 04 W 8:30 AM-10:00 AM
Lab Section: 05 W 8:30 AM-10:00 AM
Lab Section: 06 W 8:30 AM-10:00 AM
Special Lab Number: 340.921
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: None

This class blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet 2 times per week. Students are expected to spend 1.25 hours per week on class work, in addition to regular homework.

Learning Materials:

- (Book) Epidemiology
  Gordis, Leon
  Amazon $46.00

340.728.01 ADVANCED METHODS FOR DESIGN AND ANALYSIS OF COHORT STUDIES
5 credits - Course offered this year - East Baltimore

Cox, Christopher; Munoz, Alvaro

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; 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; methods for the analysis of interventions in observational studies: confounding by indication, marginal structural models for individual effectiveness; methods for estimating population effectiveness; and methods to jointly analyze longitudinal and survival data.

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

Email: amunoz@jhu.edu
Lecture: T TH 8:30 AM - 10:20 AM
Lecture: M 8:30 AM - 9:20 AM
Enrollment: Minimum 5, Maximum 50, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 340.753 and 140.623 or 653. Knowledge of statistical package.

340.731.01 PRINCIPLES OF GENETIC EPIDEMIOLOGY 1
4 credits - Course offered this year - East Baltimore
Duggal, Priya
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

Email: pduggal@jhu.edu
Lecture: T TH 9:00 AM - 10:20 AM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: College-level biology

340.731.81 PRINCIPLES OF GENETIC EPIDEMIOLOGY 1 (Discontinued)
4 credits - Course offered this year - Internet
Duggal, Priya
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

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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

Email: pduggal@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning and College-level biology or genetics.

340.751.01 EPIDEMIOLOGIC METHODS 1
5 credits - Course offered this year - East Baltimore
McAdams Demarco, Mara; Sutcliffe, Catherine
First course in the Epidemiologic Methods sequence: introduces students to the principles and concepts used in epidemiologic research. Presents material in the context of an epidemiological framework with three major areas: populations and an introduction to study designs; measurement, including measures of accuracy and disease occurrence; and methods used for comparing populations. Synthesis lectures illustrate how these elements come together in modern epidemiological research. Laboratory exercises and the Mini-Project provide experience with applying concepts and calculations to problems drawn from real epidemiological data and published literature.
Upon successfully completing this course, students will be able to:
1 Describe key features of populations in time in epidemiologic research
2 Identify and distinguish basic epidemiological study designs
3 Recognize important characteristics associated with measurement in epidemiologic studies
4 Distinguish and calculate validity and reliability measures that quantify the accuracy of measurement
5 Describe types, purposes, and key components of surveillance systems
6 Select, calculate, compare, and interpret basic population health measures and measures of association for comparing population health measures.

Email: mara@jhu.edu
Lecture: M W F 8:30 AM - 9:50 AM
Lab Section: 01 M W 10:00 AM-11:50 AM
Lab Section: 02 M W 10:00 AM-11:50 AM
Lab Section: 03 M F 10:00 AM-11:50 AM
Lab Section: 04 M F 10:00 AM-11:50 AM
Special Lab Number: 340.951
Enrollment: Minimum 30, No maximum enrollment required, Waitlist Enabled: No
No auditors permitted.
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for special students and non-JHSPH students.
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 "A" 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.

340.800.01 MPH CAPSTONE EPIDEMIOLOGY
2 credits Must have 1-4 credits per term for two terms. - Course offered this year - East Baltimore
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Departmental Faculty

The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

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

1 Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

340.820.01 THESIS RESEARCH EPIDEMIOLOGY
variable credits - Course offered this year - East Baltimore

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

1 Write a publishable quality manuscript

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

340.830.01 POSTDOCTORAL RESEARCH EPIDEMIOLOGY
variable credits - Course offered this year - East Baltimore

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

1 Conduct post-graduate research and write papers for publication

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

340.840.01 SPECIAL STUDIES AND RESEARCH EPIDEMIOLOGY
variable credits - Course offered this year - East Baltimore

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

1 Become proficient in field of research; perform literature reviews; or conduct secondary data analysis at an advanced level

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

340.853.01 FIRST YEAR EPIDEMIOLOGY DOCTORAL SEMINAR
1 credits - Course offered this year - East Baltimore

Coresh, Josef; Selvin, Elizabeth

Introduces current discussion, controversies, and applications of epidemiology. Reviews landmark papers and current literature and provides guided discussions of the materials. Focuses on exploring key paradigms that have influenced the field of epidemiology. Includes discussion of current trends influencing epidemiologic research and training, mentorship, controversies in the assessment of populations and outcomes, individual-level vs. population-health, and the relationship of epidemiology to the health care system.
Upon successfully completing this course, students will be able to:
1. Identify and discuss current controversies in epidemiology
2. Articulate the importance and context for key papers in the field
3. Explain key paradigms that have influenced the field of epidemiology

Email: eselvin@jhu.edu
Lecture: T 4:00 PM - 5:00 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to first year PhD / ScD student in the Department of Epidemiology
Grading Options: Pass/Fail
Prerequisite: Concurrent enrollment in 340.751.
The course is offered terms 1-3. Students are required to take all three terms during their first year of enrollment.

340.860.01 CURRENT TOPICS IN EPIDEMIOLOGIC RESEARCH
1 credits - Course offered this year - East Baltimore
Camarata, Laura
Provides an overview of current research in the Department and in the field of epidemiology, and offers an opportunity for discussion and clarification of epidemiologic methods as applied in research settings.
Upon successfully completing this course, students will be able to:
1. Discuss current epidemiologic research being conducted by or in collaboration with the JHSPH Department of Epidemiology
2. Interact with Department faculty and epidemiologic researchers
3. Discuss topics related to professional development as an epidemiologist
Email: lcamarat@jhsph.edu
Lecture: F 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Prerequisite:

340.863.01 DOCTORAL SEMINARS IN EPIDEMIOLOGY
3 credits - Course offered this year - East Baltimore
Celentano, David; Mehta, Shruti
Provides a forum in which the doctoral students present and discuss papers on topics relevant to epidemiologic principles and practice. Topics include issues in measurement, causal reasoning, confounding, and multilevel modeling. Faculty guides 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
Email: smehta@jhu.edu
Lecture: T 3:30 PM - 6:20 PM
Enrollment: Minimum 5, Maximum 30, Waitlist Enabled: Yes
Restricted to second year doctoral students in Epidemiology
Grading Options: Pass/Fail
Prerequisite: 340.751-753 and the Epi department written comprehensive exam
Course will end earlier than scheduled.

340.871.01 WELCH CENTER RESEARCH SEMINAR
1 credits - Course offered this year - East Baltimore
Selvin, Elizabeth
Students, postdoctoral fellows, and faculty present scientific papers from the current and/or classic literature dealing with epidemiologic research, with a focus on cardiovascular and clinical epidemiology. Emphasizes the ability to critically evaluate scientific papers, presentation skills, and open discussion. Using a journal-club format in which one or more papers are distributed in advance, participants are expected to read the paper in advance, post at least 2 comments or questions on CoursePlus by 11:59 pm the night before the session, and discuss the assigned material. Media reporting/coverage in the lay and medical press is explicitly discussed. Provides a forum for the discussion of the strengths and weaknesses of epidemiologic methods and appropriate use of statistical methods for various study designs.

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

Email: eselvin@jhu.edu

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

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

MHS, ScM, DrPH, PhD, and ScD students in the Department of Epidemiology only.

Grading Options: Pass/Fail

Consent required for some students; Course is restricted to current MHS, ScM, DrPH, PhD, and ScD degree students in the Department of Epidemiology only.

Prerequisite:

Email: eselvin@jhu.edu

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

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

MHS, ScM, DrPH, PhD, and ScD students in the Department of Epidemiology only.

Grading Options: Pass/Fail

Consent required for some students; Course is restricted to current MHS, ScM, DrPH, PhD, and ScD degree students in the Department of Epidemiology only.

Prerequisite:

Students may take this course multiple times.

340.895.01 MPH PRACTICUM: EPIDEMIOLOGY

variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - East Baltimore

Departmental Faculty

The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

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

1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

Extradenartmental

550.001.01 ENGLISH FOR ACADEMIC PURPOSES I

0 credits - Course offered this year - East Baltimore

Hong Smith, Vicki

This course is mainly for students whose first language is not American English and/or whose higher education experience in U.S. institutions is limited. The course includes basic formats and expectations, cultural and linguistic sensitivity, correct source usage to avoid plagiarism, documentation styles and application, global and local writing issues, common grammar issues and other relevant issues in academic communication in English.

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 brainstorming, 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

Email: vhongs@jhsph.edu

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Lecture: F 3:00 PM - 6:00 PM
Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; Consent of Student Affairs required. Please email Contact person.
Multi-term with 550.001
Final grade applies to all terms

550.001.01 ENGLISH FOR ACADEMIC PURPOSES I
0 credits - Course offered this year - East Baltimore
Hong Smith, Vicki
This course is mainly for students whose first language is not American English and/or whose higher education experience in U.S. institutions is limited. The course includes basic formats and expectations, cultural and linguistic sensitivity, correct source usage to avoid plagiarism, documentation styles and application, global and local writing issues, common grammar issues and other relevant issues in academic communication in English.

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 brainstorming, 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

Email: vhongs@jhsph.edu

Lecture: W 3:30 PM - 5:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
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.
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

550.600.01 RESPONSIBLE CONDUCT OF RESEARCH
1 credits - Course offered this year - East Baltimore
Evans, Janice
Fosters the responsible conduct of scientific research using a combination of lectures, discussion and analysis of case studies. Topics include: data management, conflict of interest, scientific misconduct, questionable research practices, responsible authorship, peer review, collaborations with peers and industry, trainee-mentor relationships, research ethics and regulatory requirements of the conduct of animal and human research, and the scientist as a responsible member of society.

Upon successfully completing this course, students will be able to:
1. Explain the regulatory requirements that govern the modern research environment
2. Discuss the expectations for adherence to the ethical principles in the conduct of research
3. Apply ethical and regulatory principles to the trainee’s own current and future research program

Email: jevans6@jhu.edu

Lecture: F 3:00 PM - 6:00 PM
Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; Consent of Student Affairs required. Please email Contact person.
Multi-term with 550.002
Final grade applies to all terms

550.603.81 FUNDAMENTALS OF IMMUNOLOGY
1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 39 of 118
Internet

Scott, Alan

Introduces the major molecular and cellular components of the immune system and provides a broad understanding of the biological concepts associated with the induction and regulation of innate and adaptive immune responses. Explores major mechanistic topic areas that include the innate recognition of pathogens, the molecular nature of antigens and antigen presentation; molecular basis for antibody and T-cell receptor structure and diversity; cytokine signaling in immune activation, T cell lineage commitment, cellular basis for antibody production, cellular basis for T cell activation and cellular immunity, and central and peripheral tolerance.

Upon successfully completing this course, students will be able to:
1. Categorize and differentiate pattern recognition receptors, their ligands and signal transduction events
2. Examine the relationships between structure and function for antibodies, T cell receptors and MHC molecules
3. Examine the genetic, molecular and cellular basis for the antigen specificity of antibody and T cell receptors and the role that receptor specific has in pathogen recognition and tolerance to self
4. Articulate the roles cytokines play in the differentiation, activation and regulation of immune responses
5. Examine the cellular and molecular basis for T cell development and selection
6. Examine the cellular and molecular basis for antibody production and T cell-mediated immunity

Email: ascott5@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Prerequisite: Academic backgrounds in relevant scientific areas such as chemistry/biochemistry, biology/cell biology/molecular biology, environmental sciences, microbiology/immunology or biomedical engineering.

Jointly offered with BIOCHEM,EHE

It should be emphasized that only students with a background the the basic cellular and molecular science will optimally profit from this course. It would be inappropriate for students without such backgrounds.

Learning Materials:
- (Book) Immunobiology
  Murphy, Kenneth
  Amazon $125.00
  2017

550.609.01 LIFE AND DEATH IN CHARM CITY: HISTORIES OF PUBLIC HEALTH IN BALTIMORE, 1750 TO THE PRESENT

3 credits - Course offered this year - East Baltimore

Mooney, Graham

Critically explores a range of important topics in the history of public health in Baltimore from the mid-18th century to the present, including: migration and health; sewers and water supply; infectious disease control (for example, tuberculosis and STDs); housing and lead poisoning; rodent control. Recurrent themes are racial inequality, the geography of poverty and the multiple challenges of urban government. Focuses on the city of Baltimore, but the issues discussed are placed in their wider national and international contexts and take into account broad historical developments in the theory and practice of public health.

Upon successfully completing this course, students will be able to:
1. Describe a variety of key public health issues in Baltimore between 1750-2000
2. Discuss and appreciate the historical origins of some of Baltimore’s current public health challenges
3. Assess the impact of policy interventions on the health of Baltimore’s population
4. Critically discuss the changing relationship between local, state and federal agencies (governmental and non-governmental) in the formation, implementation and evaluation of public health interventions in Baltimore
5. Locate, analyze and interpret qualitative and quantitative primary source materials (such as published and unpublished government documents, newspaper reports, maps and images)

Email: gmooney3@jhmi.edu

Lecture: M W 10:30 AM - 11:50 AM

Enrollment: Minimum 5, Maximum 30, Waitlist Enabled: Yes

Grading Options: Letter Grade or Pass/Fail

Prerequisite:
550.630.01 PUBLIC HEALTH BIOLOGY
3 credits - Course offered this year - East Baltimore
Zirkin, Barry
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

Email: brzirkin@jhu.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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.

550.631.81 BIOLOGICAL BASIS OF PUBLIC HEALTH
3 credits - Course offered this year - Internet
Ketner, Gary; Strickland, Paul; Zirkin, Barry
Discusses molecular, biochemical, cellular and immunological methodology and approaches for the mechanistic understanding, treatment and prevention of human diseases, and for understanding disease susceptibility. The focus will be on the application of biological methods and approaches to such critical issues as infectious disease, cancer, neurodegenerative disease, COPD, environmental toxicant effects on early development, and reproductive anomalies and their treatment.

Upon successfully completing this course, students will be able to:
1. Analyze the ways in which biochemical, molecular and cellular tools are applied to understand, treat, and prevent human diseases and conditions
2. Assess the role of genetic determinants in human disease and disease susceptibility
3. Critique how specific biological tools have been or can be utilized to treat and prevent human disease
4. Apply biological principles and tools to the creation of solutions to existing or potential public health threats

Email: brzirkin@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: A strong college-level background in the biological sciences is required
Jointly offered with BIOCHEM, EHE, MMI

550.714.81 ANALYSIS OF ELECTRONIC HEALTH RECORD DATA
3 credits - Course offered this year - Internet
Lau, Brandyn
Introduces students to concepts, methods, and issues related to the application of analytics to Electronic Health Record (EHR) data. Covers the use of EHR data to define and identify populations and sub-populations of patients, evaluate common metrics in health care, and improve patient safety and care quality. Emphasizes the use of EHR data in hospital settings.

Upon successfully completing this course, students will be able to:
1. Translate a high-level data request into a well-specified request that a programmer could implement
2. Identify privacy risks in a data request
Identify information systems and data sources required to fulfill a data request
4 Identify the IDs that need to be reconciled in order to fulfill a request
5 Identify semantic threats from the component data systems
6 Describe the architecture of an EHR-based query-fulfilment environment

Email: blau2@jhmi.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; Consent required for all students
Jointly offered with ME

Learning Materials:
- (Book) Biomedical Informatics Computer Applications in Health Care and Biomedicine
  Shortliffe, Edward H.
  Springer $0.00
- (Book) The Information System Consultant's Handbook Systems Analysis and Design
  Davis, William S.
  CRC Press $0.00

550.800.94 MPH CAPSTONE EXTRADEPARTMENTAL
2 credits - Course offered this year - India
Departmental Faculty
The MPH capstone is an opportunity for students to work on public health practice projects that are of particular interest to
them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that
simulates a professional practice experience.
Upon successfully completing this course, students will be able to:
1 Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that
approximates a professional practice experience

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Only students enrolled in the MPH program with IIHMR, Jaipur are permitted in this section
Grading Options: Pass/Fail
Prerequisite: All other MPH core requirements must be taken before or concurrently with the capstone project.
This section is offered in Jaipur, India

550.845.20 COMPREHENSIVE OR PRELIMINARY ORAL EXAM FOR PART TIME INTERNATIONAL DRPH STUDENTS
2 credits - Course offered this year - East Baltimore
Departmental Faculty
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 10, No maximum enrollment required, Waitlist Enabled: No
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.
Grading Options: 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.

550.850.01 MPH MBA INTERNSHIP

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 42 of 118
12 credits - Course offered this year - East Baltimore

MPH MBA Internship

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

1. Articulate how they have applied both MPH and MBA core principles in an applied professional setting

Enrollment: Minimum 1, Maximum 10, Waitlist Enabled: Yes

Grading Options: Pass/Fail

550.853.01 SEMINAR FOR MPH CONCENTRATION IN SOCIAL AND BEHAVIORAL SCIENCES I

1 credits - Course offered this year - East Baltimore

Bowie, Janice; Denison, Julie

Introduces students to research and practice activities related to social and behavioral sciences at JHU, and also introduces students to key concepts and tools needed to successfully complete a Capstone Project related to social and behavioral sciences.

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

1. Describe the steps in completing different types of Capstone Projects related to social and behavioral sciences (grant proposal, comprehensive literature review, plan for health behavior intervention, plan for program evaluation, formative research protocol, research project)
2. Access the information and technical support needed to successfully complete the different types of Capstone Projects

Email: jbowie2@jhu.edu

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

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

Prerequisite: None

Jointly offered with HBS,IH

550.860.82 ACADEMIC & RESEARCH ETHICS AT JHSPH

0 credits - Course offered this year - Internet module

Vernick, Jon

Examines academic and research ethics at JHSPH in a series of online interactive modules. Focuses on information about the academic ethics code and responsible conduct of research at the School. Explores issues of academic integrity such as proper ethical conduct and referencing, and discusses violations such as plagiarism and cheating, relative to case studies that illustrate situations faced by students and faculty in the academic setting. Addresses topics that include responsible conduct of research, authorship, data management, data ownership, guidelines for professional conduct, research fraud or scientific misconduct, federal and institutional guidelines related to research using human and animal subjects and ethical issues involving vulnerable subjects in research.

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

1. Describe and explain the policies and procedures that govern academic integrity and ethical conduct of research in the school
2. Practice proper attribution when referencing sources in academic assignments and scholarly works
3. Avoid violations of academic and research integrity such as plagiarism, cheating, research fraud and scientific misconduct
4. Conduct research in a responsible and professional manner with attention to maintaining integrity relative to authorship, data management and ownership, and protection of human and animal rights

Email: jvernic1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Auditing not permitted

Grading Options: Pass/Fail

All students must complete during their first term of matriculation; failure to do so will result in blockage of further course registration

550.862.81 CURRENT ISSUES IN PUBLIC HEALTH (Discontinued)

1 credits - Course offered this year - Internet

Schoenrich, Edyth
Faculty experts present public health topics of current interest in both industrialized and developing nations, such as 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 and discuss the magnitude of the problem, recent relevant research findings, and intervention strategies

Email: eschoen2@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning
This is the Internet version of 550.861.

550.870.01 SS/R: OCCUPATIONAL MEDICINE RESIDENCY-PRACTICUM YEAR
variable credits Depends on rotations, courses, and research workload. - Course offered this year - East Baltimore
Schwartz, Brian
Occupational medicine resident physicians perform a series of clinical, administrative, regulatory, and plant-based rotations throughout the year.

Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored occupational medicine practicum experience

Email: bschwar1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Residency training.
Grading Options: Pass/Fail
Consent required for all students; Must have approval of program director.

550.880.01 SS/R: GENERAL PREVENTIVE MEDICINE RESIDENCY-MPH
1 credits - Course offered this year - East Baltimore
Lam, Clarence
Forthcoming

Upon successfully completing this course, students will be able to:
1. Prepare residents in the theoretical, practical, and clinical knowledge and skills essential to leadership roles in the design, management, and evaluation of population-based approaches to health
2. Provide training in the teaching, research, and practice of preventive medicine
3. Instill in residents the ability to synthesize clinical and population-based approaches to disease prevention and health promotion
4. Enable residents to view health issues on a broad continuum from local to international perspective
5. Apply knowledge toward the protection of the public's health
6. Provide residents with the management and epidemiologic skills needed to address the overall health needs of underserved populations

Email: ckl@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to MPH/GPMR during MPH year.
Grading Options: Pass/Fail

550.890.01 SS/R: GENERAL PREVENTIVE MEDICINE RESIDENCY-RESIDENCY YEAR
variable credits Range of 6-16 credits - Course offered this year - East Baltimore
Lam, Clarence

Prepare residents in the theoretical, practical, and clinical knowledge and skills essential to leadership roles in the design, management, and evaluation of population-based approaches to health.

