

## Topics in Psycholinguistics: Word and Sentence Processing (LING449A)

### Course information

<i>Times:</i>	Monday/Wednesday 1-2:15 pm
<i>Location:</i>	Marie Mount Hall 1401G
<i>Website:</i>	Course materials at <a href="http://phoebegaston.com/ling449a">phoebegaston.com/ling449a</a> Assignments submitted via ELMS.
<i>Prerequisites:</i>	LING311 and LING321
<i>Textbook:</i>	None. Readings provided on course website.

### Instructor information

<i>Instructor:</i>	Phoebe Gaston
<i>Email:</i>	<a href="mailto:pgaston@umd.edu">pgaston@umd.edu</a>
<i>Office:</i>	Marie Mount Hall 1407A (knock on outer door to 1407)
<i>Office hours:</i>	Wednesdays 2:30-3:30pm, or by appointment

### Course description

In this course, we will investigate the representation and processing of words, and how this interacts with the representation and processing of sentence-level linguistic structure. We will begin with some background in speech and sentence processing, and then spend the bulk of the course on psycholinguistic and neurolinguistic evidence relating to the structure of the mental lexicon, how words are recognized visually and auditorily, access to lexical information after a word-form has been recognized, and the influences of syntactic and semantic context on word processing. Towards the end of the course, we will consider the role of word processing in our understanding of syntactic prediction and syntactic structure-building. Throughout the course, we will be learning about the techniques that make this type of research possible. Students will read, discuss, and present primary literature, complete hands-on lab assignments, and write a final paper comprised of literature review and proposal of a novel research question.

### Course goals

After taking this course, students should be able to demonstrate:

- an ability to read, understand, and critically evaluate current research in word and sentence processing. This includes extracting the goals, methods, findings, and implications of the research, and articulating them clearly in writing and in presentations.
- knowledge of common psycholinguistic and neurolinguistic methods.
- knowledge of basic principles in statistics and experimental design.

## Expectations

### Readings

You will be assigned a journal article to read in preparation for most classes, except at the very beginning and end of the semester. Readings should always be done **before** the day they are indicated on the class schedule. You should come to class prepared to discuss what you read. For 15 out of the 20 readings, you must also submit a short, one-paragraph summary by 11 am on the day of class, via ELMS. The summary should include:

- 1) What is the problem this paper is addressing?
- 2) What is the main finding?
- 3) How does this change our view of the problem?
- 4) Are there any serious confusions you had, or central concepts that you think need special attention in class?

These are not meant to take you very long, but are intended to help you make sure that you have a clear take-away. I recommend that you keep these compiled in a single document for your own reference later in the course. 15% of your final grade will be contributed by these reading summaries.

Deciding when not to submit a reading summary is up to you. There are five days planned during the semester when both a reading and a lab or final paper component are due; this policy will allow you to not submit reading summaries on days that you submit other assignments, if you so choose. However, note that on the days you do not submit reading assignments, you are still expected to have read the paper and to be prepared to discuss it in class.

One time during the semester, you will present one of the readings to your classmates. I will post a sign-up sheet with eligible readings by mid-September, and you will be able to choose a date that works for you (note that there will not be presentations on days when labs are due). We will also discuss the format and goals of the presentation before the sign-up sheet is posted. You will be required to meet with me in advance (by the preceding Wednesday or Friday for Monday or Wednesday presentations, respectively) so that I can give you feedback and help you prepare. The presentation will be worth 5% of your final grade.

### Assignments

You will submit eight assignments during this course, plus a final paper. Four of the assignments will be labs, meant to give you hands-on experience with psycholinguistic data and simulations. The other four will be early iterations of your final paper (proposal, outline, rough draft of introduction and literature review, rough draft of proposed experiment and conclusion). The final paper is broken up in this way in order

to give you as many opportunities as possible for feedback, and to help you pace yourself. On the last day of class, you will also give a short (10 min.) presentation on your final paper, and a final draft will be due on Wednesday, December 12th (by 11 am). More information about the final paper will be provided during the first month of the semester.

