Course Title: **The Axiomatic Theory of Abstract Objects**

Abstract: In this course, we present an overview of the body of theorems formally derivable from the axioms of the theory of abstract objects. The axioms are motivated and presented in the first lecture, and in the remaining lectures we go through the definitions and theorems that systematize a variety of philosophical applications. We shall identify, and derive principles governing: truth-values, logical classes, Forms, fictions, situations, possible worlds, impossible worlds, concepts (including complete individual concepts), Fregean senses, Fregean (natural) numbers, and theoretical mathematical individuals and relations generally. The readings are optional.

A Note About the Readings: The readings are optional. The best preparation, however, is not to read the papers I've listed below, but rather to have familiarity with the work cited in the Bibliographies of the papers listed below. That is, the best preparation is to be familiar with *what others have said* about such topics as logical objects (and neologicism), Plato's Forms, fictions, situations, possible and impossible worlds, Leibniz's theory of concepts, Fregean Senses, and mathematical objects.

Lecture Schedule

Lecture 1: Mon, Apr 25 (morning): **Introduction and Presentation of Axioms**

Lecture 2: Mon, Apr 25 (afternoon): **Logical Objects (Truth Values and Classes)**

Reading: Anderson, David J. and E. Zalta, "Frege, Boolos, and Logical Objects", *Journal of Philosophical Logic*, 33/1 (February 2004): 1-26; preprint available at http://mally.stanford.edu/Papers/frege-boolos.pdf

Lecture 3: Tue, Apr 26 (morning): **Forms and Fictions**
Reading 1: Pelletier, F.J., and E. Zalta, "How to Say Goodbye to the Third Man", *Noûs*, 34/2 (2000): 165-202; preprint available at
http://mally.stanford.edu/Papers/plato.pdf
Reading 2: "The Road Between Pretense Theory and Object Theory, in *Empty Names, Fiction, and the Puzzles of Non-Existence*, A. Everett and T. Hofweber (eds.), Stanford: CSLI Publications, 2000, pp. 117-147; preprint available at http://mally.stanford.edu/Papers/pretense.pdf

Lecture 4: Tue, Apr 26 (afternoon): **Situations, Possible Worlds, and Impossible Worlds**
Reading 1: "Twenty-Five Basic Theorems in Situation and World Theory", *Journal of Philosophical Logic*, 22 (1993): 385-428; preprint available at http://mally.stanford.edu/Papers/twenty-five.pdf
Reading 2: "A Classically-Based Theory of Impossible Worlds", *Notre Dame Journal of Formal Logic*, 38/4 (Fall 1997): 640-660; preprint available at http://mally.stanford.edu/Papers/impossible.pdf

Lecture 5: Wed, Apr 27 (morning): (**Leibnizian) Concepts and (Leibniz's) Modal Metaphysics**
Reading: "A (Leibnizian) Theory of Concepts", *Philosophiegeschichte und logische Analyse / Logical Analysis and History of Philosophy*, 3

(2000): 137-183; preprint available at
http://mally.stanford.edu/Papers/leibniz.pdf

Lecture 6: Wed, Apr 27 (afternoon): **Fregean Senses**
   Reading: "Fregean Senses, Modes of Presentation, and Concepts", *Philosophical Perspectives*, 15 (2001): 333-359; preprint available at http://mally.stanford.edu/Papers/modes.pdf

Lecture 7: Thur, Apr 28 (morning): **Frege Numbers (Natural Numbers)**
   Reading: "Natural Numbers and Natural Cardinals as Abstract Objects: A Partial Reconstruction of Frege's *Grundgesetze* in Object Theory", *Journal of Philosophical Logic*, 28/6 (1999): 619-660; preprint available at http://mally.stanford.edu/Papers/numbers.pdf

Lecture 8: Thu, Apr 28 (afternoon): **Mathematical Individuals and Relations**
   Reading: Nodelman, U., and E. Zalta, "Foundations for Mathematical Structuralism", *Mind*, 123/489 (2014): 39–78; preprint available at
http://mally.stanford.edu/Papers/structuralism.pdf