Upon successfully completing this course, students will be able to:
1. Prepare residents in the theoretical, practical, and clinical knowledge and skills essential to leadership roles in the design, management, and evaluation of population-based approaches to health
2. Provide training in the teaching, research, and practice of preventive medicine

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 44 of 118
3 Instill in residents the ability to synthesize clinical and population-based approaches to disease prevention and health promotion

4 Enable residents to view health issues on a broad continuum from local to international perspective

5 Apply knowledge toward the protection of the public's health

6 Provide residents with the management and epidemiologic skills needed to address the overall health needs of underserved populations

7 Residents will participate in a core course of modules known as "Fundamentals of General Preventive Medicine." Approximately 10 modules will be offered annually. Examples include Health Care Delivery; Injury Epidemiology and Prevention; Health Promotion; and Public Health Preparedness

Email: ckl@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to GPMR during post MPH year.
Grading Options: Pass/Fail

**550.895.01 MPH PRACTICUM (NON DEPARTMENTAL)**
variable credits Credits are determined in conjunction with the MPH practicum coordinator - Course offered this year - **East Baltimore**
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

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

1. Demonstrate that they have had a mentored public health practicum experience
2. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

Please consult MPH Program Office before registering for course, mphprog@jhsph.edu

**550.895.94 MPH PRACTICUM (NON DEPARTMENTAL)**
variable credits Credits are determined in conjunction with the MPH practicum coordinator - Course offered this year - **India**
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

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

1. Demonstrate that they have had a mentored public health practicum experience
2. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No

Only students enrolled in the MPH program with IIHMR, Jaipur are permitted in this section
Grading Options: Pass/Fail

This section is offered in Jaipur, India

**551.895.01 SOURCE PRACTICUM SPECIAL STUDIES**
variable credits 1 credit if work 4 hours/week with community 2 credit if work 8 hours/week with community 3 credit if work 12 hours/week with community - Course offered this year - **East Baltimore**
Levin, Mindi
Special studies for practicum activities with SOURCE and participating Baltimore City community-based organizations.

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

1. Develop a collaboration with a community-based organization to address public health issues in Baltimore.

Email: mlevin@jhu.edu

Enrollment: Minimum 1, Maximum 20, Waitlist Enabled: Yes
Grading Options: Pass/Fail
Consent required for all students; All students must seek permission from SOURCE Director, Mindi Levin. Students must have already identified collaboration/project with SOURCE non-profit.

Prerequisite: Student must first be matched with a SOURCE partnering community-based organization.

**Health Behavior and Society**

**410.600.01 FUNDAMENTALS OF HEALTH, BEHAVIOR AND SOCIETY**

4 credits - Course offered this year - **East Baltimore**

Owczarzak, Jill; Sherman, Susan

Introduces students to a social ecological [and a life course] perspective of population health. Challenges students to address societal and structural forces such as socioeconomic position, racial and ethnic and gender sources of inequality as well as interpersonal processes reflected in norms, networks, and social capital. Focuses on behavior, communication, decision-making, and health outcomes at the individual, family and community level. Applies these social and behavioral perspectives to a better understanding of health problems and prepares students to develop effective public health interventions for individuals, families, communities and populations. Provides students with skills to apply social and behavioral science principles and methods in their future public health research and practice.

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

1. Identify basic theories, concepts, and models from a range of social and behavioral science disciplines that are used in public health research and practice.
2. Describe the socioecological perspective and how social and behavioral factors affect health outcomes and public health responses.
3. Summarize public health research literature and explain how a study’s theoretical framework, methods, and findings fit within a socioecological perspective.
4. Use the socioecological model and its underlying theoretical perspectives to identify and explain multiple determinants of health and their influences on health and behavior.
5. Compare how different theories and levels from the socioecological model shape our understanding of public health problems and their solutions.
6. Evaluate public health interventions to identify their theoretical foundations and assess how they address health determinants outlined by the socioecological model.

Email: jillowczarzak@jhu.edu

Lecture: M W 3:30 PM - 5:20 PM

Enrollment: Minimum 20, Maximum 100, Waitlist Enabled: Yes

Graduate students

Grading Options: Letter Grade or Pass/Fail

Prerequisite:

**410.612.01 SOCIOLOGICAL PERSPECTIVES ON HEALTH**

3 credits - Course offered this year - **East Baltimore**

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

Email: ksmit103@jhu.edu

Lecture: T TH 3:30 PM - 4:50 PM

Enrollment: Minimum 7, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

**410.620.01 PROGRAM PLANNING FOR HEALTH BEHAVIOR CHANGE**

3 credits - Course offered this year - **East Baltimore**
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.

Upon successfully completing this course, students will be able to:
1. Explain the importance of health behavior as a contributor to current public health problems
2. Describe the elements of at least two behavior change theories and their applicability to developing health education/health promotion programs
3. Describe at least three intervention methods and their applicability to successful health education/health promotion programs
4. Demonstrate skills in planning a health behavior change program by successfully completing a written needs assessment

Email: vjones@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

Learning Materials:
- (Book) Health Behavior and Health Education: Theory, Research, and Practice
  Glanz, Karen
  Amazon $61.00

410.641.67 IMPLEMENTATION AND EVALUATION FOR TOBACCO CONTROL
3 credits - Course offered this year - East Baltimore
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. Recognize theories that help in designing or guiding tobacco control strategies
2. Describe methods of obtaining data to support tobacco control programs and policies
3. Recognize the importance and review different methods to plan, implement, and evaluate tobacco control interventions
4. Determine the barriers and challenges that arise when implementing tobacco control policies or programs, and identify methods to overcome these barriers
5. Identify ways to disseminate and utilize data to support policy and research interventions to key stakeholders to promote change

Email: fstillm1@jhu.edu
Lecture: M T W TH F 9:00 AM - 12:00 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite:
This course blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet for 5 days during the 2-week Institute. Students are expected to spend 8 hours on class work during the 2-week Institute in addition to regular homework. Students are required to complete readings and assignments prior to the 2-week Institute. The final course assignment will be due on October 23rd, 2017.

410.642.67 TOBACCO CONTROL LEADERSHIP
2 credits - Course offered this year - East Baltimore
Tamplin, Stephen
Examines the role of the tobacco control leader in policy development and implementation, and the essential knowledge and skills this role requires, through lectures, discussion, exercises, and an applied case study. 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

Email: stampli1@jhu.edu

Lecture: M T W TH 1:00 PM - 4:00 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

This course blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet for 4 days during the 2-week Institute. Students are expected to spend 4 hours on class work during the 2-week Institute in addition to regular homework.

Students are required to complete readings and assignments prior to the 2-week Institute. The final course assignment will be due on October 20th.

410.643.67 INTRODUCTION TO QUALITATIVE METHODS IN TOBACCO CONTROL

3 credits - Course offered this year - East Baltimore
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 approaches to qualitative research in tobacco control
2. Articulate the relative appropriateness of an applied research technique and data analysis approach per a particular research question
3. Practice qualitative methods that are specific to tobacco control, such as tobacco industry document review

Email: fstillm1@jhu.edu
Lecture: T W TH F 9:00 AM - 12:00 PM
Lecture: M 9:30 AM - 12:20 PM
Enrollment: Minimum 10, Maximum 40, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

This course blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet for 5 days during the 2-week Institute. Students are expected to spend 8 hours on class work during the 2-week Institute in addition to regular homework. Students are required to complete readings and assignments prior to the 2-week Institute. The final course assignment will be due on October 22nd, 2017.

410.644.67 QUANTITATIVE METHODS FOR TOBACCO CONTROL

4 credits - Course offered this year - East Baltimore
Welding, Kevin

Introduces students to quantitative methods most often used in tobacco control and tobacco-related research. Includes topics such as common study design, methods to assess the burden of tobacco-related disease, and evaluation of prevention and cessation interventions. Provides students with the opportunity to apply these new skills in interpreting and presenting quantitative data.
Upon successfully completing this course, students will be able to:

1. Identify key indicators for surveillance of tobacco use behaviors and tobacco control interventions
2. Describe quantitative approaches for studying the determinants of tobacco use behaviors and the impact of tobacco control interventions
3. Interpret surveillance indicators and measures of association
4. Identify the principles of a comprehensive literature review
5. Describe the strengths and limitations of quantitative methods for tobacco control
6. Design a quantitative research study proposal on a relevant tobacco control topic

Email: kwelding@jhu.edu

Lecture: M T W TH F 1:00 PM - 4:00 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Graduate students

Grading Options: Letter Grade or Pass/Fail

This course blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet for 6 days during the 2-week Institute. Students are expected to spend 8 hours on class work during the 2-week Institute in addition to regular homework. Students are required to complete readings and assignments prior to the 2-week Institute. There will be an in-class quiz on the first day of the course on topics from the online lectures. Students will be provided with a study guide for the quiz by the end of August. The final course assignment will be due on October 20th, 2017.

**410.653.01 CONTEMPORARY ISSUES IN HEALTH COMMUNICATION**

1 credits - Course offered this year - East Baltimore

Moran, Meghan

Introduces students to some of the many contemporary communication issues that affect the health of the public. Addresses topics including interpersonal communication within the context of medical encounters, the use of story-telling and entertainment as educational strategies, and the role of news media in covering health topics; social marketing and media.

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

1. Identify at least three different health communication approaches used to influence the health of the public
2. Assess the relationship between patient-centered communication and patient outcomes
3. Describe the role of story-telling and news media on public knowledge, attitudes and behaviors relevant to individual and community health issues
4. Identify commercial marketing strategies used to influence consumer behavior
5. Explain the role of social marketing, advocacy and regulation in diminishing the impact of commercial marketing of unhealthy products

Email: mmoran@jhu.edu

Lecture: W 5:30 PM - 6:30 PM

Enrollment: Minimum 20, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

Prerequisite: There are no prerequisites for this course.

**410.656.01ENTERTAINMENT EDUCATION FOR BEHAVIOR CHANGE AND DEVELOPMENT**

4 credits - Course offered this year - East Baltimore

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

Email: cjacoby@jhu.edu
Lecture: M W 1:30 PM - 3:20 PM

Enrollment: Minimum 7, No maximum enrollment required, Waitlist Enabled: No
Graduate students. Instructor consent required for undergraduate students.
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for undergraduate students.

410.676.01 CLINICAL HEALTH BEHAVIOR CHANGE EXPERIENCE IN WEIGHT MANAGEMENT

Cheskin, Lawrence
Focuses on the practical application of principles from communication, behavioral, social science, and psychological theories in a clinical setting. Enables students to work directly with patients of the Johns Hopkins Weight Management Center (JHWMC) to promote behavior change in the areas of diet and fitness. Integrates theoretical concepts with practical clinical applications, and presents students the opportunity to work in a team setting with healthcare practitioners.

Upon successfully completing this course, students will be able to:
1. Describe the complex mechanisms underlying the obesity epidemic
2. Identify the interventions commonly employed to treat obesity in clinical settings
3. Assess standard (USDA) nutrition and physical activity recommendations for weight management
4. Identify psychosocial and psychological factors that impact behavior change
5. Describe cognitive-behavioral strategies to elicit change in patients
6. Apply principles from communication, behavioral, social science, and psychological theories to encourage health behavior change in others
7. Apply motivational interviewing (MI) theory and techniques
8. Evaluate the evidence regarding the efficacy of MI techniques for weight loss
9. Perform clinical practice skills such as reflective listening, empathy, barriers assessment, eliciting change talk, and goal setting

Email: cheskin@jhu.edu
Enrollment: Minimum 1, Maximum 10, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Times to be arranged with instructor. Also offered in 3rd term.

410.733.01 COMMUNICATION NETWORK ANALYSIS IN PUBLIC HEALTH PROGRAMS

Yang, Cui
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

Email: cyang29@jhu.edu
Lecture: T TH 10:30 AM - 11:50 AM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

410.800.01 MPH CAPSTONE HEALTH, BEHAVIOR AND SOCIETY
2 credits Number of credits depends upon the scope and nature of their project. - Course offered this year - East Baltimore

Departmental Faculty

The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

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

1. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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.

410.810.01 FIELD PLACEMENT HEALTH BEHAVIOR AND SOCIETY

variable credits - Course offered this year - East Baltimore

McDonald, Eileen

Information not required for this course type

Email: emcdona1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

410.820.01 THESIS RESEARCH IN HEALTH BEHAVIOR AND SOCIETY

variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

410.830.01 POSTDOCTORAL RESEARCH IN HEALTH BEHAVIOR AND SOCIETY

variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

410.840.01 SPECIAL STUDIES AND RESEARCH IN HEALTH BEHAVIOR AND SOCIETY

variable credits - Course offered this year - East Baltimore

Departmental Faculty

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

410.850.01 MHS RESEARCH PRACTICUM IN HEALTH BEHAVIOR AND SOCIETY

variable credits Can vary per term depending on hours spent on research practicum - Course offered this year - East Baltimore

German, Danielle; Smith, Katherine Clegg

Introduces MHS Social Factors students to hands-on social science research for public health. Provides an opportunity to work extensively with a doctorally trained research mentor. Prepares students to participate in social science research initiatives. Builds students' research knowledge and skills.

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

1. Participate in a social factors research initiative

Email: ksmith103@jhu.edu
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
HBS MHS students
Grading Options: Pass/Fail

410.860.01 GRADUATE SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES
2 credits - Course offered this year - East Baltimore
Kerrigan, Deanna
Explores and debates theoretical concepts and orientations in the social and behavioral sciences and their application to public health research and practice through readings, discussion, and writing assignments.
Upon successfully completing this course, students will be able to:
1. Critically discuss theoretical concepts and orientations in the social and behavioral sciences
2. Present syntheses and critiques of foundational social and behavioral science texts
3. Develop a theoretically driven argument in the form of an original essay or manuscript
Email: dkerrig1@jhu.edu
Lecture: TH 1:30 PM - 3:20 PM
Enrollment: Minimum 5, Maximum 20, Waitlist Enabled: Yes
Restricted to HBS doctoral students
Grading Options: Letter Grade or Pass/Fail

410.861.01 GRADUATE SEMINAR IN COMMUNITY-BASED RESEARCH
1 credits - Course offered this year - East Baltimore
Bone, Lee; 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 and also community patrons.
Upon successfully completing this course, students will be able to:
1. Engage with students, faculty, scholars, and community members from different disciplines and backgrounds in scholarly exchange on issues of community-based research.
2. Apply CBPR principles across the continuum of the research process, including planning, implementation, evaluation, dissemination and policy implications.
3. Explain the need for and added value of using CBPR.
4. Discuss the strengths and challenges associated with community-university partnerships, as well as the successful co-development and impact of interventions to address community issues.
Email: lbone1@jhu.edu
Lecture: T 12:00 PM - 1:20 PM

410.863.01 DOCTORAL SEMINAR IN SOCIAL AND BEHAVIORAL RESEARCH AND PRACTICE
1 credits - Course offered this year - East Baltimore
Kerrigan, Deanna
Explores and critiques social and behavioral sciences research and practice, emphasizing key constructs and methods of department faculty through presentations, readings, and group discussions.
Upon successfully completing this course, students will be able to:
1. Discuss key social and behavioral science theoretical constructs and methods used by department faculty in their research and practice
2. Develop and model oral presentation skills in social and behavioral sciences
Email: dkerrig1@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 7, No maximum enrollment required, Waitlist Enabled: No
HBS students only
Grading Options: Pass/Fail
410.864.01 CRITICAL ISSUES IN HEALTH DISPARITIES
1 credits - Course offered this year - East Baltimore
Thorpe, Roland
Provides an opportunity for students, postdoctoral trainees, and faculty to present scientific papers from the current and/or classic health disparities literature. Emphasizes presentation skills and the ability to critically evaluate scientific papers. Requires participants 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 Lead discussions and present research related to health and/or healthcare disparities
3 Describe patterns of health outcomes by race, geography, and socioeconomic status
Email: rthorpe@jhu.edu
Lecture: T 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

410.865.01 MSPH SEMINAR IN HEALTH EDUCATION AND HEALTH PROMOTION
1 credits - Course offered this year - East Baltimore
McDonald, 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 their 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 their skills and experiences to a potential employer
Email: emcdona1@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
MSPH students in HBS
Grading Options: Pass/Fail

410.868.01 PROGRAM PLANNING FOR HEALTH BEHAVIOR CHANGE PRACTICUM
2 credits - Course offered this year - East Baltimore
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
Email: vjones@jhu.edu
Lecture: F 9:00 AM - 10:20 AM
Enrollment: Minimum 5, Maximum 10, Waitlist Enabled: Yes

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 53 of 118
Graduate students only, with instructor consent. 
Grading Options: Pass/Fail 
Consent required for all students; Consent required for all students. 
Prerequisite: Concurrently enrolled in 410.620. 
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
2 credits - Course offered this year - East Baltimore
Davey-Rothwell, Melissa; Tobin, Karin
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.

Upon successfully completing this course, students will be able to:
1. Make progress on their dissertation proposals and understand the dissertation proposal writing process
2. Build competencies for peer review and manuscript development that will enhance their proposal development skills
3. Demonstrate skills for oral presentation and defense of their research in both academic and professional settings

Email: mdavey1@jhu.edu
Lecture: M 1:30 PM - 3:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
HBS doctoral students
Grading Options: Pass/Fail
Multi-term with 410.871
Final grade applies to all terms
Grade is given for both 410.870 and 410.871 upon completion of 410.871.

410.881.01 MHS SEMINAR IN SOCIAL FACTORS IN HEALTH I
1 credits - Course offered this year - East Baltimore
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

Email: danielle.german@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to MHS in Social Factors in Health students.
Grading Options: Pass/Fail

410.895.01 MPH PRACTICUM: HEALTH BEHAVIOR AND SOCIETY
variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - East Baltimore
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 54 of 118
Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

415.610.92 PRACTICAL GENETIC COUNSELING
2 credits - Course offered this year - NIH - Bethesda, MD
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 care 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 Hemoglobinopathies and Thalassemias as models of molecular pathology, the molecular/biochemical basis of genetic disease, genetics of cancer, gene mapping

Upon successfully completing this course, students will be able to:
1. Discuss genetic counseling within clinical and research genetics services
2. Practice the skills needed for taking family and medical histories and constructing pedigrees
3. Explain the components of prenatal, pediatric, and adult genetics services and the role of genetic counseling
4. Contrast genetic counseling in clinical research settings and service settings
5. Explain various models of genetic counseling and how they pertain to overall service delivery and outcomes

Email: sappj@mail.nih.gov
Lecture: M 5:30 PM - 7:30 PM
Enrollment: Minimum 4, Maximum 8, Waitlist Enabled: Yes
Course restricted to ScM in Genetic Counseling students
Grading Options: Letter Grade or Pass/Fail
Jointly offered with NIH

415.611.92 INTRODUCTION TO HUMAN GENETICS I
2 credits - Course offered this year - NIH - Bethesda, MD
Biesecker, Leslie

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 care 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 Hemoglobinopathies and Thalassemias as models of molecular pathology, the molecular/biochemical basis of genetic disease, genetics of cancer, gene mapping

Upon successfully completing this course, students will be able to:
1. Discuss basic structure and function of chromosomes and genes
2. Recognize inheritance patterns in pedigrees and assess risks
3. Discuss when and how screening and diagnostic tests are performed and how to interpret results of such tests
4. Discuss basic mechanisms of mutation and how mutations can lead to disease
5. Discuss how the inheritance pattern of a disease is determined by the molecular mechanisms by which mutations alter gene function and cause the disease
6. Discuss the features of common genetic diseases seen in genetic counseling practice, including natural history and management

Email: leslieb@helix.nih.gov
Lecture: TH 4:30 PM - 6:30 PM
Enrollment: Minimum 4, Maximum 8, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail

Consent required for some students; Consent required for students not in the ScM in Genetic Counseling program.

