

## Linguistics 260: Formal Analysis of Words and Sentences

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Northwestern University  
Spring 2009

### Lecture

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Time: Monday & Wednesday, 2:00-3:20  
Place: Kresge Centennial Hall 2415

Instructor: Hannah Rohde  
Office: #103 Department of Linguistics (2016 Sheridan Rd.)  
Email: hannah@northwestern.edu  
Office Hours: MW 12:00-1:00 and by appointment

TA: Matthew Berends  
Office Hours: Monday 11:30-12:30 and by appointment  
Location: Swift 007  
Email: matthewberends@gmail.com

### Course Web Page

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Schedule updates, assignments, announcements and overheads from lecture will be posted on the course web page in the Blackboard. Make sure that you have an access to the site and that you check it regularly.

Required reading:

All required materials will be uploaded to the course website on Blackboard.

### Course Description

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In this class we will examine the formal structure of sentences in natural language. We will analyze data from a variety of languages (but especially English) in order to construct a theory of syntax. The goal will be to build a (partial) model of the (speaker's internal) grammar and at the same time to determine what aspects of that grammar might be universal (true of all languages). In addition to building up a particular theory, this course will provide you with a basic toolbox (set of tests and diagnostics) that will serve as a foundation for pursuing research (and further courses) in syntax.

The primary focus of this class is on learning how to *do* syntax. You will learn terminology, facts, and a particular theory of syntax, but more importantly, the aim is for you to learn the basic concepts, skills, methodology, and analytical and abstract thinking that are necessary to do formal linguistics. You will also have to learn some amount of existing theory, but the focus will be on solving problems and providing logical arguments, not just on memorizing a particular system. The motivation for this is that theories change, but having skills such as *making generalizations*, *applying tests*, *providing logical argumentation*, and *testing predictions of hypotheses* will always be crucial to doing syntax.

## What you are expected to do

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### Homework:

- **HW Submission:** Homework must be turned in during class on the due date. If you cannot come to class, you should email your homework to your TA before the start of class. DO NOT miss class in order to finish homework. Late homework (not turned in by the start of class on the due date) will receive 50% penalty and will be accepted in the week of the original deadline. (If you are sick or have some other emergency, contact me as early as possible.)
- **Collaboration:** You are encouraged to discuss homework problems with me, with your TA, and with your classmates before they are due. However, you MUST write up your answers on your own and in your own words and acknowledge your collaborators (in footnote, you have to list who you worked with). Make sure that for every problem, you understand and can justify your answers if asked. The assignments are not group assignments. If two homeworks look suspiciously alike, both authors will receive a zero on the assignment.

**Attendance and participation:** Because much of the learning will occur in the classroom in presenting and discussing hypotheses, your success in this course depends crucially on attending class regularly. The day any homework or exercise is due, you should be prepared to discuss your work in class, compare your results with those of your classmates, and discuss and evaluate different solutions that are put forward.

**Exams:** There will be two exams. The second exam will be cumulative. No early or late make-up exams will be given. If you miss an exam, you will receive 0 on it. Exceptions will be made only in the case of serious, documented emergencies that are communicated to me in a timely manner. (You must contact me as soon as you possibly can in cases of serious emergencies, illness or personal circumstances).

### Evaluation:

Homework assignments and exercises	20%
Exam #1	30%
Exam #2	40%
Experimental Credit	+/- half a letter grade

### Relevant Dates:

Exam #1: May 4, 2009  
Exam #2: June 1, 2009

## Topics:

- The creative aspect of human language
- Constituency and phrase structure
- Binding theory: distribution of reflexives, pronouns, and referential nominals
- X-bar theory
- Transformations: Movement rules
- Constraints on transformation: Islands and Locality Constraints

## Schedule

Below is the current schedule for the course. *It is very likely that this schedule will change.* Check the course web site regularly as assignments and exercise will be posted there.

Major Topics	Week	Day	Date	Topics	Class	Home Work
Introduction: Aspects of human language	1	1	3/30 Mon	- Admin - The creative aspect of human language - Syntactic Categories and Morphology	Handout 1	
		2	4/1 Wed	- Syntactic categories - Elementary Morphology - Ambiguity & hierarchical structure	Handout 1	Read Carnie Ch2
Constituency & Phrase Structure Rules	2	3	4/6 Mon	- Elementary Morphology (recap) - Structure dependency - Constituency tests	Handout 1-2 (Carnie Ch2)	
		4	4/8 Wed	- VP/NP constituency tests - Phrase structure rules	Handout 2	HW #1 assigned
Structural Relations & Binding Theory	3	5	4/13 Mon	- PSRs	Handout 2-3	
		6	4/15 Wed	- Structural Relations	Handout 3	<b>HW #1 DUE</b> Read Carnie Ch3&4
Binding Theory and X-bar theory	4	7	4/20 Mon	- Binding Conditions - Structure of VP & NP Complements & Adjuncts	Handout 3 (Carnie Ch3&4)	Read Carnie Ch5
		8	4/22 Wed	- Binding & C-command - X-bar theory - Endocentricity - Complements & Adjuncts	Handout 3-4	HW #2 assigned

