## Courses of Interest Outside of Fuqua

All course descriptions are taken from the <u>Graduate School Bulletin</u>, the <u>Law School Bulletin</u>, the <u>Sanford School of Public Policy Bulletin</u>, the <u>School of Medicine Bulletin</u>, the School of Nursing Bulletin or the <u>Pratt School of Engineering Bulletin</u>. Please check with listing department for course availability (Not all course may be available at this time). MBA students must <u>receive approval</u> from the Fuqua Registrar to take coursework outside of Fuqua.

**BIOETHIC 601S**. Foundations of Bioethics. This course is designed to provide the incoming joint degree students in the JD/MA in Bioethics & Science Policy with an introduction to and overview of the central concepts underlying bioethics and the formulation of science policy. In a seminar format, the students will explore the foundations of bioethics, the concept of informed consent, human subject research and the Common Rule, bioethical issues in a clinical setting, risk and the precautionary principle, race and genetics, science and human rights, policy analysis, science communication and the formulation of science policy. Instructor consent required. Instructor: Williams 3 units.

**BIOETHIC 602.** Law, Research and Bioethics. An examination of the relationship between the law and bioethical issues, particularly in research and medical contexts. The course will explore the ways scientific advances affect law and other social institutions, and, conversely, how law affects the development and use of scientific knowledge. Topics include the history of human subject protections, current regulatory and statutory issues in research, and legal decisions governing informed consent, confidentiality, privacy, the philosophical principles underlying bioethics, and other issues. Open to students in the Bioethics and Science Policy program. Consent of instructor is required for undergraduates. Instructor: Williams 3 units.

**BIOETHIC 603.** An examination of the leading issues in bioethics, especially those that arise in the context of clinical decision-making and the doctor-patient encounter. The focus will be on the ethical dilemmas faced by medical providers, patients, and their families: how issues are analyzed, what values are considered, and how disputes are resolved. Topics will include end-of-life care; withdrawal or refusal of life-sustaining treatment; pediatric ethics; transplantation; and rationing of scarce drugs or resources. The course will use real case examples to illustrate these dilemmas and challenges. Consent of instructor is required for undergraduates. Instructor: Lemmon 3 units.

BIOETHIC 605S. Contemporary Issues in Bioethics and Science Policy. The course will focus on "Professional and Scholarly Writing" (Fall; Instructor: Angrist) and "Communicating Science and Bioethics" (Spring; Instructor: Weintraub). In the fall, we delve into how and where we express ideas about bioethics and science policy in writing. We begin from first principles: Why do we write? What can good writing do for us? How do we know when we're done? During the semester we will write clear, thoughtful, analytic and creative pieces in bioethics and science policy. The spring course provides students with practical training in the communication of scientific research and bioethical issues to the media, policy makers, and the general public. Instructor consent required. Instructor: Angrist 1.5 units.

**BME 590** Special Topics in Biomedical Engineering - Reimbursement Med Product. (The objective of the course is to give a practical overview of the current regulatory and reimbursement landscape for medical products (drugs, devices, and biologics), as well as an understanding of current issues that may influence existing and/or future regulatory and reimbursement practices and policies. The focus will be primarily on US regulation and reimbursement policy, but international context will be included as appropriate. Students can expect to gain a basic understanding of how drugs, devices, and biological products are tested and regulated as well as the multiple stakeholders involved in the purchase and reimbursement of medical products. Instructor: Christina Silcox

**ENVIRON 539**. Human Health and Ecological Risk Assessment. Topics central to both health and ecological risk assessment are explored. Basic concepts of hazard identification, dose-response relationships, exposure assessment, and risk characterization and communication are discussed in the context of both human health and environmental assessment. The basis and rationale for using specific, as well as extrapolated, scientific information and expert judgment, and the strengths and weaknesses of alternative approaches, are evaluated. Applications emphasizing real cases are used to illustrate the interdisciplinary process and products of risk assessment, as well as the regulatory use of the information. Group projects emphasized. Instructors: Mihaich/McMasters. 3 units.