Prerequisite: 415.610

Jointly offered with NIH

415.620.92 INTRODUCTION TO GENETIC COUNSELING I

2 credits - Course offered this year - NIH - Bethesda, MD

Erby, Lori

Introduces the scope of genetic counseling practice, laying a foundation for the JHU/NHGRI Genetic Counseling Graduate Program. Compares definitions of genetic counseling with objectives, practice standards and a code of ethics. Explores genetic counseling values as they relate to roles and responsibilities toward clients. Introduces ethical, legal and policy issues specific to genetic counseling in conjunction with a research agenda for the future. Includes case discussion, verbal critiquing of primary literature, role-playing, and semi-formal debates.

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

1. Describe the history and goals of genetic counseling
2. Understand the genetic counseling process and the roles that the counselor and client play in the counseling interaction
3. Evaluate the role of genetic risk information in disease understanding and decision making
4. Discuss the professional, legal, cultural, and ethical implications of how genetic counseling is practiced, today and in the future

Email: lorierby@jhu.edu

Lecture: TH 1:30 PM - 3:20 PM

Enrollment: Minimum 4, Maximum 10, Waitlist Enabled: Yes

Must be enrolled in ScM in Genetic Counseling Program

Grading Options: Letter Grade or Pass/Fail

Prerequisite: Multi-term with 415.621

Final grade applies to all terms

Jointly offered with NIH

415.631.92 THERAPEUTIC GENETIC COUNSELING II

2 credits - Course offered this year - NIH - Bethesda, MD

Biesecker, Barbara

Prepares students to develop an applied theory for genetic counseling practice. Presents a client-centered approach as adapted for short-term therapy related to genetic conditions, using case examples and role-playing to implement concepts and apply them to clinical scenarios; basic attending skills in conjunction with issues of countertransference; and limitations of counseling, particularly for mentally ill clients or those with pathologic grief reactions. Compares and contrasts several counseling theories.

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

1. Discuss basic attending skills and assessment of clients' concerns related to genetic conditions and risks
2. Practice establishing and acting on a therapeutic relationship in supervised role plays
3. Adopt a client-centered approach to counseling genetics clients
4. Describe core concepts in existential, cognitive-behavioral, self-in-relation, family systems, feminist and group theories as they relate to genetic counseling
5. Develop an applied theory of genetic counseling practice

Email: barbarab@mail.nih.gov

Lecture: W 3:00 PM - 4:50 PM

Enrollment: Minimum 4, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Letter Grade or Pass/Fail

Prerequisite: 415.630; Must be enrolled in ScM in Genetic Counseling Program

Jointly offered with NIH

415.670.92 DEVELOPMENTAL BIOLOGY AND HUMAN MALFORMATIONS I

1 credits - Course offered this year - NIH - Bethesda, MD
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.

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

Email: leslieb@helix.nih.gov
Lecture: W 5:30 PM - 6:30 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent is required for non-Genetic Counseling training program students.

Multi-term with 415.671
Jointly offered with NIH

415.701.92 ADVANCED GENETIC COUNSELING I
2 credits - Course offered this year - NIH - Bethesda, MD

Biesecker, Barbara

Explores interactive genetic counseling interventions as they apply to specific clinical settings and client needs. Presents key issues in client education for various medical specialties, and identifies research needs related to genetic counseling. Examines counseling issues through the use of role-plays.

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

Email: barbarab@mail.nih.gov
Lecture: F 11:00 AM - 12:50 PM
Enrollment: Minimum 4, Maximum 12, Waitlist Enabled: Yes
HBS ScM in Genetic Counseling students
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 415.630-631; Must be enrolled in ScM in Genetic Counseling Program
Multi-term with 415.702
Multiterm course. Grade assigned after completing Advanced Genetic Counseling II
Jointly offered with NIH

415.710.92 MEDICAL GENETICS AND GENOMIC MEDICINE: FROM DIAGNOSIS TO TREATMENT I
2 credits - Course not offered until 2018 - 2019 - NIH - Bethesda, MD

Muenke, Maximilian

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.

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 57 of 118
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

Email: mamuenke@mail.nih.gov

Lecture: W 5:30 PM - 7:30 PM

Enrollment: Minimum 5, Maximum 50, Waitlist Enabled: Yes
Grading Options: 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 and 415.615.92
Multi-term with 415.711
Final grade applies to all terms
Jointly offered with NIH

415.820.92 THESIS RESEARCH: GENETIC COUNSELING
variable credits - Course offered this year - NIH - Bethesda, MD

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

415.840.92 SS/R: GENETIC COUNSELING
variable credits - Course offered this year - NIH - Bethesda, MD

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

415.851.92 SUPERVISED CLINICAL ROTATIONS: GENETIC COUNSELING
variable credits Students should register for 4 credits in terms 1-4 and 2 credits in the summer term. - Course offered this year - NIH - Bethesda, MD
Erby, Lori
Offers clinical placements in adult, pediatric, and prenatal genetic centers in the Baltimore-Washington area. Provides opportunity to learn about genetic conditions by their impact on individuals and their families, and about roles of the genetic counselor. Provides a wide range of clinical experiences over the course of multiple placements.

Upon successfully completing this course, students will be able to:
1. Demonstrate skills required to practice in a clinical genetic counseling setting
2. Critique developing counseling skills

Email: lorierby@jhu.edu

Enrollment: Minimum 10, Maximum 15, Waitlist Enabled: Yes
ScM in Genetic Counseling students
Grading Options: Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with NIH

415.861.92 GENETIC COUNSELING SEMINAR: TOPICS IN THE FIELD
2 credits - Course offered this year - NIH - Bethesda, MD
Biesecker, Barbara
Offers a dynamic forum for discussion that focuses on genetic counseling research, policy, and education and their impact on clinical practice. Invites a diverse group of professionals to present topics well suited for class discussion. Includes student-led case presentations to highlight the psychological, social, and ethical issues in genetic counseling. Exposes students to a variety of client attitudes, reactions, and experiences by including clients who have personal experience with a genetic condition or familial risk as speakers.

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

1. Present concise case summaries and exchange impressions of the psychological, social, and ethical aspects of genetic counseling
2. Establish relationships with other students to facilitate mentoring, strategizing, and camaraderie
3. Describe provocative issues in the field of genetic counseling
4. Explain the types of cases and professional issues encountered by genetic counselors
5. Describe the variety of genetic counseling research topics
6. Describe programs in policy and ethics related to genetic counseling
7. Describe the personal experiences of those with genetic conditions or living at increased risk

Email: barbarab@mail.nih.gov
Lecture: F 1:30 PM - 3:20 PM
Enrollment: Minimum 10, Maximum 25, Waitlist Enabled: Yes
ScM in Genetic Counseling students
Grading Options: Pass/Fail
Consent required for some students; Consent required for non-ScM in Genetic Counseling students.
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with NIH
ScM in Genetic Counseling students must register for all four terms. Non-ScM in Genetic Counseling students are only required to register for either the two fall or two spring terms.

415.870.01 GENETIC COUNSELING CLINICAL SUPERVISION
1 credits - Course offered this year - East Baltimore
Biesecker, Barbara
Assists the student in recognizing the impact of personal styles and biases on the counseling process through individual supervision sessions. Uses audiotapes and/or videotapes of student counseling sessions to review, analyze, and process student-client interactions throughout the student's clinical rotations, and develop strategies for addressing barriers in the counseling process.

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

1. Demonstrate professional growth in establishing a therapeutic relationship with clients
2. Recognize the impact of personal styles and biases on the counseling process
3. Demonstrate strategies to best meet each individual client's needs
4. Provide genetic counseling services using techniques that are consistent with the student's developing personal style

Email: barbarab@mail.nih.gov
Enrollment: Minimum 10, Maximum 15, Waitlist Enabled: Yes
ScM in Genetic Counseling Students
Grading Options: Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program; students must register for four terms.
Jointly offered with NIH

415.870.92 GENETIC COUNSELING CLINICAL SUPERVISION
1 credits - Course offered this year - NIH - Bethesda, MD
Biesecker, Barbara
Assists the student in recognizing the impact of personal styles and biases on the counseling process through individual supervision sessions. Uses audiotapes and/or videotapes of student counseling sessions to review, analyze, and process student-client interactions throughout the student's clinical rotations, and develop strategies for addressing barriers in the counseling process.
Upon successfully completing this course, students will be able to:
1. Demonstrate professional growth in establishing a therapeutic relationship with clients
2. Recognize the impact of personal styles and biases on the counseling process
3. Demonstrate strategies to best meet each individual client's needs
4. Provide genetic counseling services using techniques that are consistent with the student's developing personal style

Email: barbarab@mail.nih.gov

Enrollment: Minimum 10, Maximum 15, Waitlist Enabled: Yes

ScM in Genetic Counseling Students
Grading Options: Pass/Fail
Prerequisite: Must be enrolled in ScM in Genetic Counseling Program; students must register for four terms.
Jointly offered with NIH

415.881.01 GENETIC COUNSELING PROGRAM THESIS PROPOSAL DEVELOPMENT II
2 credits - Course offered this year - East Baltimore
Erby, Lori; Roter, Debra
Provides students with the skills to develop and write a proposal for their own research project, based on preliminary work done during the course's first term. Prepares students to refine their proposal for submission to the Executive Committee and prepare for the oral examination during the third term of the course (second quarter). Guides students, by the end of the three terms, to turn a nascent research idea into a proposal which will then become a thesis.

Upon successfully completing this course, students will be able to:
1. Demonstrate skills necessary to: a) summarize literature to support an original genetic-counseling related research question, b) propose a conceptually sound approach to formulate research questions or hypotheses to address the research question, and d) develop a study design and analytic approach to answer the study questions.
2. Prepare a first draft of a formal research proposal for independent thesis research

Email: droter1@jhu.edu
Lecture: W 9:30 AM - 11:20 AM

Enrollment: Minimum 3, Maximum 6, Waitlist Enabled: Yes
Grading Options: Pass/Fail
Prerequisite: 415.880. Must be enrolled in ScM in Genetic Counseling Program
Jointly offered with NIH
Will use departmental space

300.600.81 INTRODUCTION TO HEALTH POLICY
4 credits - Course offered this year - Internet
Kebede, Sosena
Introduces students to the concepts and tools of health policy. Provides the opportunity to hear healthcare and health policy concerns from others and a chance to apply tools for policy analysis. Introduces skills necessary to be an effective policy analyst/policy advocate. Lecturers illustrate policy issues with examples from many fields of health services ranging from medical care, to current public health issues including the Affordable Care Act and population health, as well as health service delivery improvement efforts.

Upon successfully completing this course, students will be able to:
1. Use a model of rational decision making to conduct analysis of alternatives in a policy environment
2. Explain concepts and tools used to develop health policy
3. Analyze the historical, political, ethical, and legal ramifications of health policy programs
4. Assess current healthcare related issues through the policy prism
5. Illustrate the healthcare trend towards an emphasis on population health and health service delivery improvement
6. Recognize the stakeholder analysis process in forming health policies

Email: skebede3@jhmi.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning
**300.651.01 INTRODUCTION TO THE U.S. HEALTHCARE SYSTEM**

4 credits - Course offered this year - East Baltimore

Herring, Bradley

Focuses on the organization, financing, and delivery of healthcare in the U.S. Contrasts the private and public sectors and examines the effects of market competition and government regulation. Examines the ways that medical providers are paid, and explores the major issues currently facing physicians, hospitals, and the pharmaceutical industry. Also discusses several potential small and large scale reforms to the U.S. healthcare system and evaluates their likely effects on healthcare spending, quality of care, and access to care.

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

1. Apply basic economic concepts related to health insurance coverage
2. Explain how both private health insurance and public health insurance are financed
3. Evaluate the ways in which private and public health insurers reimburse medical providers
4. Assess private and public models of financing and delivery of healthcare services
5. Analyze various aspects of the hospital, physician, and pharmaceutical drug sectors
6. Explain how nonprofit status, competition, quality, and safety affect medical providers
7. Identify the various determinants of access to care for low-income and vulnerable populations
8. Evaluate how specific policy proposals will likely affect access to care and healthcare spending
9. Critique how the political process affects how healthcare reform is undertaken in the U.S.

Email: herring@jhu.edu

Lecture: T TH 1:30 PM - 3:20 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Undergraduate students are not permitted in this course

Grading Options: Letter Grade or Pass/Fail

Prerequisite:

**300.721.01 PHD SEMINAR IN HEALTH POLICY**

2 credits - Course offered this year - East Baltimore

Barry, Colleen; Saloner, Brendan

Familiarizes students with some of the foundational readings in health policy and provides an understanding of the theories and conceptual frameworks used in the development, implementation and analysis of health policies. Explores how different disciplines (political science, ethics, law, economics, sociology, behavioral sciences and history) inform thinking about the development, implementation and analysis of health policies that make a difference in the public's health. Emphasizes critical reading and thinking, informed debate with respect for a range of opinions, and communication skills.

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

1. Discuss and critique several of the foundational readings in health policy
2. Demonstrate how different disciplines and theories are relevant to contemporary problems in health policy
3. Describe how theories and disciplines are used in the development of a conceptual framework for policy development and research
4. Identify key sources of disagreements in a body of literature and discuss what kinds of evidence would be persuasive in supporting, refuting or refining a particular line of argument
5. Demonstrate how research can test a theory and help to re-formulate the theory based on new knowledge

Email: cbarry@jhu.edu

Lecture: M 1:30 PM - 3:20 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

ONLY PHD students in HPM permitted to register for this class

Grading Options: Letter Grade or Pass/Fail

Multi-term with 300.722

students must register for both 300.721 and 300.722 in order to receive a grade at the conclusion of 300.722

Final grade applies to all terms

PhD students in HPM ONLY

**300.731.01 POLICY COMMUNICATIONS: READING, WRITING AND TALKING ABOUT POLICY**

3 credits - Course offered this year - East Baltimore
Students develop skills as strong policy writers, but also as critical readers of and participants in the policy literature and conversations. Students learn to write with clarity, confidence and in modes appropriate for different audiences. Covers different forms of communicating policy and various kinds within these modes including executive summaries, annotated bibliographies, short policy briefs, presentations and literature critiques. Replicates challenges policy students will encounter as professionals. Addresses habits, methods and techniques to produce high quality writing, to critically review relevant literature and effectively engage in policy discussions and discourse. To be successful, students constantly read and write and fully engage with faculty and students in editorial discussions.

Upon successfully completing this course, students will be able to:
1. Identify different and appropriate forms of policy writing to address the needs of policy stakeholders
2. Communicate effectively orally and in writing to policy stakeholders
3. Critically read and review reports, articles, and other sources of evidence
4. Provide objective and constructive peer-feedback on versions of policy drafts
5. Implement effective presentation strategies based on an understanding of the audience
6. Apply the above skills to a particular policy topic

Email: jbwogan@gmail.com

Lecture: W 1:30 PM - 3:20 PM
Enrollment: Minimum 10, Maximum 25, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; Priority registration given to MPP students; All others must obtain consent from Mary Wisniewski to register
grade assigned at the end of 2nd term
Final grade applies to all terms

300.741.01 PHD SEMINAR IN HEALTH POLICY: USING SECONDARY DATA TO CONDUCT HEALTH POLICY RESEARCH
1 credits - Course offered this year - East Baltimore
Nicholas, Lauren

Provides a small class-size, doctoral-focused experience. Examines some of the most common data sources used in the field to study health policy topics. Emphasizes secondary data sources. Will discuss: (1) the data structure and challenges with conducting research with 5 to 7 commonly used data sources, (2) developing research questions and testable hypotheses using these data sources, (3) choosing appropriate methods for analyzing these data sets, (4) data protection and storage related concerns. Exposes students to faculty research projects and the specific datasets being used to conduct this research.

Upon successfully completing this course, students will be able to:
1. Explain data structure, methodological approaches and challenges associated with conducting research using some of the most common secondary datasets available for health policy and management research
2. Critically evaluate the use of various data sources for studying contemporary health policy and management issues

Email: lauren.nicholas@jhu.edu
Lecture: M 1:30 PM - 3:20 PM
Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
2nd year (or beyond) HPM PhD students only
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 300.721 -724 and successful passing of HPM PhD qualifying exam

300.800.01 MPH CAPSTONE HEALTH POLICY AND MANAGEMENT
2 credits - Course offered this year - East Baltimore
Departmental Faculty

The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

Upon successfully completing this course, students will be able to:
1. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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.

300.830.01 POSTDOCTORAL RESEARCH HEALTH POLICY AND MANAGEMENT
variable credits credit registration is negotiated with faculty mentor - Course offered this year - East Baltimore
Departmental Faculty
Information not required for this course type
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

300.840.01 SPECIAL STUDIES AND RESEARCH IN HEALTH POLICY AND MANAGEMENT
variable credits student and faculty determine appropriate number of credits for each registration period - Course offered this year - East Baltimore
Departmental Faculty
Information not required for this course type
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

300.862.81 CURRENT ISSUES IN PUBLIC HEALTH
1 credits - Course offered this year - Internet
McGinty, Meghan D.
Faculty experts present public health topics of current interest in both industrialized and developing nations, such as 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 and discuss the magnitude of the problem, recent relevant research findings, and intervention strategies

Email: mmcginty@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Prerequisite: Introduction to Online Learning

300.895.01 MPH PRACTICUM: HPM
variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - East Baltimore
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

301.820.01 THESIS RESEARCH IN HEALTH POLICY AND MANAGEMENT
variable credits students and faculty determine appropriate number of credits of registration for each term - Course offered this year - East Baltimore
Departmental Faculty
PhD students register after successful passing of the school-wide preliminary oral exam to conduct their dissertation work.
Upon successfully completing this course, students will be able to:
1. Information not required for this course type
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

301.861.01 GRADUATE SEMINAR IN HEALTH AND PUBLIC POLICY
1 credits - Course offered this year - East Baltimore
Rutkow, Helaine
Reviews and critiques current literature in health and public policy and evaluates studies from a methodological and conceptual basis.
Upon successfully completing this course, students will be able to:
1. Knowledgeable of the faculty of Health and Public Policy and their research and practice interests
2. Familiar with the literature that pertains to HPP subject areas
3. Provided with a forum for discussing that literature and for understanding relationships between health policy and other areas within public health
4. Exposed to an environment that welcomes and promotes a strong, engaged cohort of doctoral students within the HPP faculty
5. Identify and develop skills that facilitate the translation of public health research into policy and practice
Email: lrutkow@jhu.edu
Lecture: W 12:00 PM - 1:20 PM

305.610.01 ISSUES IN INJURY AND VIOLENCE PREVENTION
2 credits - Course offered this year - East Baltimore
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.
Upon successfully completing this course, students will be able to:
1. Define injuries as major public health problems
2. Describe current issues related to the prevention of injuries
3. Define state of the art methods for controlling injuries
4. Formulate their own attitudes toward causation and prevention of injuries
5. Recognize opportunities for reducing injuries and for injury control advocacy
Email: jvernic1@jhu.edu
Lecture: M W 3:30 PM - 4:50 PM

305.623.01 FUNDAMENTALS OF CLINICAL PREVENTIVE MEDICINE
4 credits - Course offered this year - East Baltimore
Lam, Clarence
Examines the complex interplay between clinical preventive medicine and integrative medicine. Covers core topics for practice and for the preventive medicine board examination; prevention at the individual and community level; the evidence-based policy approach to prevention; and the creation and use of clinical governance standards and practice guidelines for prevention. Addresses key topics in integrative medicine including the following: mind-body medicine, lifestyle medicine, diet and nutrition wellness, motivational interviewing and health coaching, and evidence-based complementary and alternative medicine.
Upon successfully completing this course, students will be able to:
1. Describe how health policy, e.g. American health reform, impacts availability and provision of preventive services within the U.S. healthcare system and apply evidence-based resources for prevention at the community level

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 64 of 118
2 Identify key guidelines and evidence governing preventive service provision for patients
3 Use a patient-centered medical home (PCMH) model to provide integrated, patient-centered preventive care
4 Explain the concepts and evidence underlying clinical preventive guidelines
5 Describe how political factors may influence the development of prevention recommendations
6 Apply the core modalities of integrative medicine including treatment, prevention, health promotion, and wellness to the practice of clinical preventive services
7 Recognize the core concepts of mind-body medicine and apply mind-body skills and practices to direct patient care
8 Describe the core concepts of lifestyle medicine including and identify the leading causes of death related to lifestyle-prevalence illness
9 Apply skills and knowledge in motivational interviewing to engage in behavioral change and promoting environments that support healthy lifestyle choices among patients

Email: ckl@jhu.edu
Lecture: F 8:00 AM - 11:50 AM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Residents and affiliates of the Hopkins GPMR program, and by special approval, Hopkins physicians who are interested in preventive medicine and population health
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Students must take 2 credits in the prerequisite Special Studies in General Preventive Medicine (550.880 or 550.890) prior to enrolling in this course. Special exceptions may be granted by the course director(s)/instructor(s).
Held in departmental space.

