Department of Public Health Sciences
Spring 2016 Course Offerings
For more information about the courses listed below, please contact the instructor or Pattie Kolomic, Graduate Programs Administrator, 275-7882, Pattie_Kolomic@urmc.rochester.edu.

Spring classes begin on Wednesday, January 13

No Classes Monday January 18, 2016 (Martin Luther King Day)
Spring Break March 7-11, 2016
Classes End April 27, 2016
Exam Week: May 2-9, 2016

PM 414 History of Epidemiology (CRN: 81487) 3 credit hours
Instructor: Seplaki, Christopher, Ph.D., Jones, Courtney, Ph.D.
The overall goal of this course is to provide students with both a review of the historical framework that shaped the field of epidemiology and discussion of important epidemiologic approaches developed within historic periods. The course will first discuss the origins of the field and the interplay between the development of epidemiology inquiry and our scientific understanding of disease and population health. Attention will then turn toward the increasing social awareness and role of public health and overviews of the development of modern epidemiologic methods of study design and analysis, including intellectual exchanges and interactions with other scientific disciplines (e.g., biomedical, social). The course will then close by examining recent and future challenges facing the field. **Tuesday, 2:00 – 4:40, SRB 1416**

PM416 – Epidemiologic Methods (CRN: 78993) 3 credits
Instructor: Rich, David, ScD., Seplaki, Christopher, Ph.D., Thevenet-Morrison, Kelly, M.S
This course provides an in-depth coverage of the theoretical and quantitative methodological issues associated with population based epidemiology research, including concepts of study design, selection and information bias, measurement, confounding, and effect modification. The course will also cover multivariable analytic techniques including logistic regression and Cox proportional hazards modeling. Students will also have lectures on the use of SAS software to conduct these statistical analyses. At the end of the course students will be able to conduct a complete epidemiology study from study design to data analysis to inference. **Tues., 9:40-10:55, Thurs., 9:40-12:20, SRB 3434A/B**

PM422 – Quality OF Care & Risk Adjustment (CRN78987) 3 credits
Instructor: Li, Yue, Ph.D., Cai, Shubing, Ph.D.
The purpose of this course is to explore the various methods and opportunities available to track and assess outcomes of clinical practices and medical technologies. The material covered will include the framework, analytic approaches, databases and settings available for studies addressing patient outcomes, practice patterns, clinical interventions and strategies that constitute the content of health care. The course focuses on the use of patient populations and databases as laboratories for the generation of new knowledge and information. **Wednesday, 9:40-12:20, SRB 2420A/B**
PM 425 Health Promotion and Preventive Medicine (CRN: 65248) 3 Credit Hours
Instructor: Kopin, Laurie, M.S., Ph.D.
This course will provide the learner with a solid foundation and appreciation for primordial, primary, secondary, and tertiary disease prevention strategies on both an individual (patient and provider) and population-wide basis (society as a whole). The overarching theme of the course is to impress upon the learner the importance of and need for preventive health behavioral interventions and the positive impact healthy behavior change can have on our society as a whole on an environmental, economical, and social level. **Tuesday, 3:25-6:05, SRB 3434 A/B**

PM 426 Social and Behavioral Medicine (CRN: 78961) 3 credits
Instructor: Ossip, Deborah, Ph.D.
The overall goal is to examine the public health impact of behavioral, psychosocial, cultural, and environmental factors on the development, prevention, and treatment of health problems. This is a survey course designed to introduce students to a wide range of social and behavioral determinants of health, health behavior change, and health disparities over the life course. **Thursday, 2:00-4:40, SRB 1.416**

PM 428 Health Services Research Seminar/Workshop Series (CRN: 72701) 1 Credit Hour
Instructor: Veazie, Peter, Ph.D.
A non-credit course required of all doctoral and postdoctoral students. A variety of topics will be presented for discussion by faculty and students. **Friday, 2:00 – 3:15, SRB 1416**