These assignments:

- will always be **due** on the date they are indicated on the class schedule.
- will always be due by 11 am on Wednesdays.
- will be posted on the class website at least one week before they are due.
- should be submitted as a PDF via ELMS.

30% of your final grade will be contributed by labs (7.5% each) and 20% will be contributed by the early iterations of your final paper (5% each). 10% will be contributed by the final draft of your final paper, and 5% by your presentation on the last day of class.

I will aim to return graded assignments within one week (submitted on Wednesdays, returned the following Wednesdays). Rough drafts of the final paper will also be submitted on Wednesdays, but I will aim to provide feedback by the following Monday.

### **Participation**

*\* thanks to Laurel Perkins for her eloquent articulation of participation expectations in seminars, which I am using here.*

Students are expected to participate actively in class discussions (and this is worth 15% of your final grade). This requires thoroughly reading and digesting the assigned readings for that day ahead of time, and being prepared to discuss your thoughts and questions about those readings. Participating in class is valuable for everyone in this seminar: it makes you an active learner and greatly increases your understanding of the material, it benefits your classmates who may have had the same question or may benefit from hearing a different perspective from their own, and it benefits the instructor in tailoring the course material to better serve your learning needs.

Active participation means speaking up when you find something unclear, when you see a connection between a particular topic and other material we have discussed in this course, and when you are unconvinced by the logic of an argument or have a different argument that you would like to propose. All discussion is expected to be respectful and inclusive towards the different identities, backgrounds, and perspectives of your fellow students and instructor.

## Grading

Final paper:	35%	(4x 5% for proposal, outline, rough draft parts 1 & 2) (1x 5% presentation) (1x 10% final draft)
Labs:	30%	(4x 7.5% each)
Class participation:	15%	
Reading summaries:	15%	(for 15 of the 20 readings x 1% each)
Paper presentation:	5%	

There is no final exam for this course.

Scale:	100% - 98% = A+	<98% - 93% = A	<93% - 90% = A-
	<90% - 87% = B+	<87% - 83% = B	<83% - 80% = B-
	<80% - 77% = C+	<77% - 73% = C	<73% - 70% = C-
	<70% - 67% = D+	<67% - 63% = D	<63% - 60% = D-
	<60% = F		

## Course Policies

A full list of course-related policies and relevant links to resources may be found at: <http://www.ugst.umd.edu/courserelatedpolicies.html>. It is your responsibility to make yourself familiar with university policies. Policies specific to this course are described below.

### Communication

All course-related communication will occur via email. Adjustments to the schedule of topics, readings, and assignments will also be published on the course website.

### Electronic Devices

Please refrain from using your cellphone during class. Cellphones should be on silent, unless you have a potential emergency (in which case your phone may be on vibrate). You may use your computer for taking notes during class. Please do not use your computer for anything other than taking notes or referring to a reading. This includes email or anything in your internet browser, both of which are distracting to people around you.

### Attendance

You are expected to attend every class, and to let me know in advance if you will miss class for any reason. If you have missed class, you can download the slides from the course website, and I recommend asking a classmate if they are willing to share their

notes with you. After you have reviewed the slides and notes, you are welcome to come to office hours and/or ask me any additional questions.

If you have an emergency or if you are experiencing an illness or any other situation which is interfering with your ability to attend class or participate fully in the course, make sure that you contact me as soon as possible to let me know what is happening. Letting me know of a problem in a timely manner helps to make sure that I can accommodate your needs.

### **Late work**

If you have a medical or family emergency, please email me whenever feasible and we will work out a solution for late work, without penalty.

Otherwise, for assignments (labs, final paper components), please let me know by email, **ahead** of the deadline, if you need an extension. If you have done so, late assignments will be accepted within 48 hours of the deadline, with a 25% penalty. The penalty may be waived in cases of illness or other special circumstances. Having a lot of work in your other classes does not count as a special circumstance.

If you have not written to me before the deadline in a non-emergency situation, late assignments (labs, final paper components) will not be accepted.