305.861.01 GRADUATE SEMINAR IN INJURY RESEARCH AND POLICY
1 credits - Course offered this year - East Baltimore
Webster, Daniel
Students attend weekly seminars sponsored by the Center for Injury Research and Policy that advance one’s understanding of injury, violence, and resulting disability as public health problems. Seminar topics include methodological approaches, occupational injury, violence prevention, disability, and emerging topics, as well as the application of policy, law, and practice for injury and violence prevention. Students hear from leading experts in the field and read literature provided to accompany each presentation.
Upon successfully completing this course, students will be able to:
1 Explain the epidemiology of specific injuries and related consequences in the population
2 Identify effective or promising strategies for preventing injury and disability
3 Describe how injury research informs policy and practice to reduce the burden of injury in the population

Email: dwebster@jhu.edu
Lecture: M 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

306.861.01 GRADUATE DOCTORAL SEMINAR IN BIOETHICS
1 credits - Course offered this year - East Baltimore
Taylor, Holly
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 Understand the literature in bioethics and public health
2 Analyze arguments in existing bioethics literature and respond to them independently
3 Synthesize literature across different content areas of bioethics in order to provide linkages in the field
4 Critique one another's work and scholarly arguments

Email: htaylor@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for all students; Students who are NOT doctoral students in the bioethics track require permission of the instructor.

**308.615.81 THE OPIOID CRISIS: PROBLEM SOLVING SEMINAR**

3 credits - Course offered this year - Internet
Sharfstein, Joshua

Uses interactive case-based and problem-based strategies to provide an overview of the impact of the opioid crisis in the United States. Enables students to develop skills to address different aspects of the opioid crisis. Addresses topics including stigma attached to opioid use and treatment of opioid use disorders, the development of strategies to address such stigma, the importance of data in identifying opportunities for response, assessment of current policy options for addressing the opioid crisis in the United States, and addressing the political challenges to support effective policymaking. Prepares students to undertake data collection at the state level.

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

1. Express the practical challenges of using data in confronting a rapidly evolving public health crisis
2. Recognize the importance of cultural norms such as stigma in shaping the policy environment, and develop strategies for addressing stigma
3. Construct a system-level intervention that employs effective strategies to address the opioid epidemic
4. Distinguish between popular strategies that are unlikely to work and unpopular strategies that have a stronger evidence base for effectiveness
5. Prepare a policy memo sensitive to both policy imperatives and political considerations

Email: joshua.sharfstein@jhu.edu

Enrollment: Minimum 10, Maximum 75, Waitlist Enabled: Yes
undergraduate students are not permitted in this course
Grading Options: Letter Grade or Pass/Fail

Consent required for some students; Non-DrPH and Non-MPH Bloomberg Fellows must obtain permission from instructor in order to register
Prerequisite: Introduction to Online learning

**308.810.01 FIELD PLACEMENT HEALTH POLICY-MSPH**

variable credits most students will register for 16 credits but on occasion, with program permission, fewer credits may be registered for - Course offered this year - East Baltimore
Resnick, Beth A.

Provides students with an intensive “hands on” extension of their academic training under the guidance of one or two senior level health policy professionals and program faculty. Students gain a deeper understanding of how health policies affect the public’s health and further develop their professional health policy skills.

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

1. Contribute to the organization by participating in and completing all assigned work.
2. Discern their own role in the organization and explain how their work contributes to the mission of the organization
3. Recognize the role of the host organization within the health policy arena and how the organization fits into the “big picture” of health policy

Email: bresnick@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
only matriculated msp/hp permitted
Grading Options: Pass/Fail

Consent required for all students; all students required to obtain permission to register to ensure field site is appropriate and approved

**308.867.01 MSPH SEMINAR IN HEALTH POLICY**

1 credits - Course offered this year - East Baltimore
Resnick, Beth A.

Introduces work undertaken in health policy settings and prepares students for professional career development.

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

1. Describe themselves, their strengths, and their personality preferences through use of MBTI and StrengthFinder 2.0 assessments.
2. Identify the Public Health Competencies and related skills

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 66 of 118
3 Develop a Career Development Action Plan
Email: bresnick@jhu.edu
Lecture: W 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to Masters students in HPM
Grading Options: Pass/Fail

309.600.81 EVALUATING QUALITY IMPROVEMENT AND PATIENT SAFETY PROGRAMS
3 credits - Course offered this year - Internet
Marsteller, Jill
Prepares students to evaluate Quality Improvement/Patient Safety (QI/PS) projects by developing their competencies in the following areas: 1) Critiquing evaluations of QI/PS projects; 2) Designing a robust evaluation of a QI/PS project; and 3) Conducting a small scale qualitative study.
Upon successfully completing this course, students will be able to:
1 Enumerate and communicate the importance of environmental, organizational, group, provider, task, work system, implementation and patient influences on outcomes
2 Describe and evaluate strengths and weaknesses of designs for testing success of QI/PS interventions
3 Describe operational steps to conducting robust data collection and analysis (quantitative and qualitative)
4 Define and describe remedies for common problems in QI/PS studies
Email: jmarste2@jhu.edu
Enrollment: Minimum 8, No maximum enrollment required, Waitlist Enabled: No
undergraduate students are not permitted in this course
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to On-line learning

309.605.60 HEALTH ISSUES FOR AGING POPULATIONS (Cancelled - Department)
3 credits - Course offered this year - East Baltimore
Wolff, Jennifer
Survey course introduces students to topics that pertain to aging societies. Organized around three modules that explore (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 consequences for individuals and society (financing of health and long-term care, retirement and economic security, sustainability of entitlement programs).
Upon successfully completing this course, students will be able to:
1 Identify determinants of population aging and consequences for individuals and society
2 Analyze conceptual frameworks and measures in gerontology
3 Critique seminal and current readings in gerontology
4 Explain policy programs, financing considerations, and workforce issues that pertain to meeting economic, health, and social needs of aging societies
5 Apply concepts covered in this course to one or more contemporary aging-related issues
6 Translate frameworks and methods from gerontology to one or more contemporary policy topic
Email: jwolff2@jhu.edu
Lecture: TH 3:30 PM - 4:50 PM
Enrollment: Minimum 10, Maximum 40, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
This course blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet 1 time per week. Students are expected to spend 1.5 hours a week on class work in addition to regular homework.

309.716.01 ADVANCED METHODS IN HEALTH SERVICES RESEARCH: ANALYSIS
3 credits - Course offered this year - East Baltimore
Gaskin, Darrell J.
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

Email: dgaskin1@jhu.edu
Lecture: T TH 9:00 AM - 10:20 AM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 140.621-624 or 140.651-654

309.861.01 GRADUATE SEMINAR IN HEALTH SERVICES RESEARCH AND POLICY
1 credits - Course offered this year - East Baltimore
Chan, Kitty; Wu, Albert
Provides opportunity to learn about faculty research, discuss issues and concepts relevant to the field of health services research, and learn skills important for academic and professional success in the field of health services research. Intended for doctoral students from the Department of Health Policy and Management who are 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

Email: awu@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for some students; any student wanting to take this class who is not an HPM doctoral student must obtain consent of instructor

311.615.81 QUALITY OF MEDICAL CARE
3 credits - Course offered this year - Internet
Dy, Sydney M.
Introduces quality issues, including quality assessment and assurance performed by researchers, health systems, professional societies, and government and other third party organizations who pay for care. Provides a basis to evaluate the effectiveness of quality assessment and assurance activities. Describes different approaches to quality improvement and evaluation.

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

Email: dy1@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to graduate students
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online learning; an understanding of health care systems (or concurrent enrollment in Introduction to the US Health Care System) and training and experience with writing US-style term papers or concurrent enrollment in 550.001.01 English for Academic Purposes I
311.820.01 THESIS RESEARCH HPM-DRPH
variable credits Students register for thesis research credits per consultation with advisor. - Course offered this year - East Baltimore
Departmental Faculty
HPM/DrPH students conduct their thesis research.
Information not required for this course type
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

311.861.01 GRADUATE SEMINAR IN HEALTH CARE MANAGEMENT AND LEADERSHIP
1 credits - Course offered this year - East Baltimore
Engineer, Lilly; Morlock, Laura
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
Email: lmorloc1@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

312.600.93 MANAGING HEALTH SERVICES ORGANIZATIONS
4 credits - Course offered this year - Beijing, China
Ford, Eric
Examines the health care environment and its organizational implications. Presents a framework for understanding and managing health services and health sector organizations. Explores the application of managerial leadership skills to influence people and institutions. Discusses how to manage resources within a framework of principles, people, processes and organizational design. Addresses strategic and organizational management, management and performance improvement tools, and management roles and functions.
Upon successfully completing this course, students will be able to:
1. Identify the complexities and challenges of managing health services organizations
2. Analyze health service organizations and their functions in order to facilitate change and performance improvement
3. Apply management tools and processes to performance improvement opportunities
4. Discuss the role and expectations of managers in health service organizations
5. Apply management theories and tools to the analysis of a current health care organizational issues
6. Work collaboratively on a team assignment
Email: ewford@jhu.edu
Lecture: M F SA 8:30 AM - 5:00 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Enrollment restricted to DrPH/pt students in the Tsinghua cohort
Grading Options: Letter Grade or Pass/Fail
This course will be offered over a 4 day period in Beijing China at Tsinghua University. Students are required to complete readings and take several short quizzes on content comprehension prior to the start of class. Final case analysis will be due at the conclusion of 1st term on October 20, 2017.

312.603.81 FUNDAMENTALS OF BUDGETING AND FINANCIAL MANAGEMENT
3 credits - Course offered this year - Internet
Ward, William
Provides students with an understanding of budgeting as an important management tool. Focuses on budget development, evaluation of the financial status of a department or operating unit and the ability to determine what, if any, corrective actions need to be taken. Includes strategies for measuring and reporting skills. Considers the analytical tools used to support evaluation and decision-making including; volume adjusted variance analysis, benefit-cost ratio analysis, breakeven analysis, process flow analysis, benchmarking, and methods for building cost standards.

Upon successfully completing this course, students will be able to:
1. Explain budgeting as a key component of the administrative process
2. Develop budgets for service volume, revenues, salaries and supplies, and equipment
3. Evaluate the financial status of a department or operating unit and determine what, if any, corrective actions should be taken
4. Prepare marginal P&Ls, benefit-cost ratio analysis, and breakeven analysis and ad hoc financial analyses
5. Use benchmarking to improve operational performance

Email: wwardjr1@jhu.edu

Enrollment: Minimum 10, Maximum 120, Waitlist Enabled: Yes
Restricted to graduate students
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.
Jointly offered with HPM,IH

312.617.01 FUNDAMENTALS OF FINANCIAL ACCOUNTING
3 credits - Course offered this year - East Baltimore
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 discussion of where financial transactions originate, and how they are recorded and presented in the financial statements
3. Explain changes in financial position, and results of operations
4. Discuss key elements of the statement of cash flows
5. 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

Email: psokolo1@jhu.edu
Lecture: W 3:30 PM - 6:20 PM
Enrollment: Minimum 10, Maximum 40, Waitlist Enabled: Yes
Restricted to graduate students.
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; all students must obtain permission due to the enrollment cap

312.617.20 FUNDAMENTALS OF FINANCIAL ACCOUNTING
3 credits - Course offered this year - East Baltimore
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 Explain changes in financial position, and results of operations
4 Discuss key elements of the statement of cash flows
5 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

Email: psokolo1@jhu.edu
Lecture: M T 8:30 AM - 5:00 PM
Enrollment: Minimum 10, Maximum 40, Waitlist Enabled: Yes
Part-time DrPH students in the Tsinghua cohort only
Grading Options: Letter Grade or Pass/Fail
Consent required for all students; enrollment restricted to students in the Tsinghua DrPH cohort 1 only
Prerequisite:
This course will be offered over a 3-day period in Baltimore. Students are required to complete assignments prior to the start of class

312.620.20 PERFORMANCE MEASUREMENT IN HEALTH CARE
2 credits - Course offered only this year - East Baltimore
Matthes, Nikolas
Focuses on performance measurement for hospitals and describes key aspects and challenges of measurement initiatives in the current context of health care reform in general, and payment reform more specifically. The faculty, all senior health care professionals from the trenches, describe the regulatory environment, and Joint Commission and CMS requirements. They also summarize key measures used for public reporting and payment such as chart-abstracted clinical process, administrative data based outcomes, satisfaction, and efficiency. Highlights the advantages and disadvantages of each type of measure and discusses appropriate use of analytics and comparison data including patient satisfaction. Covers current public reporting and pay for performance initiatives and associated challenges. Another topic is emerging initiatives in the context of the electronic medical records, such as e-measures and meaningful use.
Upon successfully completing this course, students will be able to:
1 Discuss the evolution of performance measurement for hospitals and operational challenges for hospitals
2 Describe data analysis, composite scores, and benchmarking
3 Identify the components of payment reform including value-based Purchasing, readmissions, and hospital-acquired conditions
4 Evaluate satisfaction measurement and improvement
5 Review the changes of performance measurement in the context of EHR
6 Analyze the challenges of public reporting of quality measures for hospitals
Email: nmatthe1@jhu.edu
Lecture: SA 8:30 AM - 5:00 PM
Enrollment: Minimum 8, Maximum 35, Waitlist Enabled: Yes
Restricted to students in the Tsinghua DrPH cohort only
Grading Options: Letter Grade or Pass/Fail
Consent required for all students;
This course will be offered over a 2-day period in Baltimore. Students are required to complete assignments prior to the start of class.

312.623.20 FINANCIAL MANAGEMENT IN HEALTH CARE I
3 credits - Course offered this year - East Baltimore
Ellis, John
Provides opportunities for students to apply knowledge of accounting, budgeting and financial management in a real world setting, emphasizing analysis and decision-making; applies in a broad range of healthcare settings, including the pharmaceutical, insurance, consulting and for-profit industries. Presents a “big picture” approach rather than micromanagement.
Upon successfully completing this course, students will be able to:
1 Identify the complexities and challenges of financing a healthcare business
2 Interpret the economic performance of the organization based on its financial statement
3 Develop operating plans as a result of financial trends and results
4 Present clear and concise conclusions and recommendations through oral presentation for action to a Board of Directors
5 Analyze the financial viability of a new business venture and how it contributes to the mission of the organization
6 Prepare business plans based upon multiple data points and business trends
7 Develop framework to measure and monitor organizational performance
8 Demonstrate teamwork skills within a work team resulting in a completed case study

This course will be offered over a 3-day period in Baltimore. Students are required to complete assignments prior to the start of class.

312.630.81 HEALTHCARE FINANCIAL MANAGEMENT
3 credits - Course offered this year - Internet
Pio Roda, Claro
Provides managers and professionals, both novice and experienced, with the financially quantitative knowledge needed for planning, controlling and managing in contemporary health care organizations under constantly changing conditions. Provides a foundation in the basic financial management skills as well as their advanced application. Introduces the basic business finance approaches to decision-making and governance. Provides students with a sound conceptual and applied understanding of the role that financial and cost management play in the business setting decision-making process.

Upon successfully completing this course, students will be able to:
1 Discuss the importance and challenges of sound financial management in health care today.
2 Demonstrate a working knowledge of the key principles and techniques of financial management
3 Assess the financial health of an organization by reviewing key metrics and reports.
4 Identify all factors to consider in a major capital financing project.
5 Develop a comprehensive health care business plan supported by a thorough financial analysis.
6 Demonstrate effective teamwork skills within a project team culminating in a presentation to the class.

312.693.81 INTRODUCTION TO COMPARATIVE EFFECTIVENESS AND OUTCOMES RESEARCH
3 credits - Course offered this year - Internet
Segal, Jodi
Reviews the problems faced by decision makers across the US health care system, and reviews 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, but also on newer trial designs. Addresses 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 U.S. 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
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Prerequisite:

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.

312.810.01 FIELD PLACEMENT - HEALTH ADMINISTRATION
variable credits students typically register for 16 credits but may be modified at the program's discretion - Course offered this year - East Baltimore
Schwartz, Teresa

Complements and reinforces the didactic portion of the MHA program by providing students with an opportunity to apply the knowledge gained during the first year, to develop skills in management according to individually designed learning objectives, and to work as part of a management team in a health care organization. Students are placed in a variety of professional settings, which may include: the community sector (community and university-affiliated hospitals), the for-profit sector (investor-owned hospitals, consulting firms, long-term care facilities, and managed care organizations.)

Upon successfully completing this course, students will be able to:
1. Translate and apply financial, economic, market and performance information and models to improve and optimize organizational performance
2. Demonstrate knowledge of the healthcare system and environment in which health services are provided
3. Develop and define a vision, take initiative, provide direction, manage change, and participate in the planning, development and monitoring required to establish and achieve organizational goals
4. Communicate effectively, manage relationships and influence individuals and groups to take action in the pursuit of organizational goals

Email: Teresa.Schwartz@jhu.edu

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Open to 2nd year MHA students only
Grading Options: Pass/Fail
Prerequisite: successful completion of 1st year curriculum

312.866.01 MHS SEMINAR IN HEALTH FINANCE AND MANAGEMENT
1 credits - Course offered this year - East Baltimore
Bittle, Mark; Schwartz, Teresa

Introduces students to current health care finance and management issues through a series of discussion sessions and field trips with program directors. Students will work with their advisor to identify appropriate learning opportunities and contacts that will allow students to develop a scholarly research paper on a topic related to health finance and/or management.

Upon successfully completing this course, students will be able to:
1. Identify, evaluate, and prioritize market opportunities and alternatives
2. Apply management knowledge and skills effectively in guiding individual and group behavior and influencing organizational culture and performance
3. Develop a proposal for the MHS capstone

Email: mbittle1@jhu.edu

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Restricted to HPM MHS/HFM students
Grading Options: Pass/Fail
Administrative Course Fee: 25.0000
To cover the cost of book(s) that are distributed to the students during 1st term.

312.867.01 MHA SEMINAR IN HEALTH FINANCE AND MANAGEMENT
1 credits - Course offered this year - East Baltimore
Schwartz, Teresa
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

Email: Teresa.Schwartz@jhu.edu
Lecture: M W 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to MHA students only
Grading Options: Pass/Fail
Administrative Course Fee: 25.0000
fee will cover the cost of course materials.

313.653.01 MICROECONOMIC MODELS IN PUBLIC HEALTH I
2 credits - Course offered this year - East Baltimore
Gaskin, Darrell J.; 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 employed in the literature
2. Apply comparative statics to health economic problems
3. Create their own models of health economic phenomenon
4. Produce advanced articles in health economics literature

Email: herring@jhu.edu
Lecture: F 1:30 PM - 3:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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

313.653.01 MICROECONOMIC MODELS IN PUBLIC HEALTH I
2 credits - Course offered this year - East Baltimore
Gaskin, Darrell J.; 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 employed in the literature
2. Apply comparative statics to health economic problems
3. Create their own models of health economic phenomenon
4 Produce advanced articles in health economics literature

Email: herring@jhu.edu
Lecture: F 1:30 PM - 3:20 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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 313.655
Final grade applies to all terms

313.653.01 MICROECONOMIC MODELS IN PUBLIC HEALTH I
2 credits - Course offered this year - East Baltimore
Gaskin, Darrell J.; 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 employed in the literature
2. Apply comparative statics to health economic problems
3. Create their own models of health economic phenomenon
4. Produce advanced articles in health economics literature

Email: herring@jhu.edu
Lecture: F 1:30 PM - 3:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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 313.656
Final grade applies to all terms

313.670.01 MATHEMATICAL MICROECONOMICS I
3 credits - Course offered this year - East Baltimore
Bridges, John
Explores the core topics of microeconomics including: the theory of the consumer, theory of the firm, market equilibrium, and monopoly. Provides students with a graduate level introduction to economic theory while reviewing mathematical concepts and techniques. Utilizes calculus to determine first order conditions for utility maximization, cost minimization, profit maximization, and linear algebra to identify equilibrium. Fosters a greater understanding of how consumers and firms make decisions and how they interact in the market place.