PM 442 Nutritional Epidemiology (CRN: 72716) 3 Credit Hours (442W: 72727)
Instructor: Fernandez, Diana, M.D., M.P.H., Ph.D.
The course is designed to give the students the tools to critically review the nutritional epidemiologic literature and to conduct epidemiologic studies of diet, nutrition, and disease. Concepts on nutritional epidemiology will be applied to nutrition and nutritional-related disorders prevalent in the United States and globally (e.g., descriptive epidemiology of breastfeeding, obesity). Prerequisites: introductory courses in epidemiology and statistics. **Friday, 9:00-11:40, SRB 1406**

PM 451 Infectious Disease Epidemiology (CRN: 81493) 3 Credit Hours,
Instructor: Fernandez, Diana, Ph.D.
This course examines the epidemiology of infectious diseases within a biological and methodological framework. Students will be introduced to the objectives of conducting research in infectious diseases and the methodologies used to accomplish these objectives. There will be a particular focus on topics not applicable to the study of chronic diseases, such as vaccination, immunity, and transmission dynamics. Students will also gain an appreciation for the public health importance of specific pathogens in the United States and globally. **Monday, 9:00 – 11:40, SRB 1402**
PM 452 Community Health Improvement Practicum (CHIP) (CRN: 78949) 3 credits
Instructor: McIntosh, Scott, Ph.D.
This practicum course educates students in the appropriate knowledge, attitudes, and skills necessary for developing population-based interventions, and understanding the connection between community and health. The main goal is to facilitate key partnerships for sustainable interventions (group projects) in the community to improve health at the population level. **Wednesday 3:25-6:05, SRB 1.416**

PM 458 Qualitative Health Care Research (CRN: 72738) 3 Credit Hours
Instructor: Alio, Amina, Ph.D.
A community’s health is not just determined by individual health behaviors, but also by cultural beliefs and forms of social organization. Traditional quantitative methodologies, which have been so powerful in understanding biological phenomena, have limited explanatory power in analyzing socio-cultural phenomena. Qualitative methods, long used in the social sciences, allow for the collection, analysis, and interpretation of social and cultural data that quantitative methods cannot adequately reach. In addition, qualitative methods can function as an essential adjunct to quantitative methods by hypothesis generation or identifying lay terminology for accurate survey developed. This course is designed as a hybrid: a combination of in-class meetings (50%), outside-of-class research tasks (25%), and online modules (25%). Course content covers standard qualitative methodologies through a discussion of relevant literature, class exercises, and a class project. **Mon., 2:00-4:40, SRB**

PM 460 Master’s Essay
This research project is designed, carried out, analyzed, and written up by the student under the supervision of, and in consultation with, an essay advisor and an advisory committee.

PM 464 Introduction to Regression Analysis (CRN: 72933) 3 Credit Hours
Instructor: Cai, Shubing, Ph.D.
The course will focus on the ordinary least squares regression, including the theory, assumptions as well as the necessary alterations required to conduct valid analysis when those assumptions are not met. The course will also cover other commonly used regression models (e.g. logistic regression). The course will provide students with analytic skills to test model assumptions, perform hypothesis testing, and interpret model parameters. **Monday/Thursday 12:30-2:00, SRB 1402**

PM 472 Measurement & Evaluation of Research Instruments (CRN: 72998) 3 Credit Hrs
Instructor: Rogge, Ronald, PhD.
The purpose of this course is to provide the student with a comprehensive background in the development and testing of self-report instruments for epidemiologic research purposes. A review of the principles of survey development will begin the course, however, it will rapidly move to a more hands-on approach as students will learn how to run and interpret classical test theory analyses, factor analyses, responsiveness to change analyses and Item Response Theory (IRT) analyses of item pool data. The students will learn how to use and integrate these statistical approaches to develop self-report instruments with high levels of validity and low levels of measurement error. Prerequisites: PM 415 or PHS 103. **Wed., 2:00–5:00, Meliora 474**
PM 483 Advanced Health Economics II (CRN: 73029) 3 Credit Hours
Instructor: Hill, Elaine, Ph.D.
Comprehensive course covering micro-economic theory and its application to health and health care markets. Topics include consumer decision making, the theory of the firm, market imperfections, and human capital formation. Applications in health economics include the demand for health, determinants of health, rational addiction, how consumers respond to information about health care, adverse selection in health insurance, and the moral hazard created by physician compensation strategies. Each student writes a research sketch, testing predictions from microeconomic theory and defining the appropriate econometric model as a final project. Prerequisites: Health Economics I and calculus. **Tuesday/Thursday 9:40 – 10:55, SRB 1402**

