

Prospectus & Syllabus

as of April 3, 2023

Instructor:	Florian Schwarz
Office:	3401-C Walnut, Room 411
Class Time	M/W 3:30-4:50
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1 Course Description

This course provides an introduction to formal semantics for natural language. The central issue is how the meaning of a sentence can be derived from the meanings of its parts. We will discuss various of the aspects central to meaning composition, including function application, modification, quantification, and binding. We will also introduce some basic formal tools that are useful for semantic analysis, including set theory, propositional logic, and predicate logic. Throughout, the focus is on hands-on work so that you learn how to DO semantic analysis. The aim is for you to be able to develop formal semantic analyses of natural language phenomena and to be able to read and understand the current research literature.

2 Class Structure

- Class time will be a mixture of lecture/discussion and groupwork on problem sets to build up the skills needed to master the formal concepts and materials.
- We will use an integrated online discussion platform to have ongoing discussion to ensure continuity and connection spanning both the synchronous and asynchronous activities.
- A typical week will include, in addition to synchronous class meetings:
 - A homework assignment
 - 2 Textbook readings
 - Occasional video lectures that prepare for in-class activities
 - Participation in discussion board on current topics and problem sets

3 Requirements

- attend class & do assigned readings
- Regular homework assignments (about 1 per week)
- Mid-Term Exam
- Final Exam (take home)

The homework assignments are the heart of the class. In order to learn how to do semantics, you have to do it yourself. You are welcome to discuss homework with your classmates, but you have to write up what you turn in on your own and indicate who you worked with.

Homework has to be turned in on time. This will make sure that you don't fall behind. The mid-term and the final will contain exercises similar to those on the homework assignments.

Your grade for the class will be based on your homework (60%) and your exams (10% for the midterm, 20% for the final). Attendance and class participation are a must to do well in the class - they make up another 10% of your grade. If you have to miss class for a legitimate reason, please let me know about this in advance, and turn in homework prior to class if at all possible.

4 Resources

4.1 Required Textbook

Heim, I. & A. Kratzer. 1998. *Semantics in Generative Grammar*. Blackwell.

Parts of the textbook can be made available electronically as needed if anyone is having trouble getting a copy of the book.

4.2 Other useful resources (we will read excerpts from some of these)

- Bach, E. 1989. *Informal Lectures on Formal Semantics*. State University of New York Press.
- Chierchia, G., and McConnell-Ginet, S. 1990. *Meaning and Grammar: An Introduction to Semantics*. MIT Press.
- Coppock, Elizabeth & Lucas Champollion. 2018. *Semantics Boot Camp*. Draft. <http://eecoppock.info/semantics-boot-camp.pdf>
- Elbourne, P. 2011. *Meaning. A slim guide to semantics*. Oxford University Press.
- Gamut, L.T.F. 1991. *Logic, Language, and Meaning*. Volume 1 and 2. University of Chicago Press.
- Jacobson, Pauline 2014. *Compositional Semantics: An Introduction to the Syntax/Semantics Interface*. Oxford University Press
- Larson, R. and G. Segal. 1995. *Knowledge of Meaning*. Bradford.
- Partee, B., Ter Meulen, A. , and Wall. 1990. *Mathematical Methods in Linguistics*. Kluwer.
- Partee, B., and P. Portner. 2002. *Formal Semantics. The Essential Readings*. Blackwell.
- Portner, P. 2005. *What is Meaning: Fundamentals of Formal Semantics*. Wiley-Blackwell.
- Potts, C. 2007. *Logic for Linguists*. <http://udrive.oit.umass.edu/potts/web/lsa07/lsa108P/>
- Winter, Yoad. 2016. *Elements of Formal Semantics*. Edinburgh University Press. <http://www.phil.uu.nl/~yoad/efs/main.html>
- Zimmermann, T.E. and W. Sternefeld. 2013. *Introduction to Semantics*. DeGruyter.

5 List of Topics

- Introduction
- Set Theory
- Relations & Functions
- Composing Basic Meanings
- The λ -Notation
- Statement Logic
- Semantics & Syntax
- Modification
- Definite Descriptions
- Relative Clauses & Variables
- Variable Binding
- Predicate Logic
- Type Theory & λ -Calculus
- Natural Language Quantifiers
- Quantification and Grammar
- Quantifier Raising
- Pronouns & Binding