PHI 520/420  Philosophy of Science  Bittner

Wednesday, 3:00-4:50 pm, 114 Baldy, 2388
The aim of this course is to provide an introduction to modern physics from a philosophical perspective. The course is designed for advanced undergraduate students and graduate students in Philosophy. It is intended to be self-contained but basic knowledge about Newtonian mechanics, calculus, and vector spaces is required. Grading will be based on in-class participation, a presentation, and a term paper.

The first part of the course will start with a brief overview of modern classical mechanics. The discussion will focus on the notion of phase spaces and the nature of laws of physics. This will provide the basis for a rough introduction to quantum mechanics and the theory of relativity. The discussion of quantum mechanics will focus on three aspects: (a) some key experiments (e.g., the two-slit experiment); (b) key concepts such as the uncertainty principle, the superposition of quantum states, and quantum entanglement; and (c) some basic aspects of the mathematics that is used to formulate quantum mechanics. If time permits, we will also look into some attempts to integrate the theories of quantum mechanics and relativity into a single, unified theory.
In the second part of the course we will go through some of the philosophically interesting implications of modern physics including the various interpretations of quantum mechanics, questions of determinism and the nature of vagueness that arise from quantum mechanics, and the mereology of relativistic space-time.
This seminar will discuss a variety of problems in theoretical and applied ontology, paying special attention to applications in the areas of biology and medicine on the one hand, and defense and security on the other. Ontologies to be considered will include:

- Basic Formal Ontology
- Information Artifact Ontology
- The Gene Ontology and other ontologies in the OBO (Open Biomedical Ontologies) Foundry
- Universal Core Semantic Layer
- The Environment Ontology

Literature:
Introductory readings are provided here:

http://ontology.buffalo.edu/smith/articles/ontologies.htm

Links to further readings will be made available on the course wiki at:
http://ncorwiki.buffalo.edu/index.php/Problems_in_Ontology which will also include further details on course organization.

Students are strongly encouraged to register also for the tutorial:
PHI 398 LEC SMI Lecture Spec Topics: Intro to Ontology
which will provide a one-credit hour tutorial on the Protégé 2000 ontology editing software, the initial meeting of which will take place on August 11-12, 2012.

In this course we will be examining early modern views of the philosophy of language, with a particular focus on John Locke, Gottfried Leibniz, and George Berkeley. Locke’s theory of language focuses on the relationship between language and the mind, and on both the role of language in communication and the role of language in reasoning. Locke’s theory of language is a good starting point because of its influence, and because of the relatively systematic fashion in which it was presented. We’ll also examine Leibniz’s views on language (including some framed as responses to Locke), and Berkeley’s views (which involve a rejection or reconceptualization of the Lockean paradigm). We will examine these views both in their own right, as theories about language, and in connection with the rest of their respective authors’ philosophical systems. If time permits, we may also cover works by Thomas Reid; Adam Smith; Étienne Bonnot de Condillac; and/or John Stuart
**PHI 596 Graduate Dissertation Seminar   Williams**

Friday, 1:30-3:20 pm, 141 Park, 11571

This course is a required course for all philosophy graduate students who have completed their coursework and are now either preparing a thesis topical or writing thesis chapters. Students may enroll more than once, and are encouraged to do so, but if space is limited (14 max.) priority will be given to students who have recently defended or are working on Topicals, typically in their 4th year of grad studies. The aim is to help students complete their dissertations in a more timely manner, and achieve greater success with career placement. Offered in the Fall of each year, this course is a writing intensive course with a central presentation component. Course content is entirely dictated by the dissertation topics students are engaged in—students will be presenting original work in preparation for thesis prospectus or dissertation chapters. All students will get exposure to the issues covered by their peers, and gain useful presentation skills and practice. Students will be instructed in how to improve their presentation skills, and will receive oral feedback from their peers, and oral and written feedback from the instructor. Attendance is mandatory (within reason); all students will present at least once, more times if enrollment permits.

**PHI 579 Special Topics -Metaphysics Bootcamp   Williams**

Monday, 2:00-4:00 pm, 141 Park, 23888

Our aim in this course is to spend 14 weeks looking very closely at 14 important papers spanning much of the metaphysical landscape, each of which is at the heart of some contemporary debate in metaphysics. Each week we will focus on one reading (with some additional readings thrown in for extra background and coverage) that we will go through very carefully and discuss in great detail. Topics to be covered include: the problem of universals; the nature of particulars; persistence; ontological commitment; time; material constitution; dispositions; causation; modality. Our time with each topic will be brief, but should give students at least a passing familiarity with what goes on in much of contemporary analytic metaphysics.
PHI 598 Contemporary Continental Philosophy   Cohen

Wednesday, 4:00-6:00 pm, 141 Park, 23896

Contrasting personal-social-political visions of the best life: philosophy as scientific knowledge and/or aesthetic appreciation, versus philosophy as moral responsibility; ontology versus metaphysics; Spinoza and Heidegger versus Levinas; capital accumulation versus social justice. Questioning the role of technique in philosophy, mass existence in the world, and the evisceration/evacuation of what is called “philosophy” in the academy.

PHI 598/AMS 620 Perspectives on Ecological Restoration   Shockley

Tuesday, 2:00-5:00 pm, 1004 Clemens, 14303

This course will examine humanistic, social, and technological dimensions of ecological restoration from Native American Ecocentric, multicultural and analytic perspectives. This examination will incorporate the inherently multidisciplinary nature of ecological restoration. The relationship between restoration and human ecology, including matters of culture, social context, and situated knowledge, will be emphasized. Current and recent case studies will be analyzed, and the applicability of policies associated with those case studies considered. The underlying notions of restoration, sustainability, adaptation, and ecosystem will be critically examined, both conceptually and normatively.

PHI 605 BAU Supervised Teaching   Baumer, William

Requires Permission of Instructor   Meeting Days/Times to be arranged

PHI 637 Derek Parfit’s On What Matters   Shockley

Tuesday/Thursday, 11:00 -12:20 pm, 141 Park, 23887

of the most significant philosophers writing today is Derek Parfit. The focus of this course is his recent /On What Matters. /In this course we will consider, as background, the chief families of normative ethical theories, Consequentialism, Deontology, and Virtue Ethics. We shall ask how best to formulate these theories, and examine arguments for and against them. We will begin by working through the now classic exchange between J. J. Smart, defending utilitarianism, and Bernard Williams, arguing against it. We will then read through a more recent exchange between Marcia Baron, who advances a neo-Kantian position, Philip Pettit, who advances a consequentialist position not restricted to traditional hedonistic utilitarianism,
and Michael Slote, who advances a Humean version of virtue ethics. In the last half of the course, we will work our way through Parfit’s new, groundbreaking book, and examine his take on a wide range of issues in ethical theory.

**PHI 637  Bioethics  Hershenov**

**Tuesday, 4:00 - 7:00 pm, 141 Park, 23897**

The seminar will be focused on Jeff McMahan’s book: The Ethics of Killing: Problems at the Margins of Life. The topics to be examined involve personal identity, the badness of death, the nature of harm, the wrongness of killing, the moral status of animals and cognitively impaired human beings, abortion and infanticide, defining and determining death, euthanasia and physician-assisted suicide, the withering away of the self in cases of dementia. Grades will be determined solely by a 6000 word term paper.

**Individual Tutorial Course Sections with Philosophy Department Faculty**

**Requires Permission of Instructor**

**Meeting Days/Times Arranged with Professors**

**PHI 599  Graduate Tutorial**
**PHI 701  MA Guidance**
**PHI 703  Dissertation Guidance**