Human infants learn to understand and speak their native language by age 3-4 with essentially no direct teaching from adults. This mysterious fact is the basis of the modern study of language as a cognitive and computational system. This seminar is an introduction to the scientific study of language through the lens of human language acquisition. We will review major findings about how children learn the sound system, words, and grammar of their first language, focusing on how the evidence reveals the role of biological structures and environmental influences on language development. Throughout the course, students will read summary texts, original research articles, and coverage of language science in the popular media. Language development is a topic of real importance to parents, educators, and policy-makers, but, as in all sciences, it is often difficult to disseminate findings in a way that the public can understand. We will discuss the potential applications of basic research on language development, and students will practice “translating” scientific reasoning for a general audience.

LEARNING OBJECTIVES
By the end of this course, you should be able to:
• Describe different stages of language development.
• Analyze the phonological, syntactic, and semantic properties of utterances.
• Recognize interesting language and speech phenomena in everyday conversation (with adults or children).
• Explain how language is a product of both “nature” and “nurture”, and how we know.
• Describe experimental techniques we can use to investigate what infants know about their native language at different stages of development.
• Discuss the role of parents and other caregivers in children’s language development.
• Evaluate articles in the public media about language and child development.
• Explain what you’ve learned about language and child development to people with no background in linguistics or science.

CLASS REQUIREMENTS & EVALUATION
• Active participation in class discussions is an essential part of this course. You’re expected to attend every class ready to discuss the week’s readings. If you know you’re going to miss class, please inform me in advance so we can discuss how you can make up the lost time.
• By the night before each class, each student will submit one question or discussion point about the readings, which will be included in the class discussion. These need not be more than a
sentence or two. Alternatively, if you see something about language in the popular media (newspaper, blog, podcast, video, etc.) that you’d like to discuss in class, you can post a link along with a couple sentences about why you thought it was interesting.

- My goal is for every student to meet the learning objectives described above by the end of the course. I will frequently administer mini-quizzes during class to make sure that everyone is up to speed. I’ll give you feedback so you know how you’re doing, but the quizzes will not be graded.

- Students will complete one short (500-1000 words) writing assignment each week. These will (mostly) be of two types:
  1) Explaining experimental findings: After reading an original research article, students will summarize the findings and their significance in a way that would be understandable and interesting to the general public.
  2) Critiquing newspaper articles: Students will evaluate newspaper articles related to language or language learning. If the article attempts to cite a scientific finding, the critique should explain what the author got right, what they got wrong, and which aspects of the scientific reasoning were distorted or missing. If the article doesn’t cite any scientific evidence, the critique should point out relevant evidence that may contradict the author’s assumptions or prejudices.

More details about the writing assignments for each week will be provided on the course Blackboard site (blackboard.jhu.edu). More explicit guidelines will be provided for the first few weeks. After that, students will structure their responses on their own. Students will submit a digital copy of their writing on the Blackboard site, and also bring a paper copy to class for evaluation and discussion with other students. (If you don’t have access to a printer on a given week, please send me your assignment by 9am before class and I can print it out for you.)

- Students will evaluate each others writing in class. We’ll decide on a “rubric” together, and then pair up to exchange written feedback. I’ll collect the papers and feedback after each class to look them over, and give them back to you at the beginning of the next class.

- At the end of the semester, students will submit an additional piece (500-1000 words) on a topic of their choosing, in the format of a newspaper article or op-ed.

### GRADES

<table>
<thead>
<tr>
<th>Evaluation Category</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Attendance and participation</td>
<td>20%</td>
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<tr>
<td>- Attend every class and complete in-class quizzes and peer evaluations</td>
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<tr>
<td>Discussion questions</td>
<td>10%</td>
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<tr>
<td>- Submit a question or comment for discussion by midnight the night before class.</td>
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<tr>
<td>- 12 opportunities, 2 “freebies” (full credit if you do at least 10 weeks)</td>
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<tr>
<td>Weekly writing assignments (completion)</td>
<td>30%</td>
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<tr>
<td>- Write a 500-1000 word piece in response to the prompt posted on Blackboard.</td>
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<tr>
<td>- Submit a digital copy of your assignment through Blackboard before class time on the day it’s due. Bring a paper copy to class for peer review.</td>
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<tr>
<td>- Graded as 0 (not turned in), 1 (acceptable effort), or 2 (good effort)</td>
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<tr>
<td>Writing “portfolio”</td>
<td>40%</td>
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<tr>
<td>- Choose your three favorite pieces to submit. You can revise them if you like.</td>
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<tr>
<td>- Write an additional piece on a topic of your choice.</td>
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<tr>
<td>- Submit your portfolio through Blackboard by midnight on Tuesday, 12/16.</td>
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ACADEMIC HONESTY
The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. In addition, the specific ethics guidelines for this course are:
(1) You may discuss the readings prior to class (in fact, you are encouraged to). However, the written piece that you hand in must be your own work, not collaborative.
(2) You must indicate by quotation marks and citation any material five words or more that has been taken directly from another source.
Report any violations you witness to the instructor. You may consult the associate dean of students and/or the chairman of the Ethics Board beforehand. See the guide on "Academic Ethics for Undergraduates" and the Ethics Board web site (http://ethics.jhu.edu) for more information.