More on X-bar theory	5	9	4/27 Mon	- More on X-bar Theory	Handout 4 (Carnie Ch5)	
		10	4/29 Wed	- Review - The grammar so far	Midterm Review Sheet	<b>HW #2 DUE</b>
	6	11	5/4 Mon	- <b>EXAM #1</b>		
		12	5/6 Wed	- X-bar Extensions - VP, NP, AP & PP	Handout 4	Read Carnie Ch11
X-bar extensions	7	13	5/11 Mon	- X-bar summary CP & IP - Transformation	Handout 4 (Carnie Ch11)	
		14	5/13 Wed	- Constructions Containing Transformations	Handout 4-5	HW #3 assigned
Movement transformations & constraints on transformations	8	15	5/18 Mon	- Wh-movement - Constraints on wh-movement: Islands	Handout 5	
		16	5/20 Wed	- More on islands	Handout 5	<b>HW #3 DUE</b>
	9		5/25 Mon	- <b>NO CLASS</b> (Memorial Day)		
		17	5/27 Wed	- Review: The grammar so far	Final Exam Review Sheet	
	10	18	6/1 Mon	- <b>EXAM #2</b>		

## Linguistics Department Experimental Requirement

This course has an experimental requirement. Students may fulfill this requirement by either participating in two experiments of one hour each, by attending two video presentations of one hour each, or by participating in one experiment of one hour and one video of one hour. The experiment will be part of ongoing research in the department and will illustrate features of language structure and use that are relevant to topics covered in the core linguistics curriculum. Similarly, the videos will be on topics covered in the core linguistics curriculum.

**Failure to complete this requirement will result in a lowered course grade.**

*NOTE WELL:* Don't leave this requirement to the end of the quarter! The last experiments and the last video showing will be scheduled during reading week at the latest. Don't count on sufficient experiment slots being available for everyone to fulfill this requirement at that late date. We highly recommend that you fulfill at least one experimental unit by week 5, and both by week 9.

### Option 1: Experiments

The experiments will be run either in the Linguistics House (2016 Sheridan Road) or in linguistics laboratories in Swift Hall and Cresap Hall. A list of available experiments with available times and instructions on where to go will be posted on the *Experimetrix* web site (see instructions below). Please note:

- You can do each experiment only once. You may not sign up for more than 1 slot in any individual experiment.
- Be sure to arrive on time for the experiments you sign up for. If you are more than 5 minutes late or fail to show up at all, you will receive a **negative credit** (i.e. you'll have to do 3 instead of just 2 credits)
- If the experimenter is more than 5 minutes late or fails to show up at all, notify your instructor immediately (via email is best). In the email include your name, the date, time and place of the appointment, and the experiment name. After the appointment has been verified with the appropriate experimenter, you will receive the credit.

### Option 2: Videos

Attendance at one video showing will count as fulfillment of one of the two hours of experiment participation required for this course. Information about the video showings will be available on the *Experimetrix* web site. In order to receive full credit for your attendance at a video showing, you need to:

- Sign-up on the *Experimetrix* web site ahead of time.
- Fill out the sign-in sheet upon entering the classroom. If you're late don't enter the room.
- Stay at the video showing for the entire duration of the video.

## Instructions for using *Experimetrix*

Experimetrix is a web site that handles the scheduling of the Linguistics experiments and video showings for all 200-level Linguistics courses. It keeps track of which experiments you have participated in and/or videos you have attended and how many credits you have earned. Below are the basic instructions for using the site (more detailed instructions are available on the site itself).

### **Step 1. Register**

Go to <http://experimetrix.com/nuling> and click on “New User.” Follow the instructions for registration. Make sure to follow the instructions that will be emailed to you shortly after you have completed your registration. **NOTE! Be sure to go to the link given above. There are other departments using Experimetrix, and you want to be sure you are at the Linguistics site.**

### **Step 2. Sign-up for experiments and manage your profile**

Once you have completed the registration process, you can sign up for experiments, edit your profile, keep track of past participation and future appointments, **and assign earned experiment credits to your courses.**

**Note well!**: Make sure to indicate which course(s) you are taking this quarter under profile options. All procedures are explained on the page which is displayed after you log-in.

### **Step 3. Apply credits towards classes**

Once you have participated in an experiment, check the web site to make sure that you have been given credit for your participation. Then, assign your credit towards the fulfillment of your requirement in your selected class(es) under the “Assign credit towards your classes” feature. This is a crucial step in making sure that your courses are credited properly.

### **IMPORTANT**

\*\*\*Be sure to assign your credits after your participation. If they are not credited by you, the instructor for your course does not receive a report indicating your participation. If you do not apply the credits to the appropriate class, no credit is assigned, and your grade will be lowered accordingly. *This is your responsibility, please be sure to follow through in order to receive your credit!* If this procedure is unclear to you after registering at the web site, please ask your instructor for assistance.\*\*\*