Upon successfully completing this course, students will be able to:
1. Demonstrate a working understanding of calculus and linear algebra
2. Explain the economic definitions of demand, supply and equilibrium
3. Use algebra and linear algebra in identifying market equilibrium
4. Mathematically solve consumers' utility maximization to determine demand
5. Use minimization and maximization techniques to model firms' decisions
6. Solve economic problems facing society using mathematical techniques

Email: jbridge7@jhu.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment: Minimum 7, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: an undergraduate course in calculus and economics or permission of instructor

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 75 of 118
315.707.81 INTRODUCTION TO BIOMEDICAL AND PUBLIC HEALTH INFORMATICS
Lehmann, Harold
Provides a survey of issues in health IT and informatics, taking the system's perspective. Students leave with a number of frameworks they can use to critically appraise a wide variety of health IT problems and systems. Issues in common to clinical (medical) and public health information problems, as well as issues unique to each, are discussed.

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

1. Identify social, biomedical, and technological imperatives and risks for health IT and informatics
2. Describe the basic functions of database and Web technologies
3. Distinguish among data, information and knowledge
4. Describe the levels of interoperability standards, explain core issues of usability and diagram workflow
5. Match theories of information needs to specific instances
6. Explain policy issues of health IT and informatics at the national and individual levels and the application of health IT and informatics principles to public health

Email: lehmann@jhmi.edu
Enrollment: Minimum 15, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to online learning
Jointly offered with ME
This is the same course as SOM 600.903

317.600.01 INTRODUCTION TO THE RISK SCIENCES AND PUBLIC POLICY
Nachman, Keeve
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.

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

1. Achieve a general understanding of the concept of quantitative risk assessment and its application to public health problems
2. Identify the elements of a quantitative risk assessment, utilizing the general framework developed by the National Research Council
3. Evaluate a report of a quantitative risk assessment and interpret the policy relevance of the findings
4. Describe current uses of quantitative risk assessment in policy-making

Email: knachman@jhu.edu
Lecture: M W 5:00 PM - 6:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Jointly offered with EHS,EPI

317.605.81 METHODS IN QUANTITATIVE RISK ASSESSMENT
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

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 76 of 118
2 Use selected software programs
3 Recognize and evaluate data gaps and models and assumptions used to fill them
4 Recognize and describe the influence of variability and uncertainty on risk estimates
5 Critique risk analyses

Email: mfox9@jhu.edu

Enrollment: Minimum 10, Maximum 30, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Prerequisite: 317.600 and Introduction to On-line learning
Jointly offered with EHS

318.600.01 INTRODUCTION TO POLICY (Discontinued)
3 credits - Course offered this year - East Baltimore
Forest, Pierre-Gerlier
Provides students with a systematic introduction to the fundamental concepts of policy science and policy analysis. Focuses on central questions, followed by discussions and practical exercises. Addresses the following: What is policy? How can it be distinguished from other forms of public or collective decisions? What is the role of power and authority in policy-making? What is the impact of public policy on society? On ordinary people? How to influence changes in policy? Are health and social policies different from policies in other sectors? How does globalization affect policy capacity at national level?
Upon successfully completing this course, students will be able to:
1 Use the key concepts of policy, public policy, and public decision-making
2 Identify different policy systems and networks
3 Explain the differences in the various kinds of policy
4 Describe and discuss the role of evidence in policy
5 Describe unintended consequences in the context of policy development
6 Compare private and public policy
7 Discuss differences in governments and policy around the world
Email: pforest1@jhu.edu
Lecture: T TH 9:00 AM - 10:20 AM
Enrollment: Minimum 10, Maximum 75, Waitlist Enabled: Yes
MPP, MSPH, MHS, & MPH concentration students only
Grading Options: Pass/Fail
Consent required for some students; Consent required for students who are not in MPP, MSPH, MHS, & MPH concentrations

318.603.01 APPLIED MICROECONOMICS FOR POLICYMAKING (Cancelled - Department)
3 credits - Course offered this year - East Baltimore
Departmental Faculty
Introduces policy students to the theories, concepts, terminology and tools of microeconomics as it relates to the examination and analysis of public policies. Students gain new vocabulary to describe decision-making behavior of people, households, firms and governments. Students learn and apply theories of supply and demand, elasticity, utility-maximization and other concepts to examine and better understand public policy issues. Students finish the course with an understanding of economic terminology and theories, will be able to use economic tools to examine decision-making and apply the concepts, terminology and tools to various policies and problems.
Upon successfully completing this course, students will be able to:
1 Describe the basic tools used in microeconomic analysis
2 Explain the key terminology and concepts of microeconomics
3 Utilize supply and demand models to evaluate different pricing policies including taxes, price ceilings and price floors
4 Discuss the role of “the economic way of thinking” in the context of public policy
5 Use the utility maximization theory and 2-D model to understand consumer behavior
6 Describe how markets operate and identify welfare outcomes for consumers and firms
7 Review market operations and identify welfare outcomes for consumers and firms
8 Examine common market failures and their application to public problems related to transportation policy (congestion, public transportation access), environmental health (obesity, pollution) and others
9 Evaluate different government remedies/interventions for market failures using the tools of supply and demand
318.610.01 STATISTICAL ANALYSIS FOR POLICY MAKING I
3 credits - Course offered this year - East Baltimore
Giandrea, Michael
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.

Upon successfully completing this course, students will 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

Email: mgiandr1@jhu.edu

318.615.01 PROGRAM EVALUATION FOR PUBLIC POLICY I
3 credits - Course offered this year - East Baltimore
Orr, Larry
Introduces the fundamental principles and practices involved in the design, implementation, and analysis of program evaluations. Topics to be considered include the evaluation of ongoing programs and tests of new interventions being considered for broader adoption; determining whether programs are ‘working’; procedures involved in implementing an evaluation in the field, including potential pitfalls; procedures for collecting and analyzing data.

Upon successfully completing this course, students will be able to:
1. Outline the fundamental principles and practices involved in the design, implementation and analysis of program evaluation
2. Discuss the evaluation of ongoing programs and tests of new interventions being adopted
3. Describe the basic statistical principles for designing an evaluation
4. Examine procedures involved in implementing an evaluation
5. Identify the basic ideas of cost-benefit and process analyses
6. Discuss the role of evaluation results in the policy process

Email: lorr5@jhu.edu

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 78 of 118
Consent required for some students; Students not enrolled in the formal MPP program must obtain permission prior to registering. 
Prerequisite: 318.610-613 or 140.621-624 or equivalent 
Multi-term with 318.616 
Students must register for both 318.615 and 318.616 in order to receive a grade. 
Final grade applies to all terms 

318.636.01 URBAN POLICY 
3 credits - Course offered this year - East Baltimore 
Newman, Sandra 
Explores urban issues through a policy lens. Examines a wide range of urban characteristics and the challenges cities face from fiscal stress and governance to poverty, homelessness, and drugs. Explores policy remedies proposed or tried in the past, how well they have worked, and what other strategies may be tried. 
Upon successfully completing this course, students will be able to: 
1. Describe the scope and complexity of a range of critical urban policy issues 
2. Think analytically, systematically and logically about complex urban policy problems 
3. Develop evidence-based targets for policy action 
4. Communicate complex ideas in a straightforward, cogent manner, both orally and in writing 

Email: sjn@jhu.edu 
Lecture: T 3:30 PM - 6:30 PM 
Enrollment: Minimum 10, Maximum 40, Waitlist Enabled: Yes 
Grading Options: Letter Grade or Pass/Fail 
Consent required for some students; undergraduates must obtain instructor permission 
Prerequisite: 

318.810.01 FIELD PLACEMENT - MPP 
3 credits - Course offered this year - East Baltimore 
Resnick, Beth A. 
All students must complete an internship to qualify for the MPP degree. Students are required to work at their internship placements for a minimum of 300 hours. Students are required to submit a policy portfolio to the MPP Office at the end of their internship: (1) A memo or paper that reflects on lessons learned during the placement and on the applicability of key concepts and skills learned during the first year of the masters program. (2) A sample of a written work product that was produced on the job. Typically, this would be a background paper or memorandum. 
Upon successfully completing this course, students will be able to: 
1. Apply the knowledge and skills obtained in the first year core courses to real-world public policy issues and problems 

Email: bresnick@jhu.edu 
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No 
continuing MPP students only 
Grading Options: Pass/Fail 
Prerequisite: completion of 1st year MPP required courses 

318.867.01 MPP GRADUATE POLICY SEMINAR 
2 credits - Course offered this year - East Baltimore 
Altschuler, David 
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. 
Upon successfully completing this course, students will 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
6. Discuss the power of personal contacts

Email: dma@jhu.edu
Lecture: T 9:00 AM - 10:20 AM

Enrollment: Minimum 10, Maximum 25, Waitlist Enabled: Yes
Only MPP students will be permitted to enroll in this course
Grading Options: Letter Grade or Pass/Fail

319.602.94 PROJECT MANAGEMENT AND EVALUATION
3 credits - Course offered this year - India
Joshi, Suresh
Covers basic concepts and principles of project management and project management cycles. Provides learning opportunities for developing project management skills, and translates modern management concepts into project planning and management using a Log Frame Approach (LFA). Describes implementation structure, coordination and supervision mechanisms, and project evaluation methods. Reviews human aspects of project management such as motivating people, team building, and improving personal influence and effectiveness.

Upon successfully completing this course, students will be able to:
1. Describe principles of project management
2. Explain project management cycle and major steps
3. Conduct situational analysis – SWOT
4. Conduct Problem analysis and define the objectives
5. Use logframe and indicators for monitoring the project
6. Develop systematic and time-bound action plans for project implementation
7. Explain human aspects of project management like motivating people, team building, gender issues, improving personal influence and effectiveness

Email: sjoshi@jhsph.edu
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

319.603.94 STRATEGIC MANAGEMENT
3 credits - Course offered this year - India
Chaudhary, Monika
Presents a practical framework for formulating, implementing and controlling organizational and program strategies in public health. Provides an overview of the sub-systems, processes and models in strategic management as applicable to public health and health care organizations. Critically reviews the major environmental trends affecting healthcare organizations. Discusses how to use internal and external environmental analysis to identify the bases of sustained competitive advantage. Presents frameworks for strategy formulation and implementation including SWOT analysis and decision logic.

Upon successfully completing this course, students will be able to:
1. Explain why strategic management has become crucial in today’s dynamic health care environment
2. Appreciate the significance of the general external environment's impact on health care organizations
3. Identify major environmental trends affecting healthcare
4. Perform analyses of internal and external environmental factors
5. Describe the process of developing an implementation strategy in public health policy and programs

Email: mochaudh@jhsph.edu
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

319.608.94 FINANCE MANAGEMENT, ACCOUNTING AND BUDGETING
3 credits - Course offered this year - India
Chaudhary, Monika; Sodani, PR
Explains the role of budgeting as a key component of the administrative process. Describes basic financial management concepts and techniques, and provides a foundation for integrating these techniques into health care organizations. Presents strategies for evaluating the financial status of a department or health unit in order to determine whether corrective actions need to be taken. Presents various analytical methods in management decision making, including benefit/cost ratio analysis, and break-even analysis.

Upon successfully completing this course, students will be able to:
1. Explain components of financial proposals for health care projects/studies
2. Describe the balance sheet and income statement in health care settings
3. Develop budgets for revenues, staffing and salaries, supplies and services, and equipment
4. Evaluate the financial status of a health service unit or department
5. Determine the cause(s) of performance deviation
6. Use a variety of analytical methods to support sound business decision-making

Email: mochaudh@jhsph.edu

Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Only students enrolled in the MPH program with IIHMR, Jaipur are permitted in this section
Grading Options: Letter Grade or Pass/Fail
This section is offered in Jaipur, India

220.601.01 FOUNDATIONS OF INTERNATIONAL HEALTH
4 credits - Course offered this year - East Baltimore
Peters, David
Provides an overview of foundational approaches and issues in International Health, preparing students to gain the skills and attributes needed to work in global public health. Examines conditions faced by disadvantaged populations, primarily in low and middle income countries (LMICs), and pathways to achieving better health outcomes. Applies principles of health equity and social justice in analyzing global health policies and programs, and develops skills to apply different frameworks for diverse types of public health intervention. Students develop and articulate evidence-informed arguments concerning public health strategies in different contexts, and practice communication skills that demonstrate respect for other cultures and perspectives. They use a range of tools to prepare for work in global public health, including how to conduct situational analyses across a range of settings, how to analyze scale-up, sustainability, and equity, and how to move research into practice.

Upon successfully completing this course, students will be able to:
1. Characterize major domains of global public health, including the associated social determinants and burdens of disease, and the key interventions and approaches to improve outcomes within those domains
2. Apply principles of social justice and human rights to assess global health policies and programs, and their impact on health equity
3. Demonstrate interpersonal communication skills that demonstrate respect for other perspectives and cultures
4. Use scientific evidence for health program planning, implementation, and evaluation in low and middle-income country settings
5. Develop and articulate arguments for global health strategies using evidence from reliable sources
6. Describe the roles and relationships of the entities influencing global health
7. Identify different dimensions of capacity building in global health, and apply capacity building concepts to health policies and program interventions in low and middle income country settings
8. Conduct a situation analysis across a range of cultural, economic, and health contexts, identifying the relationships among patterns of morbidity, mortality, and disability with demographic and other factors in shaping the circumstances of the population of a specified community, country, or region.

Email: dpeters@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM
Lab Section: 01 F 9:30 AM-11:20 AM
Enrollment: Minimum 10, Maximum 168, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Prerequisite:
Katz, Joanne

Explores selective current and historic topics of relevance to International Health in the first term. Each topic comprises a set of readings, some of which are presented and discussed in class by students working in groups under the guidance of expert content faculty. Upon successfully completing this course, students will be able to:

1. Think and write critically
2. Work in multidisciplinary teams to analyze complex issues of importance in International Health
3. Use evidence based perspectives to critically examine what interventions, programs and policies work, do not work, and why or why not

Email: jkatz1@jhu.edu

Lecture: T TH 1:30 PM - 2:50 PM

Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No

Only first year international health doctoral students (including Dr.PH)

Grading Options: Pass/Fail

Prerequisite: None

Terms graded individually

Students taking this course are required to take 220.606 in 2nd term.

220.800.01 MPH CAPSTONE INTERNATIONAL HEALTH

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

Departmental Faculty

The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

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

1. 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 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: 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.

220.810.01 FIELD PLACEMENT DRPH PROGRAM INTERNATIONAL HEALTH

variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

220.820.01 THESIS RESEARCH DRPH PROGRAM INTERNATIONAL HEALTH

variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

220.840.01 SPECIAL STUDIES AND RESEARCH DRPH PROGRAM INTERNATIONAL HEALTH

variable credits - Course offered this year - East Baltimore

Information not required for this course type
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

220.895.01 MPH PRACTICUM: INTERNATIONAL HEALTH
variable credits Students who have not met the practicum requirement, must register for at least two credits. - Course offered this year - East Baltimore
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals. Upon successfully completing this course, students will be able to:
1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for all students; Student must receive faculty advisor approval

221.602.60 APPLICATIONS IN MANAGING HEALTH ORGANIZATIONS IN LOW AND MIDDLE INCOME COUNTRIES
3 credits - Course offered this year - East Baltimore
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 scorecard” 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. Use communication and collaboration skills effectively to address 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

Email: dpeters@jhu.edu
Lecture: TH 8:30 AM - 10:20 AM
Enrollment: Minimum 10, Maximum 50, Waitlist Enabled: Yes
No undergraduates. Experience working in the health sector in LMICs required for students not in IH
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for all students except MSPH & PHD students in the Health Systems program in the IH Department. Interested student must email Jessica Cash requesting permission stating relevant experience. This class blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. The class will meet once a week. Students are expected to spend one hour a week on class work in addition to regular homework. Once consent is granted student will be assigned to a specific section.

221.602.62 APPLICATIONS IN MANAGING HEALTH ORGANIZATIONS IN LOW AND MIDDLE INCOME COUNTRIES
3 credits - Course offered this year - East Baltimore
Engineer, Cyrus
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. Use communication and collaboration skills effectively to address 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.

Email: cengine1@jhu.edu
Lecture: M 3:30 PM - 5:20 PM
Enrollment: Minimum 10, Maximum 50, Waitlist Enabled: Yes
No undergraduates. Experience working in the health sector in LMICs required for students not in IH
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required for all students except MSPH & PHD students in the Health Systems program in the IH Department. Interested student must email Jessica Cash requesting permission stating relevant experience.
This class blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. The class will meet once a week. Students are expected to spend one hour a week on class work in addition to regular homework.

221.613.01 INTRODUCTION TO HUMANITARIAN EMERGENCIES
3 credits - Course offered this year - East Baltimore
Doocy, Shannon; Spiegel, Paul
Introduces different types of humanitarian emergencies, humanitarian architecture and provides an overview of sectoral focus areas of humanitarian response. Informs students of the environment in which these emergencies occur and how public health responses in various types of emergencies and contexts differ. Explores mechanisms of preparedness, management of response to humanitarian emergencies and long-term recovery.

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

1. Define a humanitarian emergency and list the types of public health needs they create.
2. List the common types of humanitarian emergencies and indicate their relative importance in terms of the size of the affected population and mortality.
3. Discuss responses to different types of humanitarian emergencies and how priorities may differ by location and type of emergency.
4. Describe humanitarian architecture, coordination mechanisms and list the organizations that are engaged in humanitarian response.

Email: doocy1@jhu.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment: Minimum 20, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

221.619.01 INTRODUCTION TO MICROECONOMICS
3 credits - Course offered this year - East Baltimore
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.

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 84 of 118
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

Email: asorkin1@jhu.edu
Lecture: T TH 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No undergraduates are NOT permitted in this course.
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

221.695.01 SEMINAR IN HUMANITARIAN HEALTH
1 credits - Course offered this year - East Baltimore
Robinson, Courtland; Spiegel, Paul
Introduces important and evolving issues in global humanitarian health from various perspectives including experts, practitioner, policymakers and academics. Examines trending issues such as new emergencies, politics, human rights, humanitarian architecture, leadership, cash transfers, innovative financing among others. Allows for in-depth discussion and debate on these issues with faculty. Prepares students to explore practicums, internships, develop capstone projects, and apply to careers in the humanitarian health field.
Upon successfully completing this course, students will be able to:
1 Explain new and evolving concepts, policies, and interventions in humanitarian emergencies and disasters
2 Apply concepts, policies and interventions to different contexts and scenarios using current emergencies
3 Analyze key issues in humanitarian health including (but not limited to) models in program financing, sector-specific interventions, and solutions for refugees, displaced populations and others affected by crisis.
4 Identify key elements of the humanitarian health architecture and important organizations involved in programs interventions, policy, and research.
5 Critique existing humanitarian interventions and responses at global, regional and national levels.

Email: pbspiegel@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only students signed up for the MPH Concentration Health in Crisis and Humanitarian Assistance, or the Certificate in Humanitarian Assistance
Grading Options: Pass/Fail
Meets every twice a month starting on 8/30/17 until 12/13/17, and again from 1/31/18 to 5/2/18. Must retake the seminar in 3rd and 4th terms. Grade will be given at the end of 2nd term. Seminar dates are: 1st Term: Sep 13, 27; Oct 11, 25
2nd Term: Nov 8, 22; Dec 6, 13

221.722.01 QUALITY ASSURANCE MANAGEMENT METHODS FOR DEVELOPING COUNTRIES
4 credits - Course offered this year - East Baltimore
Burnham, Gilbert; 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 Describe the principles, tools and methods for developing quality initiatives
2 Define quality from the perspective of all stakeholders
3 Determine the root cause of quality deficiencies and apply team based problem solving methods to address poor performance
4 Assess the costs of poor quality and of quality improvement
5 Develop performance monitoring systems and indicators to manage performance of healthcare
6 Apply concepts and tools from QA case studies

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 85 of 118
221.722.81 QUALITY ASSURANCE MANAGEMENT METHODS FOR DEVELOPING COUNTRIES
4 credits - Course offered this year - Internet
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. Describe the principles, tools and methods for developing quality initiatives
2. Define quality from the perspective of all stakeholders
3. Determine the root cause of quality deficiencies and apply team based problem solving methods to address poor performance
4. Assess the costs of poor quality and of quality improvement
5. Develop performance monitoring systems and indicators to manage performance of healthcare
6. Apply concepts and tools from QA case studies

221.810.01 HEALTH SYSTEMS PRACTICUM
variable credits field placement - Course offered this year - East Baltimore
Alonge, Olakunle; Creanga, Andreea
Complements and reinforces the didactic portion of the MSPH program. Provides students with an opportunity to apply the knowledge gained during the first year, to develop skills in management of health programs in low- and middle-income countries according to individually designed learning objectives, and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGOs), multi-lateral, private, and/or for-profit sector. Provide opportunity for feedback for student performance and placement experience

Upon successfully completing this course, students will be able to:
1. Integrate and apply methods and skills learned in courses taken on the first year of the MSPH in a practical setting.
2. Develop new skills essential for functioning as an effective global health professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer.
3. Evaluate a program or field project as it relates to the management and control of health problems of public health importance in resource poor settings
4. Develop a proposal, take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals.
5. Communicate effectively, manage relationships and participate in teams
6. To allow for the seamless transition from student to public health professional.

