

**LING 270**  
**The Evolution of Language**  
**Fall 2020**

<b>Instructor:</b> Dr. John Archibald	<b>Time:</b> Asynchronous
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### **Delivery Method**

This course will be delivered asynchronously. What this means is that all lectures will be recorded and can be viewed at any time. Videos can be viewed at any time. There will, however, be due dates for assignments that must be respected. You will see that I have included a week-by-week schedule below, but this is merely a guideline for both you and me. For me, it ensures that the material that I cover in this course is comparable to its real-time version. For you, it will help you to keep up with the material and not fall behind. It is also a reminder that not all of the material will be available when the course site becomes available to you. I will be developing course content throughout the term.

### **Course Description**

Perhaps more than anything else, it is language which makes us human. This course probes the question of how language evolved in our species but not in others. Did it emerge gradually or suddenly? We discuss the selective pressures which made language adaptive. What were the evolutionary precursors of our complex linguistic system?

In 1866 the French Academy famously banned discussions of the origins of language. Since that time, perhaps triggered by Eric Lenneberg in the 1960s probing the biology of language, we have seen at first a steady trickle but now a virtual deluge of investigations into the deep past of human language, in spite of the absence of a fossil record of speech. Linguists, psychologists, phoneticians, and anthropologists have all investigated this question from a wide range of perspectives. This course will both introduce the necessary linguistic concepts, and simultaneously, probe the questions of the evolution of these structural properties, and functional abilities in humans, while looking for the evolutionary precursors in other species.

### **Course Materials**

Hurford, J. (2014). *The Origins of Language: A Slim Guide*. Oxford University Press.  
The textbook store will deliver books to you.

## Course Outline

Some details may change (e.g. videos may be added) but this should give you a rough idea of the content and scheduling.

Date	Topic	Reading	Notes/Videos
10 Sept Th Week 1	Introduction	Chapter 1	
14 Sept M Week 2	Introduction: Prehistory; <i>homo sapiens</i> . Meet the ancestors	Chapter 1	Video ( <i>Babel: The Origins of Language with Stephen Fry</i> ). <a href="http://www.mcnaabbconnolly.ca/UVic-Babel">http://www.mcnaabbconnolly.ca/UVic-Babel</a>
17 Th Week 2	Introduction: What is Language?	Chapter 1	
21 M Week 3	Nature, nurture & language: Is there Animal Language?	Chapter 2	<i>last day (22nd) for full tuition refund</i>
24 Th Week 3	Nature, nurture & language: Evolution; a language gene?	Chapter 2 FOXP2 in avian vocal learners	<i>last day (25th) to add new courses</i> Evolution video (S. Jay Gould) <a href="https://www.youtube.com/watch?v=m1l-Nawx1sU">https://www.youtube.com/watch?v=m1l-Nawx1sU</a>
28 M Week 4	Early communication; what is language for?	Chapter 3	
28 Th Week 4	Concepts	Chapter 4	
5 M Week 5	Speech production and perception	Chapter 5	
8 Th Week 5	Speech production and perception	Fitch vs. Lieberman	
12 M Week 6	Words	Chapter 6	
15 Th Week 6	Protolanguage	Bickerton	
19 M Week 7	Protolanguage	Musical/Prosodic Protolanguage	
22 Th Week 7	Grammar engines	Chapter 7	
26 M	Grammar engines	Chapter 7	last day to withdraw (31st)

Week 8			
29 Th Week 8	Natural selection	Darwin	Video ( <i>Darwin's Revolution in Thought</i> ) <a href="https://www.youtube.com/watch?v=Xb8QKrwQ180">https://www.youtube.com/watch?v=Xb8QKrwQ180</a>
2 Nov M Week 9	Emergentism & spandrels	Lightfoot	
5 Th Week 9	Recursion	Chomsky/Hauser /Fitch	LINGSpace: The Chomsky Hierarchy <a href="https://www.youtube.com/watch?v=5-uOijZ5mRo">https://www.youtube.com/watch?v=5-uOijZ5mRo</a>
9 M Week 10	Reading Break		
12 Th Week 10	Responses to Chomsky	Pinker & Jackendoff; Pinker & Bloom	
16 M Week 11	Why Only Us?	Berwick & Chomsky	Berwick video <a href="https://www.youtube.com/watch?v=miQcbsSEhv8">https://www.youtube.com/watch?v=miQcbsSEhv8</a>
19 Th Week 11	Why Only Us?	Berwick & Chomsky	Chomsky video <a href="https://www.youtube.com/watch?v=2NsuB9qZvVU">https://www.youtube.com/watch?v=2NsuB9qZvVU</a>
23 M Week 12	Half-Merge?	Boeckx	
26 Th Week 12	Response	Berwick & Chomsky	
30 M Week 13	A synthesis	Miyagawa	
3 Dec Th Week 13	Review		

### Course Assignments

The precise due dates are still to be confirmed but this should give you a rough idea of the timing and the nature of the assignment. More details will be posted as the Course Shell on Brightspace is made available.