PM 484 Medical Decisions and Cost Effectiveness Research (CRN: 73030) 3 Credit Hours
Instructors: Dolan, James, MD
Decision and cost-effectiveness analyses are increasingly used to evaluate alternative choices in clinical practice and to enlighten and inform health policy determinations. In this course, students are introduced to the methods and objectives of decision analysis and cost-effectiveness research, as well as to important study design issues that distinguish these investigations from other clinical research studies. Students will also learn decision analysis software such that they can perform analyses themselves as a class project. After completion of the course students will: a) understand the concepts underlying decision analytic methods and how to apply them to help decision makers make better clinical and policy decisions; b) know how to structure decision problems using decision trees, influence diagrams and multi-attribute value trees; and c) know how to conduct single and multiple outcome decision analyses, including cost-effectiveness analysis. **Monday, 7:00- 10:00PM, SRB 1.404**

PM 486 Medical Ecology (CRN: 78976) 3 credits
Instructor: Dye, Tim, Ph.D.
Medical Ecology is a multidisciplinary approach to the study of environmental impacts (broadly defined) on human health. In medical ecology, human beings as biological and social entities are placed within a wider context of dynamic ecosystems that incorporate physical, biological, and sociocultural components. Worldwide there is a resurgent interest in medical ecology to offer analytic paradigms to study, track, and address both new and old risks to human health, taking into account micro- and macro-environmental conditions and processes. Medical ecology is particularly concerned with applying a systems approach to analyzing disease, with an emphasis on how to change in environments relates to change in risk of exposure and incidence of disease. Many methods are used to generate and test medical ecological models, drawn from medical geography, epidemiology, biology, and the social sciences. Many of the lessons from this course come from global health, health impact of colonial relationships, and diseases of lifestyle and modernization. **Wednesdays, 9:40-12:20, SRB 1.416**
PM 487 Fundamentals of Science, Technology & Health Policy (CRN: 81520) 2 credits
Instructor: Steele, Scott, Ph.D.
Science and Technology (S&T) continues to be an area of significant focus to drive innovation, improve public health and enhance national security in the U.S. and across the globe. This interactive course will offer students exposure to the interaction between S&T and public policy, particularly exploring the role and impact of the Federal government in this process. Students will also have the opportunity to explore roles for scientists in the policy making process, while gaining the ability to objectively analyze S&T policy issues and develop skills to provide policy recommendations and write policy memos. Some assignments will be tailored to individual students’ policy interests and may be reviewed by the course instructor as well as consultants directly familiar with the issue. Note: This class is broadly designed for students both in the basic and applied sciences interested in the S&T policy process, as well as students focused on public health related policy issues. Tuesday, 4:50 – 6:20, SRB 1.412

PM 494 Health Policy Analysis Lab (CRN: 73056) 1 credit
Instructor: Temkin-Greener, Helena, Ph.D.,
This 1 credit seminar will provide a framework for developing and analyzing a range of health policy issues. Using case studies in the context of public health and health care, we will learn how to develop logic and argumentative skills necessary to produce compelling policy analyses. This class is required for HSR&P doctoral students. Instructor’s permission is required for others. Tuesday’s, 11:05 – 12:20, SRB 1406

PM 595 Ph.D. Research
PM 895 Continuation of Master’s Enrollment (CRN: 73307)
PM 985 Leave of Absence (CRN: 73339)
PM 999 Doctoral Dissertation (CRN: 73350)

November 10, 2015