221.820.01 THESIS RESEARCH HEALTH SYSTEMS
variable credits thesis research - Course offered this year - East Baltimore
Students actively conduct research on topics of global health importance, including developing a research question, designing a study to answer the question, conducting the research and writing up the results in a scientific format.
This course will prepare you to be able to do the following:

1. Identify research questions of importance to health in underserved populations in low resource settings internationally and in the US.
2. Design a study or studies to answer the questions.
3. Develop an application to an Institutional Review Board to address human subjects research issues.
4. Write up the results of research for the scientific literature.

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

221.830.01 POSTDOCTORAL RESEARCH HEALTH SYSTEMS
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

221.840.01 SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

221.850.01 MSPH CAPSTONE HEALTH SYSTEMS
variable credits 2-16 - Course offered this year - East Baltimore

Departmental Faculty

Offers students an opportunity to integrate and apply program skills and competencies to a public health problem in a format that approximates a professional practice experience. Fosters students' ability to produce scholarly papers that provide a meaningful contribution to knowledge of the health of underserved populations. Guides students' development of tangible evidence of expertise that addresses specific applied topics relevant to international health.

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

1. Develop a concise and cohesive written document that defines a public health problem, a population of interest, and have a defined geographic scope
2. Conduct a comprehensive literature review
3. Synthesize relevant literature in a specific public health topic
4. Analyze and present public health data in a scholarly paper

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only for MSPH Health Systems students in their 2nd year
Grading Options: Pass/Fail
Prerequisite: All other MSPH HS requirements must be taken before or concurrently with the capstone project.

221.860.01 HEALTH SYSTEMS PROGRAM SEMINAR
1 credits - Course offered this year - East Baltimore

Constenla, Dagna; Rao, Krishna

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.

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

1. Identify Health Systems Program faculty and staff who can be mentors and informal advisors during students' course of study
2. Define educational and long-term goals for a career in International Health Systems
3. Identify research and practice opportunities in the Health Systems program
221.861.01 DOCTORAL SEMINAR IN HEALTH SYSTEMS
1 credits - Course offered this year - East Baltimore
Bachani, Abdulgafoor

Designed to prepare first-year PhD students in the Health Systems program area to develop and defend their research proposal. Students will practice formulating a research question, conducting a systematic literature review, and drafting, presenting and critiquing research proposals.

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

1. Describe the elements of a research proposal
2. Formulate a research question, develop or identify a conceptual framework, conduct a brief literature review, and describe a range of study designs
3. Analyze and present a critique of a scientific journal article
4. Draft, present and defend an outline of a research proposal and to critique the proposals of fellow students

Email: abachani@jhu.edu

222.641.60 PRINCIPLES OF HUMAN NUTRITION IN PUBLIC HEALTH
4 credits - Course offered this year - East Baltimore
Hurley, Kristen

Prepares students for integrating the biology of nutrition into public health research and practice. Provides an integrated overview of the physiological requirements and functions of energy, macronutrients, and vitamins and minerals that influence health and risk for disease. Topics include dietary sources and nutrient requirements, status, absorption, metabolism, and function. Extends nutrition principles to the health and disease risks across the lifespan.

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

1. List the major macro and micronutrients and explain their relevance to human health
2. Explain the scientific rationale and public health significance of defining nutritional requirements in healthy individuals and populations, with reference to specific conditions such as pregnancy and lactation, early childhood, adolescence, and older age
3. Summarize the underlying nutrient related metabolic processes in maintaining health and preventing disease
4. Apply principles of human nutrition and evaluate their relevance to public health in a global context

Email: khurley2@jhu.edu

Learning Materials:

- (Book) Essentials of Human Nutrition
  Mann and Truswell, Jim and A. Stewart
  JHU $70.00

222.657.01 FOOD AND NUTRITION POLICY

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 88 of 118
2 credits - Course offered this year - East Baltimore
Klemm, Rolf; West, Keith

Examines the policy-making process underlying large-scale 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. Draws examples from the United States as well as low and middle income countries. Faculty and guest lecturers with diverse experience in developing and implementing food and nutrition policies lead the discussions.

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 policy options
3. Critique a specific food and/or nutrition policy with respect to its evidence-base, adequacy of design relative to the problem it is addressing, potential for nutritional impact and forces which hinder or help policy adoption and implementation (e.g. stakeholder groups)

Email: rklemm1@jhmi.edu
Lecture: M 3:30 PM - 5:20 PM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: There are no formal prerequisites for taking the course; however, students are expected to be familiar with the basic principles of nutrition. Students are strongly encouraged to broaden their reading in the subjects related to the nutritional problems and policies that are addressed in the course in order to fully participate in class discussions and in order to prepare a paper critiquing a specific food or nutrition policy.

222.658.01 CRITICAL THINKING IN NUTRITION
1 credits - Course offered this year - East Baltimore
Cheskin, Lawrence

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

Email: cheskin@jhu.edu
Lecture: F 1:30 PM - 2:20 PM
Enrollment: Minimum 2, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail

222.810.01 HUMAN NUTRITION PRACTICUM
variable credits field placement - Course offered this year - East Baltimore
Hurley, Kristen

Complements and reinforces the didactic portion of the MSPH program. Provides students with an opportunity to apply the knowledge gained during the first year, to develop field, laboratory, or clinical skills related to nutrition research or programs according to individually designed learning objectives, and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGOs), university projects, and multi-lateral, private, and/or for-profit sector. Practicum locations exist in the US and typically most regions of the world. Provide opportunity for feedback for student performance and placement experience

Upon successfully completing this course, students will be able to:
1. Integrate and apply methods and skills learned in courses taken on the first year of the MSPH in a practical setting.
2. Develop new skills essential for functioning as an effective global health professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer.
3. Evaluate a program or field project as it relates to public health nutrition
4. Integrate and understand knowledge through critical literature reviews, and analysis and interpretation of scientific data
5. Develop a proposal, take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals.

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 89 of 118
6 Communicate effectively, manage relationships and participate in teams
7 To allow for the seamless transition from student to public health professional.

Email: khurley2@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

222.815.01 HUMAN NUTRITION - REGISTERED DIETITIAN (RD) PROGRAM PRACTICUM
variable credits 1-16 credits - Course offered this year - East Baltimore

Caulfield, Laura

Engages the student, the placement agency, and the faculty in shared responsibility for the provision and acquisition of practical experience in a nutrition-related public health area. Led by the Johns Hopkins Bayview Clinical Nutrition Department, the practicum extends from June (following the year of coursework) to February of the next calendar year (3rd quarter of the subsequent academic year). Consists of a series of specific rotations in clinical, food service and community nutrition, and culminates in a 10-week public health placement.

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

1 Transition from student to public health dietetics professional
2 Integrate and apply methods and skills learned in courses taken on the first year of the MSPH in a practical setting
3 Develop new skills essential for functioning as an effective nutrition and dietetics professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer
4 Integrate and understand knowledge through critical literature reviews, and analysis and interpretation of scientific data
5 Develop a proposal, take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals
6 Communicate effectively, manage relationships and participate in teams

Email: lcaulfi1@jhu.edu

Enrollment: Minimum 4, Maximum 8, Waitlist Enabled: Yes
Only students previously accepted to the MSPH/Registered Dietitian program and on their 2nd year.
Grading Options: Pass/Fail
Administrative Course Fee: 7500.0000
Training rotations, materials, incidentals, meeting registration, contin. ed & administrative costs
Community involvement: Rotations at PACE, Moveable Feast, WIC, & Baltimore City School System

222.820.01 THESIS RESEARCH HUMAN NUTRITION
variable credits thesis research - Course offered this year - East Baltimore

Students actively conduct research on topics of global health importance, including developing a research question, designing a study to answer the question, conducting the research and writing up the results in a scientific format

This course will prepare you to be able to do the following:
1 Identify research questions of importance to health in underserved populations in low resource settings internationally and in the US.
2 Design a study or studies to answer the questions.
3 Develop an application to an Institutional Review Board to address human subjects research issues
4 Write up the results of research for the scientific literature

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

222.830.01 POSTDOCTORAL RESEARCH HUMAN NUTRITION
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 90 of 118
222.840.01 SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION
variable credits - Course offered this year - East Baltimore
Information not required for this course type
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

222.850.01 MSPH CAPSTONE HUMAN NUTRITION
variable credits 2-16 - Course offered this year - East Baltimore
Departmental Faculty
Offers students an opportunity to integrate and apply program skills and competencies to a public health problem in a format that approximates a professional practice experience. Fosters students' ability to produce scholarly papers that provide a meaningful contribution to knowledge of the health of underserved populations. Guides students' development of tangible evidence of expertise that addresses specific applied topics relevant to international health.
Upon successfully completing this course, students will be able to:
1. Develop a concise and cohesive written document that defines a public health problem, a population of interest, and have a defined geographic scope
2. Conduct a comprehensive literature review
3. Synthesize relevant literature in a specific public health topic
4. Analyze and present public health data in a scholarly paper
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only for MSPH Human Nutrition students in their 2nd year
Grading Options: Pass/Fail
Prerequisite: All other MSPH HN requirements must be taken before or concurrently with the capstone project.

222.860.01 GRADUATE NUTRITION SEMINAR
1 credits - Course offered this year - East Baltimore
Palmer, Amanda
Exposes students to the breadth of interests represented by Center for Human Nutrition faculty, as well as a range of researchers, clinicians, policymakers, and practitioners from the larger Johns Hopkins community and organizations such as the US Department of Agriculture (USDA), the National Institutes of Health (NIH), and UN Agencies. Specific topics vary over time. Emphasizes active listening, as well as the critical evaluation of research, practice, and policy.
Upon successfully completing this course, students will be able to:
1. Cite examples of state-of-the-art research, policy, or practice in the field of public health nutrition based on presentations by faculty and/or visiting speakers
2. Identify areas of overlapping interest with seminar speakers that may be of relevance to MSPH practicums, MPH capstone projects, or doctoral research
3. Recognize the features of an engaging presentation
Email: apalme17@jhu.edu
Lecture: T 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Prerequisite:

222.861.01 DOCTORAL SEMINAR IN PROPOSAL DEVELOPMENT
1 credits - Course offered this year - East Baltimore
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
Identify the components of a research career that they would like to pursue and opportunities at JHU to support the process

Conduct a literature review in an area of interest

Develop a concept paper for a study in an area of interest

Write an NIH-style grant on a research topic of interest

Give presentations on a research topic of interest

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**223.672.81 DATA MGMT METHODS IN HEALTH RESEARCH STUDIES**

(Cancelled - Department)

5 credits - Course offered this year - Internet

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.

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**223.810.01 GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PRACTICUM**

variable credits field placement - Course offered this year - East Baltimore

Tam, Yvonne

Complements and reinforces the didactic portion of the MSPH program. Provides students with an opportunity to apply the knowledge gained during the first year, to develop skills in epidemiologic and data analysis skills applied to diseases of importance in low and middle income countries according to individually designed learning objectives, and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGOs), multi-lateral, private, and/or for-profit sector. Provide opportunity for feedback for student performance and placement experience

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

1. Integrate and apply knowledge, methods and skills learned in courses taken on the first year of the MSPH in a practical setting, to allow for the seamless transition from student to public health professional.
2. Develop new skills essential for functioning as an effective global health professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer.
3. Evaluate a program or field project as it relates to the socio-cultural and health context, behavioral and health impact, community involvement and program process.
4. Develop a proposal, and/or report, or other written document that analyzes and synthesizes public health data related to their practicum.
5 Take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals.

6 Communicate effectively, manage relationships and participate in teams

Email: yvonneyotam@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

MSPH GDEC students only

Grading Options: Pass/Fail

223.810.81 GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PRACTICUM (Discontinued)

variable credits field placement - Course offered this year - Internet

Charron, Karen; Tam, Yvonne

Complements and reinforces the didactic portion of the MSPH program. Provides students with an opportunity to apply the knowledge gained during the first year, to develop skills in epidemiologic and data analysis skills applied to diseases of importance in low and middle income countries according to individually designed learning objectives, and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGOs), multi-lateral, private, and/or for-profit sector. Provide opportunity for feedback for student performance and placement experience

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

1 Integrate and apply knowledge, methods and skills learned in courses taken on the first year of the MSPH in a practical setting, to allow for the seamless transition from student to public health professional.

2 Develop new skills essential for functioning as an effective global health professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer.

3 Evaluate a program or field project as it relates to the socio-cultural and health context, behavioral and health impact, community involvement and program process.

4 Develop a proposal, and/or report, or other written document that analyzes and synthesizes public health data related to their practicum.

5 Take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals.

6 Communicate effectively, manage relationships and participate in teams

Email: kcharron@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

223.820.01 THESIS RESEARCH DISEASE CONTROL

variable credits thesis research - Course offered this year - East Baltimore

Students actively conduct research on topics of global health importance, including developing a research question, designing a study to answer the question, conducting the research and writing up the results in a scientific format.

This course will prepare you to be able to do the following:

1 Identify research questions of importance to health in underserved populations in low resource settings internationally and in the US.

2 Design a study or studies to answer the questions.

3 Develop an application to an Institutional Review Board to address human subjects research issues

4 Write up the results of research for the scientific literature

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: Pass/Fail

223.830.01 POSTDOCTORAL RESEARCH DISEASE CONTROL

variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

223.840.01 SPECIAL STUDIES AND RESEARCH DISEASE CONTROL
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

223.850.01 MSPH CAPSTONE GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL (Cancelled - Department)
variable credits - Course offered this year - East Baltimore
Departmental Faculty

Offers students an opportunity to integrate and apply program skills and competencies to a public health problem in a format that approximates a professional practice experience. Fosters students’ ability to produce scholarly papers that provide a meaningful contribution to knowledge of the health of underserved populations. Guides students’ development of tangible evidence of expertise that addresses specific applied topics relevant to international health.

Upon successfully completing this course, students will be able to:
1. Develop a concise and cohesive written document that defines a public health problem, a population of interest, and have a defined geographic scope
2. Conduct a comprehensive literature review
3. Synthesize relevant literature in a specific public health topic
4. Analyze and present public health data in a scholarly paper

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only for MSPH GDEC students in their 2nd year
Grading Options: Pass/Fail
Prerequisite: All other MSPH GDEC requirements must be taken before or concurrently with the capstone project.

223.860.01 GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM SEMINAR
1 credits - Course offered this year - East Baltimore
Charron, Karen; Tam, Yvonne; Yori, Pablo

Explores a variety of tools and methods applied by GDEC faculty to conduct public health research with a focus on hands-on skills building. Specific sessions address: data sources, including datasets that are publicly available; development of a basic statistical plan; use and interpretation of modeling tools; field data collection; data management methods; and data analysis.

Upon successfully completing this course, students will be able to:
1. Develop skills needed for public health practice, including problem-solving, analytic thinking, communication, and collaboration.
2. Interpret key publications related to global disease control programs and research
3. Apply new knowledge and problem-solving skills to address public health issues

Email: yvonneyotam@jhu.edu
Lecture: M 12:00 PM - 1:20 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to Global Disease Epidemiology and Control MSPH students.
Grading Options: Pass/Fail
Consent required for all students; Limited to GDEC MSPH students
Prerequisite:

223.861.01 GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM DOCTORAL SEMINAR
1 credits - Course offered this year - East Baltimore
Mullany, Luke
Creates a focused, small group environment for the entering PhD students, which actively engages them in relevant, challenging content necessary for success in the PhD program. The content of the seminar will support and extend beyond those topics taught in the classroom setting. The doctoral student education does not merely consist of successful completion of required courses--each student is expected to become a leading scientific expert during the years spent at JHU. It provides an opportunity to engage with senior faculty and move meaningfully toward selection of a dissertation topic and the skills necessary to successfully complete the PhD.

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

1. Engage in intellectual discussion on a range of topics, including research study design, aims, and methods, career trajectories, doctoral level skill-sets, etc.
2. Intelligently discuss the role of research in the improvement of the health status of populations throughout the world
3. Constructively critique research methods employed by public health scientists
4. Formulate research questions that may develop into dissertation topics

Email: lmullany@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
IH doctoral students
Grading Options: Pass/Fail

224.810.01 SOCIAL AND BEHAVIORAL INTERVENTIONS PRACTICUM
variable credits field placement - Course offered this year - East Baltimore
Leontsini, Elli
Complements and reinforces the didactic portion of the MSPH program. Provides students with an opportunity to apply the knowledge gained during the first year, to develop skills in the development, implementation, and evaluation of social and behavioral global health interventions, according to individually designed learning objectives, and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGOs), multi-lateral, private, and/or for-profit sector. Provide opportunity for feedback for student performance and placement experience

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

1. Integrate and apply knowledge, methods and skills learned in courses taken on the first year of the MSPH in a practical setting, to allow for the seamless transition from student to public health professional.
2. Develop new skills essential for functioning as an effective global health professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer.
3. Evaluate a program or field project as it relates to the socio-cultural and health context, behavioral and health impact, community involvement and program process.
4. Develop a proposal, report, or other written document.
5. Take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals.
6. Communicate effectively, manage relationships and participate in teams

Email: eleontsi@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

224.820.01 THESIS RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS
variable credits thesis research - Course offered this year - East Baltimore
Students actively conduct research on topics of global health importance, including developing a research question, designing a study to answer the question, conducting the research and writing up the results in a scientific format.

This course will prepare you to be able to do the following:

1. Identify research questions of importance to health in underserved populations in low resource settings internationally and in the US.
2. Design a study or studies to answer the questions.
3. Develop an application to an Institutional Review Board to address human subjects research issues.
4. Write up the results of research for the scientific literature.
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**224.830.01 POSTDOCTORAL RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS**
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**224.840.01 SPECIAL STUDIES AND RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS**
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**224.850.01 MSPH CAPSTONE SOCIAL AND BEHAVIORAL INTERVENTIONS**
variable credits 2-16 - Course offered this year - East Baltimore
Departmental Faculty

Offers students an opportunity to integrate and apply program skills and competencies to a public health problem in a format that approximates a professional practice experience. Fosters students' ability to produce scholarly papers that provide a meaningful contribution to knowledge of the health of underserved populations. Guides students' development of tangible evidence of expertise that addresses specific applied topics relevant to international health.

Upon successfully completing this course, students will be able to:
1. Develop a concise and cohesive written document that defines a public health problem, a population of interest, and have a defined geographic scope
2. Conduct a comprehensive literature review
3. Synthesize relevant literature in a specific public health topic
4. Analyze and present public health data in a scholarly paper

Email: pwinch@jhu.edu
Lecture: M 12:00 PM - 1:20 PM
Enrollment: Minimum 5, Maximum 25, Waitlist Enabled: Yes
Only for MSPH SBI students in their 2nd year
Grading Options: Pass/Fail
Prerequisite: All other MSPH SBI requirements must be taken before or concurrently with the capstone project.

**224.860.01 SOCIAL AND BEHAVIORAL INTERVENTIONS PROGRAM SEMINAR I: APPLIED SOCIAL SCIENCE & GLOBAL HEALTH**
1 credits - Course offered this year - East Baltimore
Kennedy, Caitlin; Winch, Peter

Students read the book “Global Health: Why Cultural Perceptions, Social Representations, and Biopolitics Matter” by Mark Nichter. This book serves as a starting point for a series of discussions on why a thorough understanding of the cultural, social and economic context is important in global public health practice, and the role of applied social science theory and methods in shaping and evaluating social and behavioral interventions.