Video Logs	throughout the term	2 X 10%
Midterm Test	end of October	20%
Book Review	end of November (or earlier)	35%
Final Exam	middle of December	25%

### Late Assignments

Late assignments without appropriate documentation (confirming extenuating circumstances (birth, death, illness) of you or a close family member) will have one full letter grade subtracted for each week *or part of week* that the assignment is late. Assignments will not be accepted under any circumstances if the answers have been discussed in class.

Makeup exams are not possible. With appropriate documentation, the weight of the missing exam will be transferred to the Final exam.

### **Possible Books for Review**

- Berwick, R. & N. Chomsky. (2016). *Why Only Us?* MIT Press. P118 B475 2016
- Bickerton, D. (2014). *More Than Nature Needs: Language, Mind and Evolution*. Harvard University Press. P106 B443 2014
- Bickerton, D. (2010). *Adam's Tongue*. P106 B4395
- Bolles, E. (2011). *Babel's Dawn: A Natural History of the Origins of Speech*. Counterpoint.
- Botha, R. (2016). *Language Evolution: A Windows Approach*. Cambridge University Press.
- Burling, R. (2007). *The Talking Ape*. Oxford University Press. P116 B874
- Calvin, W. & D. Bickerton (2000). *Lingua ex Machina*. MIT Press. QP399 C35
- Deacon, T. (1997). *The Symbolic Species*. Norton. QP399 D43
- Dennett, D. (1995). *Darwin's Dangerous Idea: Evolution and the Meaning of Life*. QH375 D46
- Deutscher, G. (2005). *The Unfolding of Language: An Evolutionary Tour of Mankind's Greatest Invention*. Holt. P116 D48
- Dunbar, R. (1996). *Grooming, gossip and the evolution of language*. GN281.4 D865
- Fitch, T. (2010). *The Evolution of Language*. Cambridge University Press. This is too big and complex to review in its entirety. If you want to tackle it come and talk to me about which parts to review. P116 F58
- Gould, S.J. Anything book-length he has written.
- Hurford, J. (2012). *The Origins of Grammar*. Oxford University Press. NOT the Slim Guide. P116 H87 2012
- Johanson, D. & B. Edgar (2006). *From Lucy to Language*. Simon & Schuster.
- Knight, C., M. Studdert-Kennedy & J. Hurford (2000). *The Evolutionary Emergence of Language: Social Function and the Origins of Linguistic Form*. Cambridge. P116 E96 2013
- Lieberman, P. (2006). *Toward an Evolutionary Biology of Language*. Belknap Press.
- Lieberman, P. (1998). *Eve Spoke*. Norton. P116 L497
- Lightfoot, D. (1999). *The Development of Language: Acquisition, Change, and Evolution*. Blackwell. P142 L54
- Mithen, S. (2007). *The Singing Neanderthals*. Harvard University Press. GN281.4 M586
- Pinker, S. (1994). *The Language Instinct: How the Mind Creates Language*. Harper. P106 P476
- Tallerman, M. & Gibson (2011). *Oxford Handbook of Language Evolution*. OUP. This is too big and complex to review in its entirety. If you want to tackle it come and talk to me about which parts to review. P140 O94 2012

## Learning Outcomes

At the end of this course students will:

- have awareness of the major components of human language (phonology, morphology and syntax) including their hierarchical constituent representation
- understand the computational and generative properties of a linguistic grammar (context-free versus finite-state grammars, for example)
- understand the properties of Merge and the theories of how this is central to human language
- understand the properties of animal communication systems
- have an awareness of what the properties of (real and synthesized) non-human primate sounds (e.g. vowels) are
- have an awareness of the perception of human speech by non-human primates
- have an awareness of the common ancestors of modern humans (homo sapiens, homo erectus, etc.)
- understand the anthropology and archaeology of ancient human cultures
- understand the mechanism of evolution by natural selection
- understand how traits are inherited (via basic genomics and proteomics) with particular reference to the FOXP2 gene
- understand major theories on how language evolved (e.g. gradualism versus mutation)