For reading summaries, extensions will **not** be granted unless you have an emergency. This means that late reading summaries (submitted after 11 am on the day the reading is assigned for) cannot be given credit. I have this policy because doing the reading and submitting your summary *before* class has much more value both for you, so that you are prepared for class discussions, and for me, so that I know what students took away from the readings before we start our discussions.

### **Group work & Academic Honesty**

You are welcome and encouraged to work on the lab assignments in groups. However, you must complete each step of the lab yourself (no dividing questions among group members) and all work must be written up yourself, in your own words. At the top of the assignment, indicate who you worked with. If you fail to do this, it will be treated as plagiarism. It is also plagiarism to hand in something that your group worked on that you don't fully understand. The final paper will be done individually, although you are welcome to discuss ideas with your classmates. Reading summaries should also be written on your own, although, again, discussing the readings with your classmates is completely fine. Any suspected cases of plagiarism will be reported to the Student Honor Council. If you are in any doubt about what is acceptable, just ask me.

**Tentative Schedule** (subject to change; see course website for up-to-date version)

*Assignments are always due by 11 am on the day they are indicated. Reading summaries are also due by 11 am on the day the reading is indicated.*

Week	Date	Topic	Reading due	Assignment due
1	Mon., Aug. 27th	Introduction to the course		
	Wed., Aug. 29th	Introduction to Psycho + Neurolinguistics		
2	Mon., Sep. 3rd	<b>NO CLASS</b> (Labor Day)		
	Wed., Sep. 5th	Reading science & basic statistics	Watch lectures 1.1-1.3 from Daniel Lakens' IYSI course (available on ELMS)	
3	Mon., Sep. 10th	Speech perception	Werker (1995)	
	Wed., Sep. 12th	Speech perception	Kazanina et al. (2006)	Lab 1
4	Mon., Sep. 17th	Sentence processing	Sturt (2003)	
	Wed., Sep. 19th	Sentence processing	Kim & Osterhout (2005)	
5	Mon., Sep. 24th	From sounds to sentences	Hickok & Poeppel (2007)	
	Wed., Sep. 26th	<b>NO CLASS</b> (PG at Mental Lexicon conference)		Lab 2
6	Mon., Oct. 1st	What is a word?	Altmann (1997) ch.6	
	Wed., Oct. 3rd	Words in the brain	Wilson et al. (2018)	
7	Mon., Oct. 8th	Visual word recognition	Pylkkänen & Marantz (2003)	
	Wed., Oct. 10th	Auditory word recognition	Marslen-Wilson (1987)	Lab 3
8	Mon., Oct. 15th	Visual-world paradigm	Allopenna et al. (1998)	
	Wed., Oct. 17th	TRACE	Dahan et al. (2001)	
9	Mon., Oct. 22nd	Lexical access	Lau et al. (2008)	
	Wed., Oct. 24th	Lexical ambiguity	Tanenhaus et al. (1979)	Lab 4
10	Mon., Oct. 29th	Syntactic category	Vigliocco et al. (2011)	
	Wed., Oct. 31st	Syntactic context	Strand et al. (2018)	
11	Mon., Nov. 5th	Semantic context	Zwitserslood (1989)	
	Wed., Nov. 7th	Semantic composition	Bemis & Pylkkänen (2011)	Proposal for paper
12	Mon., Nov. 12th	Syntactic prediction	Stowe (1986)	

	Wed., Nov. 14th	Syntactic prediction	Staub & Clifton (2006)	Outline of paper
13	Mon., Nov. 19th	Neurosyntax	Brennan (2016)	
	<del>Wed., Nov. 21st</del>	<b>NO CLASS</b> (Thanksgiving break)		
14	Mon., Nov. 26th	*Word processing in adverse conditions		
	Wed., Nov. 28th	*Word processing in children & older adults		Rough draft of paper (part 1)
15	Mon., Dec. 3rd	*Word processing in bilingualism		
	Wed., Dec. 5th	Replication crisis & Open Science		Rough draft of paper (part 2)
16	Mon., Dec. 10th	Final presentations		
	<del>Wed., Dec. 12th</del>	<b>NO CLASS</b>		Final paper

\* These class days may be used for wrapping up previous topics, if necessary. We will cover the indicated topics if there is time.