Upon successfully completing this course, students will be able to:
1. Gain an appreciation for current themes in applied social science and global health

Email: pwinch@jhu.edu
Lecture: M 12:00 PM - 1:20 PM
Enrollment: Minimum 5, Maximum 25, Waitlist Enabled: Yes
SBI MSPH and SBI PhD students
Grading Options: Pass/Fail

**224.863.01 DOCTORAL SEMINAR IN RESEARCH METHODS IN APPLIED MEDICAL ANTHROPOLOGY I**
4 credits - Course offered this year - East Baltimore
Kennedy, Caitlin; 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.

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

1. Describe different ways in which the concept of ethnography as a methodology is operationalized in qualitative studies on health
2. Understand Michael Crotty's framework for the research process (epistemology, theoretical framework, methodology, method), and make the distinction between epistemology and theoretical framework, and between methodology and method
3. Categorize qualitative research studies according to the four dimensions in the Crotty framework
4. Describe and distinguish between (a) Grounded Theory, (b) the descriptive (eidetic) approach to phenomenology, and (c) the interpretive (hermeneutic) approach to phenomenology in qualitative research, and explain how they differ in terms of methodology
5. Describe and list strengths and weaknesses of a highly systematic approach to the management and analysis of textual data including translation, back-translation and double-coding of interview transcripts
6. Provide examples of where focus groups are preferable as a method, and describe different approaches to the conduct and analysis of focus groups
7. List key features of Ainsworth-Vaughn's linguistic approach to discourse analysis, and describe settings in which her methodology would be appropriate for the collection and analysis of qualitative data
8. Describe how understandings of what constitutes science have evolved over the past few centuries, the difficulties inherent in defining what is and is not science
9. List key features of some of the major theories of the scientific process (Induction, falsificationism, Kuhns paradigms, Lakatos research programs, Feyerabends anarchistic theory of science, the Bayesian approach) and how they relate to qualitative research
10. Describe the evolution in the concepts and methods of cognitive anthropology over the past 50 years
11. Explain the implications of key concepts in cognitive anthropology for the design, analysis and interpretation of quantitative data collected with instruments informed by the findings of qualitative studies

Email: pwinch@jhu.edu

Lecture: T TH 8:30 AM - 10:20 AM

Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
Grading Options: Pass/Fail
Consent required for all students; All students except SBI doctoral students must request consent from instructor
Prerequisite: 224.690 and 224.691 Qualitative Research or equivalent

Mental Health

330.601.81 PERSPECTIVES OF PSYCHIATRY: THE PUBLIC HEALTH FRAMEWORK (Discontinued)

3 credits - Course offered this year - Internet

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. Recognize the value of epistemological approach to psychiatric conditions
3. Distinguish between normal human responsiveness and psychiatric symptoms, behaviors, syndromes, disorders, and diseases
4. Understand the need for the practical utility of viewing psychiatric conditions from four perspectives
5. Identify the key elements of, and the distinctions between, a psychiatric history and a mental status examination
6. Understand the principles of ascertainment, measurement, and classification of psychiatric signs and symptoms (strengths and weaknesses)

Email: pwinch@jhu.edu

Lecture: T TH 8:30 AM - 10:20 AM

Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
Grading Options: Pass/Fail
Consent required for all students; All students except SBI doctoral students must request consent from instructor
Prerequisite: 224.690 and 224.691 Qualitative Research or equivalent
7. Distinguish between a psychiatric nomenclature, nosology, and diagnostic classification; 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; difficulties in assessing and comparing degrees of impairment associated with the different major psychiatric syndromes; relationships among all four psychiatric perspectives in understanding, assessing, measuring, and treating major psychiatric syndromes.

Email: pmchugh@jhsph.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning

330.604.01 SEMINARS IN RESEARCH IN PUBLIC MENTAL HEALTH
1 credits - Course offered this year - East Baltimore

Bass, Judy; Parisi, Jeanine M.
Integrates academic training with current research in public mental health, including etiological, epidemiologic and intervention research for mental and behavioral disorders across the lifespan. Features presentations by researchers from JHU and other research and practice institutions on the results of state-of-the-art investigations of mental and behavioral health problems and issues of public health significance, emphasizing experimental design and methodology for analysis and discussion.

Upon successfully completing this course, students will be able to:
1. Cite examples of current research, policy, or practice in the field of public mental health
2. Identify areas of interest for current and future research
3. Recognize the features of engaging presentations and participate in discussions with fellow researchers

Email: jbass1@jhu.edu
Lecture: W 12:00 PM - 1:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Only open to DMH Postdocs, PhD and MHS students.
Grading Options: Pass/Fail

330.605.01 DOCTORAL SEMINAR IN PUBLIC MENTAL HEALTH
1 credits - Course offered this year - East Baltimore

Bass, Judy
Explores and critiques public mental health research and practice, emphasizing key constructs and methods with department faculty through presentations, readings, and group discussions. Develops professional development skills for careers in public mental health.

Upon successfully completing this course, students will be able to:
1. Explore in depth key public mental health historical and cutting edge research
2. Gain skills in key professional development domains related to careers in public mental health

Email: jbass1@jhu.edu
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

330.617.01 PSYCHOPATHOLOGY FOR PUBLIC HEALTH (Discontinued)
3 credits - Course offered this year - East Baltimore

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 best-practice non-pharmacological and pharmacological approaches to the treatment of disorders, and 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 history, structure, and limitations of current systems for classification of mental disorders, including the Diagnostic and Statistical Manual of Mental Disorders (DSM), Research Domain Criteria (RDoC), and alternative approaches.
2 Describe the presentations and key features of major psychiatric syndromes, including anxiety and mood disorders, schizophrenia, and others.

3 Describe current etiological perspectives for major mental disorders.

4 Identify best-practice non-pharmacological and pharmacological approaches to the treatment of disorders.

5 Identify appropriate measures for the assessment of particular disorders in public mental health research.

Email: aspira@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment: Minimum 10, Maximum 60, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent is required for undergraduate students.
Prerequisite:

330.617.60 PSYCHOPATHOLOGY FOR PUBLIC HEALTH
3 credits - Course offered this year - East Baltimore
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 best-practice non-pharmacological and pharmacological approaches to the treatment of disorders, and 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 history, structure, and limitations of current systems for classification of mental disorders, including the Diagnostic and Statistical Manual of Mental Disorders (DSM), Research Domain Criteria (RDoC), and alternative approaches.

2 Describe the presentations and key features of major psychiatric syndromes, including anxiety and mood disorders, schizophrenia, and others.

3 Describe current etiological perspectives for major mental disorders.

4 Identify best-practice non-pharmacological and pharmacological approaches to the treatment of disorders.

5 Identify appropriate measures for the assessment of particular disorders in public mental health research.

Email: aspira@jhu.edu
Lecture: T TH 1:30 PM - 2:20 PM
Enrollment: Minimum 10, Maximum 60, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent is required for undergraduate students.
Prerequisite:

This course blends traditional classroom time and outside-of-class activities with a corresponding reduction in class sessions. This class will meet twice a week. Students are expected to spend 8 hours a week on class work in addition to regular homework.

330.617.81 PSYCHOPATHOLOGY FOR PUBLIC HEALTH
3 credits - Course offered this year - Internet
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 best-practice non-pharmacological and pharmacological approaches to the treatment of disorders, and 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 history, structure, and limitations of current systems for classification of mental disorders, including the Diagnostic and Statistical Manual of Mental Disorders (DSM), Research Domain Criteria (RDoC), and alternative approaches.

2. Describe the presentations and key features of major psychiatric syndromes, including anxiety and mood disorders, schizophrenia, and others.

3. Describe current etiological perspectives for major mental disorders.

4. Identify best-practice non-pharmacological and pharmacological approaches to the treatment of disorders.

5. Identify appropriate measures for the assessment of particular disorders in public mental health research.

Email: aspira@jhu.edu

Enrollment: Minimum 10, Maximum 60, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent is required for undergraduate students.
Prerequisite:

330.657.01 STATISTICS FOR PSYCHOSOCIAL RESEARCH: MEASUREMENT
4 credits - Course offered this year - East Baltimore
Leoutsakos, Jeannie-Marie; 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.

Email: jsheppar@jhsph.edu
Lecture: M W 10:30 AM - 11:50 AM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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

330.657.81 STATISTICS FOR PSYCHOSOCIAL RESEARCH: MEASUREMENT
4 credits - Course offered this year - Internet
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. Design and conduct studies of reliability and validity.
3. Fit latent variable models, including factor analyses, latent class analyses, and latent trait analyses (IRT).

Email: jsheppar@jhsph.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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

330.662.01 PUBLIC MENTAL HEALTH
2 credits - Course offered this year - East Baltimore
Fallin, Dani Margaret
Provides an overview and framework for the full spectrum of public mental health. Presents key concepts in public health applied to mental and behavioral health and disorders. Discusses the causes and consequences of mental health disorders, the frameworks for understanding the origins of these disorders, strategies for treatment and prevention, and issues related to health services and policy for mental and behavioral health.
Upon successfully completing this course, students will be able to:
1. Develop their own definition of public mental health
2. Articulate key questions addressed in the study of public mental health
3. Map the central perspectives of public mental health across departmental curriculum
4. Create a plan for integrating key concepts into their public health training

Email: dfallin@jhu.edu
Lecture: F 1:30 PM - 3:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Prerequisite: None

330.664.01 INTRODUCTION TO MENTAL HEALTH SERVICES
3 credits - Course offered this year - East Baltimore
Mojtabai, Ramin
Examines issues in mental health care utilization, including definition of need for mental health care, concerns about the treatment gap in the community, treatment seeking and barriers to care (most importantly stigma and financial barriers) and treatment seeking models and predictors of mental health treatment-seeking in community settings. Also introduces students to the study of delivery of mental health care, including historical trends in the delivery of mental health care in the US, the mental health care system’s governance and financing, quality and outcomes of mental health care and mental health services for children and older adults and treatment services for substance disorders.
Upon successfully completing this course, students will be able to:
1. Discuss approaches to definition and measurement unmet need for mental health care and barriers to care including stigma and financial barriers
2. Discuss treatment seeking behavior and theoretical models of health service utilization
3. Describe historical trends in utilization and delivery of mental health services including psychiatric medications and services for treatment of substance disorders
4. Discuss financing and organization of mental health care system in the US
5. Discuss issues of quality and outcome of mental health care and evidence-based practice
6. Identify salient features of mental health service use and delivery for children and older adults

Email: rmojtab1@jhu.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment: Minimum 5, Maximum 50, Waitlist Enabled: Yes
No undergraduate students
Grading Options: Letter Grade or Pass/Fail
Prerequisite: There are no formal prerequisites but prior coursework in abnormal psychology or psychiatric epidemiology is recommended as is familiarity with psychiatric diagnosis and treatment.

330.800.01 MPH CAPSTONE MENTAL HEALTH
2 credits Must have 1-4 credits per term for two terms. - Course offered this year - East Baltimore
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

Upon successfully completing this course, students will be able to:
1. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
2 credits - Course offered this year - East Baltimore
Rebok, George
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 neuropathological changes associated with aging and with disease.

Upon successfully completing this course, students will be able to:
1. Discuss models of improving care for patients with dementia
2. Describe biomarkers that have been examined in neurodegenerative disorders, and how they may be used to improve the conduct of clinical trials
3. Review the genetic causes and/or risks for the major neurodegenerative diseases
4. Discuss animal models of neurodegenerative disorders and how they can be used to find improved treatments for patients

Email: grebok1@jhu.edu
Lecture: TH 3:30 PM - 5:20 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for all students;
Prerequisite:
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.

330.805.01 SEMINAR ON STATISTICAL METHODS FOR MENTAL HEALTH
1 credits - Course offered this year - East Baltimore
Musci, Rashelle; 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

Email: rmusci1@jhu.edu
Lecture: TH 12:00 PM - 1:20 PM
Enrollment: Minimum 4, Maximum 25, Waitlist Enabled: Yes
Grading Options: 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.

**330.820.01 THESIS RESEARCH MENTAL HEALTH**
variable credits - Course offered this year - *East Baltimore*

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**330.830.01 POSTDOCTORAL RESEARCH MENTAL HEALTH**
variable credits - Course offered this year - *East Baltimore*

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**330.840.01 SPECIAL STUDIES AND RESEARCH MENTAL HEALTH**
variable credits - Course offered this year - *East Baltimore*

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**330.895.01 MPH PRACTICUM: MENTAL HEALTH**
variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - *East Baltimore*

Departmental Faculty

The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.

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

1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

**Molecular Microbiology and Immunology**

**260.600.01 INTRODUCTION TO THE BIOMEDICAL SCIENCES**
4 credits - Course offered this year - *East Baltimore*

Bosch, Gundula

Students apply basic anatomy and physiology principles to current public health problems. Students learn through specific reading assignments, individual activities, whole class discussions, short objective tests as well as case studies. Brief, supplementary presentations focus on seminal discoveries and current research topics in the public health field.

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

1. Describe, in general terms, the structure and function of the major organ systems of the human body, using the language of the biomedical sciences
2. Discuss examples in which anatomy and physiology topics have been applied to specific, public health-related problems
3. Demonstrate the importance of working together as a multidisciplinary public health team
4. Develop a first network of fellow students, faculty and professional colleagues

Email: gbosch2@jhu.edu
Lecture: M T W TH F 9:00 AM - 5:00 PM

Enrollment: Minimum 15, Maximum 80, Waitlist Enabled: Yes
Grading Options: Letter Grade or 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.

260.600.81 INTRODUCTION TO THE BIOMEDICAL SCIENCES
4 credits - Course offered this year - Internet
Bosch, Gundula
Students apply basic anatomy and physiology principles to current public health problems. Students learn through specific reading assignments, individual activities, whole class discussions, short objective tests as well as case studies. Brief, supplementary presentations focus on seminal discoveries and current research topics in the public health field.
Upon successfully completing this course, students will be able to:
1. Describe, in general terms, the structure and function of the major organ systems of the human body, using the language of the biomedical sciences
2. Discuss examples in which anatomy and physiology topics have been applied to specific, public health-related problems
3. Demonstrate the importance of working together as a multidisciplinary public health team
4. Develop a first network of fellow students, faculty and professional colleagues

Email: gbosch2@jhu.edu
Enrollment: Minimum 4, Maximum 40, Waitlist Enabled: Yes
No restrictions
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning Course: https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90/
This 8 week part-time, online course is offered immediately prior to the first term. Registrants must indicate this course on their FIRST term registrations, NOT their summer registrations.

260.607.01 CORE DISCUSSION OF SCIENTIFIC LITERATURE: MMI
variable credits 1-2 credits each term, depending on School of Medicine required course that the student is taking concurrently. - Course offered this year - East Baltimore
Hardwick, J.-Marie
Students read assigned papers from the current scientific literature and participate in in-depth discussions focusing on scientific methods and understanding the technologies available in departmental core facilities. Assigned papers cover a broad range of topics that are related to but not directly covered in coursework. Student discussion leaders present background information, guide the discussion and prepare written discussion questions.
Upon successfully completing this course, students will be able to:
1. Learn to critically evaluate current scientific literature.

Email: hardwick@jhu.edu
Lecture: T 1:30 PM - 2:50 PM
Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

260.611.01 PRINCIPLES OF IMMUNOLOGY I
4 credits - Course offered this year - East Baltimore
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; autoimmune; 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

Email: ascott5@jhu.edu
Lecture: T TH 8:30 AM - 10:20 AM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: A course in advanced biology
Required for MMI students.

260.623.01 FUNDAMENTAL VIROLOGY
4 credits - Course offered this year - East Baltimore
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

Email: dgriffi6@jhmi.edu
Lecture: M W F 3:30 PM - 4:50 PM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Required for MMI students.

260.636.01 EVOLUTION OF INFECTIOUS DISEASE
3 credits - Course offered this year - East Baltimore
Klein, Sabra; Markham, Richard; Norris, Douglas
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 discussing of the molecular bases of evolution to a discussing of the pathogenesis of infectious diseases
2 Apply their discuss of the molecular bases of evolution to a discussing of why certain bacterial, parasitic, and viral pathogens persist or have emerged as major public health problems
3 Apply a rudimentary understanding of the molecular bases of evolution to a discussion of the pathogenesis of infectious diseases
4 Apply their understanding of the molecular bases of evolution to a discussing of why certain bacterial, parasitic, and viral pathogens persist or have emerged as major public health problems*

Email: sklein2@jhu.edu
Lecture: M W 1:30 PM - 2:50 PM
Enrollment: Minimum 5, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

260.707.81 EVIDENCE-BASED TEACHING IN THE BIOMEDICAL AND HEALTH SCIENCES: FOUNDATIONS

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 105 of 118
Bosch, Gundula

Acquaints students interested in teaching in biomedical and health professional settings with the foundations of adult learning. Explores the literature on adult learning theory and the science of learning. Discusses evidence-based teaching practices, assessment techniques, and their alignment with adult learning frameworks.

Upon successfully completing this course, students will be able to:
1. Identify adult learning frameworks that resonate with their educational beliefs
2. Use strategies for assessing learner’s needs
3. Examine the literature on adult learning theory as it pertains to evidence-based teaching techniques
4. Articulate an educational philosophy
5. Design practice-applicable teaching modules according to learner-needs oriented objectives, congruent assessment methods and evidence-based, instructional tools

Email: gbosch2@jhu.edu

Enrollment: Minimum 3, No maximum enrollment required, Waitlist Enabled: No

Graduate students and post-doctoral fellows, from all JH divisions and institutions

Grading Options: Letter Grade or Pass/Fail

Prerequisite:
This course is part of the R3 Graduate Science Initiative series (http://tiny.cc/JHSPH-MMI-R3) and prerequisite for the mentored teaching practice course "Evidence-Based Teaching - Practice" (PH.260.708.60), offered in the second term.

260.800.01 MPH CAPSTONE MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

Departmental Faculty

The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

Upon successfully completing this course, students will be able to:
1. 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 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: 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

1 credits - Course offered this year - East Baltimore

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

Email: ascott5@jhu.edu

Lecture: T 10:30 AM - 11:50 AM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Grading Options: 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.
260.810.01 FIELD PLACEMENT MOLECULAR MICROBIOLOGY AND IMMUNOLOGY
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

260.820.01 THESIS RESEARCH MOLECULAR MICROBIOLOGY AND IMMUNOLOGY
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

260.821.01 RESEARCH FORUM IN MOLECULAR MICROBIOLOGY AND IMMUNOLOGY
1 credits - Course offered this year - East Baltimore
Brady, Anne
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.
Upon successfully completing this course, students will be able to:
1 Become skilled in presenting research data to a diverse audience
2 Become familiar with the research conducted in departmental laboratories

Email: abrady9@jhu.edu
Lecture: M 12:00 PM - 1:20 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Required for MMI students.

260.822.01 SEMINARS IN RESEARCH IN MOLECULAR MICROBIOLOGY AND IMMUNOLOGY
1 credits - Course offered this year - East Baltimore
Stins, Monique
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.
Upon successfully completing this course, students will be able to:
1 Become familiar with current research in microbiology, immunology and infectious diseases

Email: mstins@jhmi.edu
Lecture: TH 12:00 PM - 1:20 PM

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Required for MMI students.

260.830.01 POSTDOCTORAL RESEARCH MOLECULAR MICROBIOLOGY AND IMMUNOLOGY
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

260.840.01 SS/R: MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 107 of 118
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

260.851.01 LABORATORY ROTATIONS
4-8 credits - Course offered this year - East Baltimore
Departmental Faculty
All departmental Sc.M. and doctoral students spend two and three terms, respectively, participating in the research activities of departmental faculty's laboratories. Students select appropriate rotations in consultation with their academic advisors and the departmental Graduate Program Committee.
Information not required for this course type

Lecture: TBA
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail
Consent required for all students; Consent of rotation supervisor required.
Required for MMI students.

260.852.01 MOLECULAR BIOLOGY LITERATURE
2 credits - Course offered this year - East Baltimore
Hardwick, J.-Marie
Reviews and discusses, in depth, assigned readings from historic and current scientific literature covering a range of topics in the field of molecular biology. Student discussion leaders meet with individual faculty, present background information related to the discussion paper, and guide in-class discussions.

Upon successfully completing this course, students will be able to:
  1. Understand the scientific evidence that supports the basic principles of molecular biology.
  2. Understand a range of experimental laboratory techniques.
  3. Determine if the conclusions are supported by the published evidence.