## Grading System

Percentage	Letter Grade	UVIC Scale	Description
90-100	A+	9	Outstanding in every way
85-89	A	8	Exceeding expectations
80-84	A-	7	Excellent work
77-79	B+	6	Very good
73-76	B	5	Good work
70-72	B-	4	Solid performance
65-69	C+	3	Satisfactory
60-64	C	2	Barely satisfactory
50-59	D	1	Marginal
<50	F	0	Unsatisfactory

## Discussion of Assignments

I will *not* engage in a reassessment of your course work outside of my office. This means not by e-mail and not in front of the class. This is not because I am unwilling to discuss the content of your answers with you but rather that we need to acknowledge that this type of discussion requires both time and concentration that must be conducted in person. Believe me, fewer misunderstandings arise this way.

**POLICY ON PLAGIARISM:** In accordance with the standards of scholarly integrity, the department of Linguistics does not condone plagiarism. Students who are found to have engaged in unethical academic behavior including the practices described below are subject to penalty. The most common forms of plagiarism include:

- Submission of another's work as the student's own
- Inadequate attribution given to an author or creator whose work is incorporated into the student's work including failing to indicate clearly (through accepted practices within the discipline such as footnotes, endnotes, internal references, and the crediting of all verbatim passages through indentation of longer passages or the use of quotation marks) the inclusion of another individual's work
- Paraphrasing material from a source without sufficient acknowledgement as described above
- Resubmission of work by a student that has been used in identical or similar form to fulfill an academic requirement at UVIC or another institution. Resubmission is acceptable if done with the instructor's permission.

Although the above are the most common forms of plagiarism, this is by no means an exhaustive list. Students who are in doubt as to what constitutes plagiarism in a particular instance should consult their instructor and read the UVIC calendar subsection titled Plagiarism and Cheating in the General Information section.

The penalties for plagiarism can range from a failing grade assigned to the particular

work which is allegedly plagiarized to a failing grade in the course. The instructor will determine the severity of the case of plagiarism and allocate the appropriate penalty.

**For Your Reference**

<b>Undergraduate Grading</b>		
<b>Passing Grades</b>	<b>Grade Point Value</b>	<b>Description</b>
A+ A A-	9 8 7	<b>Exceptional, outstanding and excellent</b> performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
B+ B B-	6 5 4	<b>Very good, good and solid</b> performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
C+ C	3 2	<b>Satisfactory, or minimally satisfactory.</b> These grades indicate a satisfactory performance and knowledge of the subject matter.
D	1	<b>Marginal</b> Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
<b>Failing Grades</b>	<b>Grade Point Value</b>	<b>Description</b>
E	0	Conditional supplemental.
F	0	<b>Unsatisfactory</b> performance. Wrote final examination and completed course requirements; no supplemental.
N	0	Did not write examination or complete course requirements by the end of term or session; no supplemental.

## Readings

### *Journals*

*Biolinguistics*

### Books and Articles

- Berwick, R. & N. Chomsky. (2016). *Why Only Us?* MIT Press.
- Berwick, R., A. Friederici, N. Chomsky, & J. Bohuis (2012). Evolution, brain, and the nature of language. *Trends in Cognitive Science*.
- Bickerton, D. (2010). *Adam's Tongue*.
- Calvin, W. & D. Bickerton (2000). *Lingua ex Machina*. MIT Press.
- Deacon, T. (1997). *The Symbolic Species*. Norton.
- Dennet, D. (1995). *darwin's Dangerous Idea: Evolution and the Meaning of Life*.
- Fitch, T. (2010). *The Evolution of Language*.
- Fitch, T. (2011). Unity and Diversity in human language. *Philosophical Transactions of the Royal Society*.
- Gould, S.J. & R.C. Lewontin (1979). The spandrel of San Marcos and the Panglossian paradigm: a critique of the adaptationist programme. *Proceedings of the Royal Society of London*.
- Hurford, J. (2007/2014). *The Origins of Language*.
- Knight, C., M. Studdert-Kennedy & J. Hurford (2000). *The Evolutionary Emergence of Language: Social Function and the Origins of Linguistic Form*. Cambridge.
- Lieberman, P. (2006). *Toward an Evolutionary Biology of Language*.
- Lightfoot, D. (1999). *The Development of Language: Acquisition, Change, and Evolution*. Blackwell.
- Miyagawa, S. (in press). Integration hypothesis: A parallel model of language development in evolution. In Watanabe, Hofman & Shimizu, eds. *Evolution of the Brain, Cognition and Emotion in Vertebrates*.
- Pinker, S. (1994). *The Language Instinct: How the Mind Creates Language*. Harper.
- