BD2K – Potential Courses of Interest

HPM: Health and Policy Management

- **HPM 772 Techniques for the Economic Evaluation of Health Care (3).** Permission of instructor required. This course provides an investigation of the theory, methods, and application of economic evaluation to health care. Topics include basic methods used to identify policy issues, structure an economic evaluation, measure and summarize health outcomes and estimate their value to patients or to the public, and identify resources used and estimate their costs. Fall.

- **HPM 773 Introduction to Program Evaluation in Public Health and Health Care Settings (3)**. Executive Master's Program. This course is an introduction to program evaluation in public health and health care settings. We discuss key concepts in planning, conducting, reporting, and utilizing evaluations. Through a semester-long project students develop a viable program evaluation design for a real-world program. Fall.

- **HPM 776 Health Information and Quality Tools (2).** Executive Master's Program. The HPM 776/777 and 776/778 course sequences integrate essential methods and principles in healthcare quality and information management, emphasizing use of information to measure and improve quality. Spring.

- **HPM 777 Health Information and Quality Applications (2)**. Executive Master's MHA Program. The HPM 776/777 and 776/778 course sequences integrate essential methods and principles in healthcare quality and information management, emphasizing use of information to measure and improve quality. Spring.

- **HPM 781 Seminar in Comparative Effectiveness Research (1).** The course provides an overview of substantive and methodological issues in CER, including randomized controlled trials; inferences from observational studies; literature syntheses; decision sciences/decision modeling; dissemination and implementation science; cross-cutting skills (e.g., strengths and limitations of administrative and clinical databases and electronic health records for CER). Spring.

- **HPM 785 Advanced Decision Modeling (3).** Prerequisite, HPM 772. This course covers advanced decision modeling methods in health care, including probabilistic sensitivity and value of information analysis, economic evaluation using clinical trial data, and discrete event simulation and agent-based/system dynamics modeling techniques. The course teaches analytical techniques and interpretation as well as and state-of-the-art best practices. Spring.

- **HPM 804 Healthcare Database Research (DPOP 804) (3).** Course provides foundational knowledge for using administrative health care claims and other relational data for health services research. Students learn to: manage large databases in SAS, identify key variables in administrative data, and design and implement a study protocol. Fall.

- **HPM 815 Graduate Health Economics Seminar (1).** Class will meet every other week. Discussion of recent papers in health economics. Students must have solid knowledge of graduate microeconomics theory and econometrics. Fall, spring.

- **HPM 880 Principles of Health Policy Research Methods (3)**. First course in the department's sequence in empirical analysis. Covers principles of statistical inference, univariate and bivariate analysis, statistical software applications, and mathematical concepts necessary for linear regression and further topics. Fall.
- **HPM 881 Linear Regression Models (3).** Permission of instructor required (with exception of HPM PhD students). Prerequisite: BIOS 600 or equivalent background in probability theory/statistics for student lacking the prerequisite. Required preparation, matrix algebra, derivatives, logs/exponentials, and Stata. This course is an introduction to linear regression models. Topics include least squares regression, multicollinearity, heteroscedasticity, autocorrelation, and hypothesis testing. Spring.
- **HPM 882 Advanced Methodology in Health Policy and Management Research (3).** Prerequisite: HPM 881, or permission of the instructor. This course is an introduction to linear regression models. Topics include linear algebra, least squares regression, multicollinearity, heteroscedasticity, autocorrelation, and hypothesis testing. Fall.
- **HPM 883 Analysis of Categorical Data (3).** Prerequisites: HPM 881 and 882 or equivalent. This course is an introduction to the analysis of categorical data using maximum likelihood and other non-linear techniques and specification tests. Topics include models in which the dependent variable is not continuous, including logit, probit, censored data, two-part, and count models. Spring.

Courses from other departments coming soon!