Introduction to Semantics/Einführung in die Semantik   Summer 2020

INSTRUCTOR	Dr. Prerna Nadathur (prerna.nadathur@phil.hhu.de)
OFFICE	24.53.00.87
CLASS SCHEDULE	Wednesday 14.30-16.00
CLASS LOCATION	TBA
COURSE WEBSITE	`pnadathur.github.io/semantik-sommer20.html` All course materials will be posted on the website.

COURSE DESCRIPTION

Semantics is the branch of linguistics that investigates the meanings of words and expressions. This course is an introduction to compositional semantics, which focuses on understanding and explaining our ability to produce and comprehend an infinite variety of novel linguistic expressions by combining words and phrases in new ways. We introduce the formal tools of truth-conditional semantics, including the basic theory of sets, functions, and relations, and the basics of propositional logic. We will use these tools to guide our examination of a variety of compositional phenomena, including the interpretation of nominal and verbal modifiers (adjectives and adverbs), the interpretation of definite descriptions (*the* cat as opposed to *a* cat), the treatment of presuppositions or preconditions for certain expressions, and the interpretation of quantificational expressions (*every, some, no*).

COURSE AIMS

This course is intended for students of linguistics, or the philosophy of language. It introduces the basic ideas and tools behind compositional semantics. By the end of the course, students should be familiar with the basic theory of sets, relations, and functions and understand the notion of types and type-driven compositional meaning. They should also be able to produce simple semantic computations and apply their knowledge to new data. Students will also gain some familiarity with propositional and predicate logic, which will prepare them for more advanced courses in semantics. Please see below for policies regarding credit points and the Abschlussprüfung.

POLICIES

More details about course policies and tutors are available on the course webpage. Please review this information.

(i) **Tutors.** Each student has been assigned to one tutor. Please see the course webpage for their names, contact details, and the assignments. This class does not have tutorials, but you are encouraged to communicate with your tutor via email. You can email them about course content, organizational issues, and for questions and feedback. They will also have regular office hours.

(ii) **Readings.** Readings should be completed before the class for which they are assigned. All readings can be downloaded from the course webpage. To access the reading list, you will need the course password: `montague`.

(iii) **Assignments.** This course has regular homework assignments, roughly every 1–2 weeks. They will be made available before class on the course webpage, and will be due at the beginning of class the following week, unless otherwise specified. You are expected to type your assignments and bring them to class with you. Since we will usually discuss the assignments in class on the day they are due, assignments will not be accepted after class has ended. Late assignments will only be accepted in class, and will receive an automatic deduction of 20%. If you are unable to attend class, you can turn in your assignment before class begins to the box marked "Semantik" in the Sekretariat der Allgemeinen Sprachwissenschaft & Computerlinguistik (24.53.00.86).

(iv) **Participation.** To receive credit points (Kreditpunkten, Beteiligungsnachweis) for participation, you must receive at least 50% of the available homework points, and turn in at least 80% of the assignments.

(v) **Final exam/Abschlussprüfung.** In order to qualify for the AP, you must take and pass a final exam. You can apply for the AP using the appropriate forms for your course of study, available in the Sekretariat (24.53.00.86).

(vi) **Language.** Lectures and any supplementary materials will be in English. You are strongly encouraged to complete the assignments in English: you will NOT be penalised for errors having to do with English grammar. If you would strongly prefer to complete your responses in German, I will do my best to accommodate you; however, please let me know in advance. If you intend to apply for the AP and wish to complete the final exam in German, please let me know by 24 June.

(vii) **Academic integrity.** Academic dishonesty and plagiarism are strictly prohibited. You are welcome to use the library, textbooks, journal articles, and other resources, but you *must* cite any sources that you use. Quoted material in particular must be attributed, including page numbers where possible. You are welcome (and encouraged) to work with one another to solve the problems on the assignments, but you must write up your solutions independently, in your own words. It is a good practice to indicate the names of your collaborators on your assignments. You may NOT collaborate with others on the final exam.

(vii) **Electronic devices.** As a courtesy to other students, please do not use cell phones during class. You may use a laptop to take notes.

COURSE PLAN (subject to revision)

We will cover the following topics, more or less in this order. The dates indicated are only an outline: we may spend more or less time on certain material depending on how the course progresses. The course website will be updated after each class with lecture notes from that day, any planned changes to the schedule or assignments, and which (if any) of the relevant textbook chapters are required reading for the following week. You should therefore make a habit of checking the course website.

1. Introduction: what is meaning?   Weeks 1–2
   - introduction
   - different types of meaning: assertion/entailment, presupposition, implicature
   - the project of compositional semantics

   Relevant textbook chapters: Kearns 1, de Swart 1

2. Truth-conditional semantics   Week 3

   - what do we know when we know the meaning of an utterance?
   - compositionality in action
   - sense and reference

   Relevant textbook chapters: Coppock & Champollion 1, de Swart 2

3. Basic elements of the formal system   Weeks 4–5

   - sets, relations, and functions
   - applications to simple sentences

   Relevant textbook chapters: Heim & Kratzer 1–2.2, Partee et al. 1–2

4. More formal tools   Weeks 5–6

   - semantic types
   - lambda notation
   - extending our fragment

   Relevant textbook chapters: Coppock & Champollion 4, Heim & Kratzer 2–3.3, Kearns 4–4.4

5. Propositional logic   Weeks 7–8

   - logical connectives
   - well-formedness; syntax and semantics
   - connectives in natural language

   Relevant textbook chapters: Coppock & Champollion 3–3.3, Partee et al. 5–6, de Swart 3

6. Nonverbal predicates   Weeks 9–10

   - semantically vacuous words, copular constructions
   - types of adjectives
   - predicate modification

   Relevant textbook chapters: Coppock & Champollion 6.1–6.2, Heim & Kratzer 4–4.3

7. Determiners   Week 11

   - definite descriptions and DPs
   - presuppositions in the formal system

   Relevant textbook chapters: Coppock & Champollion 8, Heim & Kratzer 4.4–4.5, Zimmerman & Sternefeld 9

8. Quantifiers   Weeks 12–13

   - DPs as quantifier phrases
   - first-order logic
   - generalized quantifiers and types

Relevant textbook chapters: Coppock & Champollion 7, Heim & Kratzer 6–8, Kearns 3, Partee et al. 7, de Swart 7–8, Zimmerman & Sternefeld 6

9. Relative clauses   Week 14

- relative clauses as predicates
- clause-internal composition
- variables and variable binding

Relevant textbook chapters: Coppock & Champollion 6.3, Heim & Kratzer 5

10. Course review   Week 15

REFERENCES

[1] Coppock, Elizabeth & Lucas Champollion. 2019. *Invitation to Formal Semantics.* Manuscript, Boston University and New York University. `eecoppock.info/semantics-boot-camp.pdf`.

[2] Heim, Irene & Angelika Kratzer. 1998. *Semantics in Generative Grammar.* Oxford: Blackwell.

[3] Kearns, Kate. 2011. *Semantics.* Basingstoke: Palgrave Macmillan.

[4] Partee, Barbara, Alice ter Meulen, & Robert Wall. 1990. *Mathematical Methods in Linguistics.* Dordrecht: Kluwer Academic.

[5] de Swart, Henriëtte. 1998. *Introduction to Natural Language Semantics.* Stanford, CA: CSLI Publications.

[6] Zimmerman, Thomas Ede & Wolfgang Sternefeld. 2013. *Introduction to Semantics: An Essential Guide to the Composition of Meaning.* Berlin: Mouton de Gruyter.