**GLHLTH 531**. Cost-Benefit Analysis for Health and Environmental Policy. Course considers the importance of economic analysis, or cost-benefit analysis (CBA), for public policy assessments. Specific focus is on health and environmental policy, and the steps in identification / cataloguing, quantification, and monetization of impacts of potential policies and projects. Covers: Economic rationale for CBA; Basic principles for assessing the economic effects of projects; Techniques for valuing health and environmental impacts; Intergenerational/philosophical concerns related to CBA; Social discounting; Risk and uncertainty; Comparisons of CBA with other approaches (i.e. cost effectiveness analysis, multi-objective analysis). Instructor: Jeuland. 3 units

GLHLTH 538. Global Environmental Health: Economics and Policy. Social science perspective on global environmental health. Students will learn to identify primary environmental causes of high burden diseases such as malaria, diarrhea, and respiratory infections; describe how to measure socio-economic impacts of global environmental health diseases; discuss key policies to control global environmental health problems based on private prevention and therapeutic behaviors; and propose frameworks to empirically monitor and evaluate global environmental health policies. A sub-module will focus on climate change and water-borne diseases. Prerequisites: Introductory course in statistics. Instructor: Pattanayak. 3 units. C-L: see Environment 538; also C-L: Public Policy Studies 582

**GLHLTH 570S.** Introduction to mHealth Technologies in Low- and Middle-Income Countries. Mobile phones are catalyzing the delivery of health services and information in low- and middle-income countries. Due to global pervasiveness of mobile phones, this mobile health (mHealth) revolution has become a centerpiece in efforts to achieve the sustainable development goals, especially universal healthcare. This course will provide an introduction to mHealth and follow the mHealth lifecycle—from design to deployment—with a strong focus on developing sustainable applications that can be integrated within national health systems in developing countries. Students will be introduced to concepts such as user centered design, system architecture, business models, and mobile data privacy. Instructor: Vasudevan. 3 units

**GLHLTH 671**. Global Health and Health Systems in Africa. This course is designed to prepare students to work in, or pursue study of, the complex institutional environment of global health and health systems in Africa. The course braids together four topical strands: (1) the social, political, and economic context of the African continent; (2) African conceptions of the "public" and of "health" (3) the origins and evolution of African health systems; and (4) the impact on African health systems of transitions in global health governance. The course pursues these topics through case studies and team projects focused on issues of global health and health systems in representative African countries. Instructor: Toole. 3 units. C-L: Public Policy Studies 636

**GLHLTH 701**. Global Health Challenges. Course introduces major global health problems and social, behavioral, economic, biomedical and environmental determinants of health in resource limited settings. Topics include communicable diseases i.e. HIV, malaria, tuberculosis and common childhood diseases; chronic diseases such as cancer, diabetes, cardiovascular disease and mental health; and determinants of health associated with these diseases, such as poverty, gender imbalance, culture, poor environmental sanitation, malnutrition, tobacco use, and climate change. Other topics may include health promotion, reproductive health, maternal and child health, and disaster preparedness. Departmental consent required. Instructor: Boyd. 3 units.

**GLHLTH 721.** Indigenous Medicine and Global Health. Explores indigenous medicine's role in global health and focuses on four interrelated topics: basic medical paradigm and practices, access and utilization in different regions, cross-cultural health delivery, and the complexities of medical pluralism. Course themes will be explored through lecture, discussion, small group case analyses, comparative analytical exercises, and wrkshops. Instructor: Boyd. 3 units. C-L: Cultural Anthropology 760

**LAW 527.** Access to Medicines - IP and Global Public Health. This 2 credit seminar examines the law and policy governing the availability, price and development of medicines worldwide, providing an overview of the international legal frameworks, national regulations, and innovation policies affecting access to existing medicines and the development of future treatments for global health. It encourages students to critically examine current international law governing pharmaceutical innovation and to engage in efforts to improve incentives for the pharmaceutical sector to better meet global health needs. This seminar is open to non-law graduate students depending on space and prior experience. Instructor: Reichman. 2 units.

**PUBPOL 635.** The Politics of Health Care. The history, status, and future of health care policy. Grounded in political theories such as distributive justice, altruism, and contractarianism. Focus on policy formation. Case discussions of American reform controversies in light of international experience. Instructor: Conover. 3 units. C-L: Political Science 518

**PUBPOL 637**. Health Policy Analysis. Group analysis of a current health-policy problem. Project involves background research, data acquisition, analysis, writing, and presentation of a substantial policy report. Designed for candidates seeking the undergraduate certificate in health policy. Consent of instructor required. Instructor: Taylor. 3 units.

**PUBPOL 639S.** Public Health Research Methods and Issues. Focus on prevention of diseases and health problems; funding, policy, and management decision making. Overview of public health interventions and outcomes in United States, Europe, and less industrialized nations. Emphasis on understanding the social construction of race and ethnicity and the impact of socioeconomic variables such as race, ethnicity, gender, income and education on health. Public health perspective applied to such topics as: HIV/AIDS; teen pregnancy; cocaine use during pregnancy; infant mortality and low birth weight; violence; major causes of mortality in less industrialized countries; and role of public health in state and national health reform. Instructor: Whetten. 3 units.

**PUBPOL 642S.** Designing Innovation for Global Health: From Philanthropy to People. Explores the introduction, adaptation, and globalization across borders of health technologies, with emphasis on resource-limited settings. Public Policy 281 Students will critically examine how policy can influence and funding can enable (or not) their innovation and access in low- and middle-income countries. Topics include policies to minimize inequity, systems for sharing and owning knowledge, approaches to innovative financing, and ethical issues. Instructor: Staff. 3 units.

**PUBPOL 644S.** Poverty, Inequality, and Health. Impact of poverty and socioeconomic inequality on the health of individuals and populations. Attention given to both United States and non-United States populations. Topics include the conceptualization and measurement of poverty and socioeconomic inequality; socioeconomic gradients in health; globalization and health; socioeconomic deprivation across the life-course and health in adulthood; and public policy responses in the United States and elsewhere to growing health inequities in the age of globalization. Prerequisite: An introductory course in statistics. Seniors and graduate students only. Instructor: Staff. 3 units. C-L: African and African American Studies 548S

**PUBPOL 700S.** Policy Analysis of Development. The broad objectives of this seminar are: 1) to examine the role of policy analysis in solving important social problems; and 2) to develop the analytical and communication skills of participants in order to undertake effective policy analysis. This seminar examines public policy objectives and the role of policy analysis in achieving these objectives, market and government failures, the role of the public and private sector, policy analysis tools (e.g. cost-benefit analysis, decision analysis, etc.), and policy implementation and evaluation. Emphasis is given to specific policy problems (e.g. social, environmental, health problems) based on the interests of the participants. This seminar relies on case studies, application of policy analysis tools, exercises, memos, policy critiques, and discussions with policy analysts. At the end of the semester participants should be able to under-stand policy issues and choices, why policies fail, how to use policy tools to reach decisions, and how to evaluate policies. Instructor consent required. Instructor: N. Mirovitskaya or R. Fernholz. 3 units.

**PUBPOL 825**. Topics in Health Policy. Seminar introduces students to major health policy concepts and methods of analysis of health policy problems. Focus on domestic and international health policy topics, including: nature of disease, health and economics, health care delivery systems, demography and health. Consent of instructor required. Instructor: D. Taylor. 3 units.

**SOCIOL 641S.** Proseminar in Medical Sociology (Special Topics). Selected topics in medical sociology: social structure and health; social behavior and health; organization and financing of health care; medical sociology (for example, social epidemiology, stress and coping, health and aging). Instructor: Burton, Brown, or Gold. 3 unit.