RESOURCES
- Academic support: academicsupport.jhu.edu
- Study consulting: academicsupport.jhu.edu/study-consulting
- Improve your study skills: web.jhu.edu/prepro/health/study_skills.html
- What kind of learner are you? www.vark-learn.com
- News and resources for Cog Sci majors: cogsci.jhu.edu/undergraduate/news-for-cogsci-majors

SCHEDULE
Writing assignments are due by class time on the date they are listed (see above). Discussion questions are due by midnight the night before.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Writing</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction and overview</td>
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<td>Week 2</td>
<td>Innate knowledge, mental grammar</td>
<td>Pinker, Ch. 1-2 (pp. 1-43) Yang, Ch. 1-2 (pp. 1-31) Eagleman (2013)</td>
<td>“Dear Aunt Mabel”: non-standard dialects</td>
</tr>
<tr>
<td>Week 3</td>
<td>Mental grammar</td>
<td>Pinker, Ch. 3-4 (pp. 44-118) “Overthrowing Chomsky”</td>
<td>Critique: “Overthrowing Chomsky”</td>
</tr>
<tr>
<td>Week 4</td>
<td>Sound systems</td>
<td>Yang, Ch. 3-4 (pp. 33-72) Pinker, Ch. 6 (pp. 153-189) “With a nasal drawl”</td>
<td>Revise a previous week’s assignment</td>
</tr>
<tr>
<td>Week 6</td>
<td>Learning words</td>
<td>Pinker, Ch. 5 (pp. 119-152) Yang, Ch. 5 (pp. 73-91) “Getting rid of your English accent”</td>
<td>Critique: “Getting rid of your English accent”</td>
</tr>
</tbody>
</table>
| Week 7 10/15 | Learning words | Baldwin (1991)  
“Infants’ contribution to the achievement of joint reference.”  
Weisleder & Fernald (2013)  
“The power of talking to your baby” | “Dear Aunt Mabel”: Baldwin |
| Week 8 10/22 | Syntax; Learning grammar | Yang, Ch. 6 (pp. 93-125)  
Pinker, Ch. 7 (pp. 190-230)  
“So, like, you want your kids to speak, like, properly?”  
“It just looks so much better in sign” | Critique: “So, like, you want your kids to speak, like, properly?” |
| Week 9 10/29 | Learning grammar | Crain & Thornton (1999)  
Naigles (1990) – OPTIONAL | Newspaper article: Crain & Thornton |
| Week 10 11/5 | Cross-linguistic variation | Pinker, Ch. 8 (pp. 231-264)  
Yang, Ch. 7 (pp. 127-173) | Revise a previous week’s assignment |
| Week 11 11/12 | Critical period | Serratrice (2013)  
Newport (1990)  
“Legislate learning English?”  
Pinker, Ch. 9-10 – OPTIONAL | “Dear Aunt Mabel”: Newport |
| Week 12 11/19 | Unusual experience | Senghas & Coppola (2001)  
Landau & Gleitman (2004)  
Radiolab episode: “Words” | Newspaper article: Senghas & Coppola |
| Week 13 12/3 | Teaching language to animals | Terrace (1979; pp. 1-30, 208-221)  
“Smart dog” | Critique of “Smart dog” |
| Final 12/16 | Submit “portfolio” of your top three writing assignments (revised, if you wish), plus your final piece on a topic of your choice. | | |

**REQUIRED BOOKS**


**ADDITIONAL READINGS**
*All readings may be found on the course Blackboard site.*


**Newspaper/website articles (partial list):**


Radiolab (2010, August 9). Words. New York: WNYC. 
http://www.radiolab.org/story/91725-words/

http://opinionator.blogs.nytimes.com/2013/04/10/the-power-of-talking-to-your-baby/
