PPE Spring Courses 2017

**CROSS-LISTED COMMON FOUNDATIONS**

**PPE 072 (HSOC 101, PHIL 072) Biomedical Ethics Society Sector (Gibbons)**

**LEC: MW 11 AM-12 PM**
**REC: F 10-11 AM, 11-12 NOON, 12 -1 PM or 1-2 PM**

A survey of moral problems in medicine and biomedical research. Problems discussed include: genetic manipulation, informed consent, infanticide, abortion, euthanasia, and the allocation of medical resources. Moral theory is presented with the aim of enabling students to think critically and analytically about moral issues. The need for setting biomedical issues in broader humanistic perspective is stressed.

**PPE 153 (PSYC 253) Judgments & Decisions College Quantitative Data Analysis (Royzman)**

**Fulfills the College Quantitative Data Analysis Requirement.**
Prerequisite(s): One semester of statistics OR microeconomics

**LEC: R 5:30-8:30 PM (SAS) and T 6-9 PM (LPS)**

Thinking, judgment, and personal and societal decision making, with emphasis on fallacies and biases.

**CORE COURSES**

**PPE 202 (PSCI 236) Public Policy Process (Meredith)**

**LEC: MW 10-11 AM**
**REC: W 2-3 PM, 3-4 PM, or 4-5 PM,**
  - R 9-10 AM, 3-4 AM, or 4:30-5:30,
  - F 9-10 AM, 10-11 AM, or 11-12 NOON

This course introduces students to the theories and practice of the policy-making process. There are four primary learning objectives. First, understanding how the structure of political institutions matter for the policies that they produce. Second, recognizing the constraints that policy makers face when making decisions on behalf of the public. Third, identifying the strategies that can be used to overcome these constraints. Fourth, knowing the toolbox that available to participants in the policy-making process to help get their preferred strategies implemented. While our focus will primarily be on American political institutions, many of the ideas and topics discussed in the class apply broadly to other democratic systems of government.
PPE 204 (PHIL 228) Philosophy of Social Science (TBA)

LEC: MW 1-2 PM  
REC: R: 4:30-5:30 PM or 5:30-6:30 PM  
F: 10-11 AM or 11-12 NOON

This course is about the foundations of contemporary social science. It focuses on the nature of social systems, the similarities and differences between social and natural sciences, the construction, analysis, and confirmation of social theories, and the nature of social explanations. Specific topics may include: What are social norms and conventions? What does it mean to have one gender rather than another, or one sexual orientation rather than another? Should social systems be studied quantitatively or qualitatively?

RESEARCH

PPE 299 Independent Study  *Permission needed from Department.*

Student arranges with a faculty member to pursue a program of reading and writing on a suitable topic.

PPE 301 Directed Honors Research  *Permission needed from Department. Open only to senior majors in PPE.*

Student arranges with a faculty member to do an honors thesis on a suitable topic.

PPE 460 Research in Behavioral Ethics (Dimant)

SEM: T 5-8 PM (LPS)

In reality, our understanding of different mechanisms and (economic) relationships is hampered by the lack of data. More often than not, either the observation itself is difficult or the data is not reliable. Over the last decades, economic experiments have become a vital part of the scientific discourse, facilitating our understanding of the world we live in (much like in Biology, Chemistry, Physics or the like). Economic experiments allow exploring economic behavior under controlled conditions by generating observations under different experimental designs and controlled conditions. Pioneering this field of research, Daniel Kahneman and Vernon Smith were awarded the Nobel memorial prize in recognition of their work on behavioral and experimental economics. In this course, we provide you with the methodology of how to develop a research idea and a proper experimental design that allows to explore this idea. Essentially, you will learn how to think about ideas, generate predictions, and how to use economic experiments to test them.
CAPSTONES

PPE 475 Competitions and Competitive Behavior (Hart)

SEM: T 1:30-4:30 PM

Competitions constitute an important part of social and economic interactions, such as those between athletes, lawyers or developers. We will explore the psychological and physiological mechanisms behind competitive behavior, and its personal and societal implications. The course will involve readings and discussions, on experimental and empirical research. We will explore the following topics, among others: How our brains and our society norms affect the intensity of competition; how the social context affects our willingness to compete and exert costly effort; the consequences of competitions for contestants’ profit, and for their subsequent behavior – even beyond the competition itself (for example, how rivalry affects subsequent behavior). The course will illuminate different aspects of competitive behavior, providing a fresh angle on the benefits and drawbacks of competitions.

PPE 475 Network Analysis (Sontuoso)

SEM: W 3:30-6:30 PM

This course addresses elements of Network Science as relevant for analyzing the connectedness of economic or, more generally, social phenomena. Building on ideas from computer science, sociology and economics, the course will examine the properties of networked structures and the behavior of agents within these networks. The models presented in this course will aim to explain how such networked structures may determine phenomena including the spread of ideas, social norms, market practices and financial crises. (The course is designed for an interdisciplinary audience and requires no theoretical prerequisites, but it will often present material drawn from formal disciplines.)

PPE 475 Modelling Choice Behavior (Bhatia)

SEM: R 1:30-4:30 PM

This course will examine mathematical and computational models of individual choice behavior. It will cover modeling techniques from psychology, cognitive science, neuroscience, and economics, and will apply these techniques to a range of diverse behavioral domains. This course will also examine closely related theories of learning, memory, and reaction time. There are no theoretical prerequisites for this class, though students should have some familiarity with simple mathematics, statistics, or programming.

PPE 475 Fairness & Altruism (Dillenberger)

SEM: M 3:30-6:30 PM

The course is designed to be an integrative experience, drawing on knowledge from economics and psychology to understand the role of fairness in behavior.
PPE 475 Economics of Crime and Corruption: An Interdisciplinary Perspective (Dimant)

SEM: R 1:30-4:30 PM

This is an undergraduate research seminar tackling the topic of crime and corruption from an interdisciplinary perspective. Our focus will lie on understanding the mechanism and motivation to engage in criminal and corrupt behavior from the viewpoint of, among others, economics, psychology, and criminology. Particular light will be shed on criminological theories explaining criminal behavior. Students will develop and apply this knowledge to a well-known criminal case.

PPE 476 Thinking with Models (Funcke)
SEM: MW 3:30-5:00 PM

The primary focus of the course is on understanding, designing, and analyzing simulation models. Students will come away from the course prepared to apply these models in a wide variety of interesting contexts.

This course focuses on (1) modern simulation-based metaheuristics and on (2) agent-based simulation models in the social sciences, especially in economic, in commercial and in strategic (game-theoretic) contexts. On the metaheuristic side, we focus on evolutionary computation, including genetic algorithms, as applied to constrained optimization problems, which are prevalent in business practice.

Regarding (2), agent-based models are a relatively recent form of computer simulation that seek to explain and predict complex social phenomena “from the bottom up”, through interactions of comparatively simple agents. The course reviews experimental and theoretical results, and exposes the students to modern development environments for, as well as successful applications of, this form of simulation.

A modest amount of programming will be expected of students. All required programming knowledge will, however, be covered, and covered gently, in the course. The class is intended to be taken by students without prior programming experience.

Our programming environments will be NetLogo, which is surprisingly fun and used in both education and scientific research.