

# Syllabus

as of September 8, 2010

## 1 Class Coordinates

Instructor: Florian Schwarz  
Office: 613 Williams Hall  
Email: [florians@babel.ling.upenn.edu](mailto:florians@babel.ling.upenn.edu)  
Office hours: by appointment (which means just about any time!  
see my schedule at <http://florianschwarz.net/schedule>)

## 2 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.

## 3 Website

<http://www.florianschwarz.net/LING580/>

Restricted access readings will be available via Blackboard.

## 4 Requirements

- attend class & do assigned readings
- Weekly homework assignments
- Mid-Term Exam
- Final Exam

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. Coursework is mostly the same for LING 380 and LING 580. Undergraduates (and generally anyone enrolled in LING 380) will sometimes have the option of earning extra credit by answering more open-ended, research oriented homework questions from the assignments for LING 580.

Your grade for the class will be based on your homework (70%) and your exams (15% each). Your lowest homework grade will not be counted towards your grade.

Regular attendance and active participation in class are a must to do well in the class. Although I don't anticipate any problems, I reserve the right to take off up to 10% off of your grade if you miss more than 3 classes without a reasonable excuse.

## 5 Textbooks

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

Partee, B., Ter Meulen, A. , and Wall. 1990. *Mathematical Methods in Linguistics*. Kluwer.

Other useful resources (we'll 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.
- Gamut, L.T.F. 1991. *Logic, Language, and Meaning*. Volume 1 and 2. University of Chicago Press.
- Larson, R. and G. Segal. 1995. *Knowledge of Meaning*. Bradford.
- 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/>

## 6 Tentative Schedule

Recommended readings for various takes on the general approach: Krifka, Larson & Segal chapters 1 & 2, Chierchia & McConnell-Ginet chapters 1 (& 2, if you like), Portner chapters 1 & 2, Bach chapter 1

Class # (Date)	Topic	Reading	Homework
1 (9/8)	Introduction		
2 (9/13)	Intro cont'd / Set Theory	HK 1, PtMW 1	HW 1 out
3 (9/15)	Relations & Functions	PtMW 2	
4 (9/20)	Composing Basic Meanings	HK 2.1-2.2	HW 1 in, 2 out
5 (9/22)	The $\lambda$ -Notation	HK 2.3-2.5	
6 (9/27)	Statement Logic	PtMW 5 & 6-6.5	HW 2 in, 3 out
7 (9/29)	Semantics & Syntax	HK 3	
8 (10/4)	Modification	HK 4.1-4.3	HW 3 in, 4 out
9 (10/6)	Definite Descriptions	HK 4.4-4.5	
10 (10/13)	Relative Clauses & Variables	HK 5.1-5.2	HW 4 in
11 (10/18)	Relative Clauses & Variables cont'd	HK 5.1-5.2	
12 (10/20)	Mid-Term		
13 (10/25)	Relative Clauses & Variables	HK 5.3	HW 5 out
14 (10/27)	Variable Binding	HK 5.4-5.5	
15 (11/1)	Predicate Logic	PtMW 7	HW 5 in, 6 out
16 (11/3)	Type Theory & $\lambda$ -Calculus	Potts 4-6, PtMW 13	
17 (11/8)	Intro to Quantification in Natural Language		HW 6 in, 7 out
18 (11/10)	Natural Language Quantifiers	HK 6	
19 (11/15)	Natural Language Quantifiers	HK 6	HW 7 in
20 (11/17)	Quantification and Grammar	HK 7	
21 (11/22)	Quantification and Grammar	HK 7	HW 8 out
22 (11/24)	Quantifier Raising	HK 8	
23 (11/29)	Quantifier Raising	HK 8	HW 8 in
24 (12/1)	Pronouns& Binding	HK 9	
25 (12/6)	Pronouns & Binding	HK 10	
26 (12/8)	Wrap-up; TAKE HOME FINAL OUT		
12/17	TAKE HOME FINAL IN		