Email: hardwick@jhu.edu
Lecture: W F 9:00 AM - 10:20 AM
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Designed for masters students in laboratory science departments, but open to others.

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

Upon successfully completing this course, students will be able to:
  1. Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

Online Programs for Applied Learning
600.601.86 SEMINARS IN PUBLIC HEALTH
2 credits - Course offered this year - Internet
Chandran, Aruna
Uncovers current public health topics through presentations by faculty experts from the School. Focuses on current perspectives and research findings about problems important to the health of individuals and communities. Covers a broad spectrum of population-based, prevention-oriented issues relevant to public health in the private and public sectors of both domestic and international communities, including global health promotion, disease prevention, health care delivery systems, environmental issues, and the spectrum of factors influencing the health status of populations and communities. Topics covered vary by term so as to provide exposure to a broad diversity of public health topics.

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

1. Describe major current issues in public health
2. Explain the application of a population approach in the context of public health
3. Compare public health control efforts for one disease or population to that of another
4. Discuss the magnitude of a specific public health problem, including recent relevant research findings, public health burden, and intervention strategies

Email: achandr3@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Restricted to students enrolled in OPAL programs.
Grading Options: Letter Grade or Pass/Fail
Prerequisite: None

600.611.86 PROFESSIONAL DEVELOPMENT WORKSHOPS: EFFECTIVE ONLINE SEARCHING

2 credits - Course offered this year - Internet

Introduces and explores freely available online sources for finding high quality, full-text research articles. Also prepares students to use advanced search techniques efficiently within these sources and to manage references using tools such as RefWorks, EndNote, Zotero and Mendeley. Finally, students learn about tools available to use to stay current on topics related to the public health field.

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

1. Identify online sources for freely available high quality, full text articles
2. Apply advanced search techniques within online sources efficiently to locate relevant articles
3. Explain the role that open access publishing plays in the scholarly environment
4. Use online tools to store and manage references and full text
5. Identify online tools to use when establishing yourself as a professional in the field

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Enrollment in this course is restricted to students enrolled in an OPAL degree or certificate program.
Grading Options: Pass/Fail
Prerequisite:

600.712.86 PUBLIC HEALTH STATISTICS II

4 credits - Course offered this year - Internet

Employs a conceptual framework to highlight the similarities and differences between linear, logistic and Cox Proportional Hazards methods, in terms of usage and the interpretations of results from such models. Provides details for these regression approaches in the “simple” scenario, involving relating an outcome to a single predictor. Following this overview of simple regression, explores the use of multiple regression models to compare and contrast confounding and effect modification, produce adjusted and stratum-specific estimates, and allow for better prediction of an outcome via the use of multiple predictors. Offers a brief introduction to linear spline models and propensity score methods for adjustment.

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

1. Interpret the results from simple and multiple linear, logistic and Cox regression models
2. Illustrate how hypotheses tests can be expressed as simple regression models
3. Explain the assumption of proportional hazards, and what this means regarding the interpretation of hazard (incidence rate) ratios from Cox regression models
4. Describe the conditions necessary for an exposure/outcome relationship to be confounded by one or more other variables
5. Explain the concept of effect modification, and how it differs from confounding
6. Use the results from all regression types covered (linear, logistic and Cox) to assess confounding and effect modification

Email: jmcrea1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Restricted to students enrolled in OPAL programs

Grading Options: Letter Grade or Pass/Fail

Prerequisite: Public Health Statistics I (600.711)

601.731.86 SPATIAL ANALYSIS FOR PUBLIC HEALTH

4 credits - Course offered this year - Internet

Curriero, Frank; Shields, Timothy

Introduces the field of spatial analysis for public health. Examines concepts through the use of ArcGIS Geographic Information System (GIS) mapping software as a tool for integrating, manipulating, and displaying public health related spatial data. Covers GIS topics including mapping, geocoding, and manipulations related to data structures and topology. Introduces the spatial science paradigm: Spatial Data, GIS, and Spatial Statistics and uses selected case studies to demonstrate concepts along the paradigm. Focuses on using GIS to generate and refine hypotheses about public health related spatial data in preparation for follow up analyses.

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

1. Conduct GIS spatial analysis by inputting, manipulating, querying, and displaying spatial data with use of the ArcGIS software
2. Perform geocoding of address information to both the spatial point and area level resolution
3. Create and critique maps appropriate for addressing public health related objectives
4. Identify the key differences between a GIS spatial analysis and a spatial statistical analysis as it is referenced in the spatial science paradigm

Email: tshields@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Restricted to students enrolled in OPAL programs

Grading Options: Letter Grade or Pass/Fail

Prerequisite: None

ArcGIS required software (one-year free license provided to JHSPH students) is made for the PC platform; MAC users will need to install a windows operating system to run ArcGIS.

602.631.86 ESSENTIALS OF POPULATION HEALTH MANAGEMENT

3 credits - Course offered this year - Internet

Davison, Ashwini

Population health refers to outcomes for a group of individuals. Acquaints students with key concepts related to maintaining the health and wellness of populations. Examines the importance of determinants of health, including medical care, public health, genetics, personal behaviors and lifestyle, and a broad range of social, environmental, and economic factors. Explores this broad view of the determinants of population health and its impact on organizations that may not think of themselves as being in the business of health, such as housing organizations, employers, schools, and others who make decisions and create environments that can help or hinder good health. Population health management (PHM) has emerged as an important strategy for healthcare providers and payers. This course examines the challenges and opportunities to improving health within and across populations, as well as models of value-driven accountable care.

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

1. Describe population health and the related factors influencing the health and wellness of a defined community
2. Identify and stratify perspective populations and explain contemporary population health strategies
3. Discuss key components of integrated population health management and how value-based care payments models are being used to influence provider and patient behaviors

Email: ashdavison@jhmi.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Restricted to OPAL MAS in Population Health Management students and Certificate in Population Health Management students

Grading Options: Letter Grade or Pass/Fail
602.651.86 PRINCIPLES AND APPLICATIONS OF ADVANCED PAYMENT MODELS IN POPULATION HEALTH MANAGEMENT

3 credits - Course offered this year - Internet

Bittle, Mark

Presents an overview of major issues related to the design, function, management, regulation, and evaluation of health insurance and managed care plans and implications for population health management. Provides a firm foundation in basic concepts pertaining to private and public sector health insurance/benefit plans. Key topics include population care delivery and payment innovations and management techniques, provider payment models, risk-sharing and other incentives for organizational integration, quality and accountability, cost-containment. Innovative payment models and initiatives supporting health care providers and health care organizations in testing alternative care delivery and payment models are reviewed in the context of three core strategies for improving the US health system: improving the way health care providers are paid, improving the way care is delivered, and increasing the availability of information to guide decision-making.

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

1. Identify issues related to the design, function, management, regulation and evaluation of health insurance programs on managing care organizations, including ACOs
2. Distinguish between both private and public sector programs and the impact on delivery system transformation of CMMI payment initiatives
3. Evaluate the impact of payment models on population health programs and stakeholders and the impact of the various models on health care expenditures and utilization, beneficiary and health care provider experiences with care, and, where feasible, health outcomes

Email: mbittle1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Restricted to OPAL MAS in Population Health Management students and Certificate in Population Health Management students

Grading Options: Letter Grade or Pass/Fail

603.701.86 INTRODUCTION TO QUALITY OF CARE FOR PRACTITIONERS

4 credits - Course offered this year - Internet

Dy, Sydney M.

Introduces quality issues, including quality assessment and assurance performed by clinicians, health systems, professional societies, and government and other third party organizations who pay for care. Provides a basis to evaluate the effectiveness of quality assessment and assurance activities. Describes different approaches to quality improvement and evaluation.

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

1. Describe several frameworks and theories for assessing and improving the quality of medical care
2. Describe key current regulatory areas in quality of care
3. Understand how to assess quality of care for a medical condition, including:
   a. Relative advantages/disadvantages of measuring structure, process, outcome
   b. The role of different data sources and risk adjustment
   c. Advantages and methods for assessing patient experience
4. Interpret published quality assessment and improvement studies
5. Develop a quality framework for an organization
6. Discuss approaches to improving patient experience outcomes
7. Briefly describe methods for quality improvement (PDSA, Lean, Six Sigma)
8. Understand key elements of how to develop a workable quality improvement and evaluation plan, including:
   a. Logic model
   b. Evaluating assessment results
   c. Developing goals for improvement
   d. Changing individual health professionals’ behavior
   e. Changing systems
   f. Incentives for quality improvement
   g. Engaging leadership and organizational change

Email: dy1@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No

Restricted to OPAL MAS Patient Safety and Healthcare Quality students

Grading Options: Letter Grade or Pass/Fail

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 111 of 118
Population, Family and Reproductive Health

380.604.01 LIFE COURSE PERSPECTIVES ON HEALTH
4 credits - Course offered this year - East Baltimore
Blum, Robert; Hughes, M. E.

Teaches students to frame public health issues using a multilevel, life course perspective. Provides a conceptual framework with which to understand the development of health over time and the interrelated effects of biological, psychological, and social factors on health. Elaborates and illustrates the framework by considering health in specific life stages, highlighting multilevel, life course influences on health, processes by which social influences “get under the skin”, and multilevel, life course approaches to research and practice. Students create a conceptual framework illustrating the application of the framework to a public health outcome their choice.

Upon successfully completing this course, students will be able to:
1. Explain the foundations of a multilevel life course approach to health determinants
2. Identify the elements of an effective conceptual framework
3. Discuss key health influences over the life course and the pathways and processes by which these influences shape health
4. Describe examples of health interventions informed by a multilevel life course perspective
5. Create a conceptual framework that communicates a multilevel life course perspective on a specific public health outcome
6. Analyze the advantages, disadvantages, and challenges of applying a multilevel life course perspective to a specific public health outcome.

Email: rblum@jhu.edu
Lecture: M W 1:30 PM - 3:20 PM
Enrollment: Minimum 10, Maximum 65, Waitlist Enabled: Yes
Grading Options: Letter Grade or Pass/Fail
Students must have instructor's permission to enroll in the class after the first week of the term.

380.604.81 LIFE COURSE PERSPECTIVES ON HEALTH
4 credits - Course offered this year - Internet
Blum, Robert; Hughes, M. E.

Teaches students to frame public health issues using a multilevel, life course perspective. Provides a conceptual framework with which to understand the development of health over time and the interrelated effects of biological, psychological, and social factors on health. Elaborates and illustrates the framework by considering health in specific life stages, highlighting multilevel, life course influences on health, processes by which social influences “get under the skin”, and multilevel, life course approaches to research and practice. Students create a conceptual framework illustrating the application of the framework to a public health outcome their choice.

Upon successfully completing this course, students will be able to:
1. Explain the foundations of a multilevel life course approach to health determinants
2. Identify the elements of an effective conceptual framework
3. Discuss key health influences over the life course and the pathways and processes by which these influences shape health
4. Describe examples of health interventions informed by a multilevel life course perspective
5. Create a conceptual framework that communicates a multilevel life course perspective on a specific public health outcome
6. Analyze the advantages, disadvantages, and challenges of applying a multilevel life course perspective to a specific public health outcome.

Email: rblum@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite: Introduction to Online Learning.
Students must have instructor's permission to enroll in the class after the first week of the term.

380.641.01 PRENATAL AND INFANT GROWTH AND DEVELOPMENT (Discontinued)
3 credits - Course offered this year - East Baltimore
DiPietro, Janet; Paige, David

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 112 of 118
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 to functional development of the fetus, infant, and young child.
3. Identify factors that put individuals at risk for atypical growth and development, including biological and social risks.
4. Critically examine basic methodology and design of research on prenatal risk factors to evaluate the validity of journal article conclusions.

Email: jdipiet1@jhu.edu
Lecture: T TH 1:30 PM - 2:50 PM
Enrollment: Minimum 10, Maximum 66, Waitlist Enabled: Yes
No undergraduates
Grading Options: Letter Grade or Pass/Fail

380.744.81 NUTRITION AND GROWTH IN MATERNAL AND CHILD HEALTH

3 credits - Course offered this year - Internet
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.

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

1. Describe the biological determinants of growth, nutrition and development throughout the prenatal, fetal, childhood and adolescent periods.
2. Examine the factors contributing to and impinging on growth during critical periods of development.
3. Identify the interrelationship of nutritional factors influencing normal growth; and the negative consequences associated with nutritional insults.
4. Analyze dietary data for nutrient intake, apply the results to current nutrition guidance, and recognize the advantages and limitations of the various approaches to evaluating dietary intake.
5. Identify risk factors associated with the critical periods of growth framework and discuss their role in preventing or ameliorating results of negative exposures to growth and development during each critical period.

Email: dpaige@jhu.edu
Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Prerequisite:

380.755.81 POPULATION DYNAMICS AND PUBLIC HEALTH

2 credits - Course offered this year - Internet
Liu, Li; Mosley, Henry
Provides an overview of population dynamics globally and its implications for public health program planning at the national and local levels. Students learn how to locate data sources for key demographic indicators and how to calculate and interpret measures of fertility, mortality and migration in populations. Introduces the principles of population projections students learn how to utilize projections in planning for public health interventions.

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

1. Describe the major trends and patterns of domestic and international population dynamics (mortality, fertility and migration) and the basic components of population size, distribution and composition.
2. Identify selected sources of population data and their strengths and limitations, and apply population methods to public health program planning.
3. Identify some key health policy interventions which affect population change.

Email: hmosley@jhu.edu

1st term information is correct as of August 23, 2017. For latest information visit Course Catalog at http://www.jhsph.edu/courses - Page 113 of 118
Enrollment: Minimum 30, Maximum 150, Waitlist Enabled: Yes
None
Grading Options: Letter Grade or Pass/Fail
Prerequisite: None

380.767.01 COUPLES AND REPRODUCTIVE HEALTH
3 credits - Course offered this year - East Baltimore
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
Email: sbecker2@jhu.edu
Lecture: T 3:00 PM - 4:50 PM
Lab Section: 01 TH 3:30 PM-4:20 PM
Enrollment: Minimum 6, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Letter Grade or Pass/Fail
Consent required for some students; Consent required if neither 380.600 nor 380.755 has been taken.
Prerequisite: 380.600 or 380.755

380.768.81 SELECTED TOPICS IN WOMEN'S HEALTH AND WOMEN'S HEALTH POLICY
4 credits - Course offered this year - Internet
Lantos, Hannah L.
Discusses major health concerns among women within a life course framework that integrates biological determinants of health and the social, cultural and economic contexts of women’s lives. Focuses on developed countries though issues in developing countries are introduced. Examines a spectrum of current health and policy concerns, and may include family planning, preventive services for women, chronic disease, migration, gender-based violence, mental health and disability. Also includes historical perspectives and a gender justice framework for viewing health policies.
Upon successfully completing this course, students will be able to:
1. Assess women's health and health concerns within the context of a life course framework which addresses the social, cultural and economic contexts in which women live
2. Describe definitions of women's health in current use and evaluate the applicability of a gender justice framework for viewing women's health policies in developed and developing countries for selected health concerns
3. Describe current health and policy concerns for selected topics such as family planning, preventive services for women, chronic disease, migration, mental health, gender-based violence, and disability
4. Compare and contrast varying stakeholder’s perspective on current and critical issues pertaining to women’s health and health policy
Email: hlantos1@jhu.edu
Enrollment: Minimum 10, Maximum 40, Waitlist Enabled: Yes
Students who take 380.667, Women's Health Policy may not take this course.
Grading Options: Letter Grade or Pass/Fail
Prerequisite:
Course is an offspring of 380.667

380.800.01 MPH CAPSTONE POPULATION, FAMILY AND REPRODUCTIVE HEALTH
2 credits Must have 1-4 credits per term for two terms. - Course offered this year - East Baltimore
Departmental Faculty
The MPH Capstone is an opportunity for students to work on public health practice projects that are of particular interest to them. The goal is for students to apply the skills and competencies they have acquired to a public health problem that simulates a professional practice experience.

Upon successfully completing this course, students will be able to:
1. Synthesize, integrate and apply the skills and competencies they have acquired to a public health problem that approximates a professional practice experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

380.820.01 THESIS RESEARCH POPULATION, FAMILY AND REPRODUCTIVE HEALTH
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

380.821.01 PFRH PROPOSAL WRITING SEMINAR
2 credits - Course offered this year - East Baltimore
Hughes, M. E.

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, both 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

Email: mehughes@jhu.edu
Lecture: T 12:00 PM - 1:20 PM

Enrollment: Minimum 1, No maximum enrollment required, Waitlist Enabled: No
PFRH Doctoral Students only
Grading Options: Pass/Fail
Prerequisite: Must be PFRH Doctoral Student; must have completed second year comprehensive exams.

380.823.01 RESEARCH SEMINAR IN POPULATION, FAMILY AND REPRODUCTIVE HEALTH I
2 credits - Course offered this year - East Baltimore
Minkovitz, Cynthia; Strobino, Donna

Provides experience in critical evaluation of historical and contemporary research pertinent to Population, Family and Reproductive Health. Addresses a range of topics, drawing on research from multiple academic disciplines. Students and faculty critique and discuss conceptual frameworks and empirical articles and examine the methodological and disciplinary perspectives of the research or articles.

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

1. Apply diverse conceptual frameworks to public health issues pertinent to PFRH
2. Critique empirical articles addressing public health issues related to PFRH
3. Compare and contrast the approaches of various academic disciplines to public health issues of relevance to PFRH
4. Recognize and critically evaluate common study designs and methods used in research relevant to PFRH

Email: cmink@jhu.edu

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

Enrollment: Minimum 5, Maximum 15, Waitlist Enabled: Yes
Grading Options: Pass/Fail
Prerequisite: Successful completion of courses required in first year of doctoral program in PFRH

Department Space will be used, E4611

380.830.01 POSTDOCTORAL RESEARCH POPULATION, FAMILY AND REPRODUCTIVE HEALTH
variable credits - Course offered this year - East Baltimore

Information not required for this course type

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

380.840.01 SPECIAL STUDIES AND RESEARCH POPULATION, FAMILY AND REPRODUCTIVE HEALTH
variable credits - Course offered this year - East Baltimore
Blum, Robert

Information not required for this course type

Email: rblum@jhu.edu

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail

380.870.01 PFRH SPECIAL STUDIES IN PUBLIC HEALTH PRACTICE
variable credits Credits will vary according to scope of activity. The preceptor/advisor will determine the number of units. - Course offered this year - East Baltimore

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 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: 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
1 credits - Course offered this year - East Baltimore
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. Explain team dynamics and effectively use small work groups
4. Manage conflict and give effective feedback
5. Practice communication skills associated with leadership

Email: rblum@jhu.edu
Lecture: M 4:30 PM - 7:00 PM
Enrollment: Minimum 15, Maximum 35, Waitlist Enabled: Yes
Restricted to graduate students. Preference is given to second year graduate students.
Grading Options: Letter Grade or Pass/Fail
Prerequisite:
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.

380.880.01 LESSONS IN LEADERSHIP: APPLICATIONS FOR POPULATION, FAMILY AND REPRODUCTIVE HEALTH I
1 credits - Course offered this year - East Baltimore
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. Explain team dynamics and effectively use small work groups
4. Manage conflict and give effective feedback
5. Practice communication skills associated with leadership

Email: rblum@jhu.edu
Lecture: M 4:30 PM - 7:00 PM
Enrollment: Minimum 15, Maximum 35, Waitlist Enabled: Yes
Restricted to graduate students. Preference is given to second year graduate students.
Grading Options: Letter Grade or Pass/Fail
Prerequisite:
Multi-term with 380.882
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.
Email: rblum@jhu.edu
Lecture: M 4:30 PM - 7:00 PM
Enrollment: Minimum 15, Maximum 35, Waitlist Enabled: Yes
Restricted to graduate students. Preference is given to second year graduate students.
Grading Options: Letter Grade or Pass/Fail
Prerequisite:
Multi-term with 380.883
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.

380.895.01 MPH PRACTICUM: PFRH
variable credits Students who have not met the practicum requirement, must register for at least two credits - Course offered this year - East Baltimore
Departmental Faculty
The MPH Practicum is a mentored, hands-on practical public health experience, which involves meaningful participation and interaction with public health professionals.
Upon successfully completing this course, students will be able to:
   1 Demonstrate that they have had a mentored public health practicum experience

Enrollment: Minimum 10, No maximum enrollment required, Waitlist Enabled: No
Grading Options: Pass/Fail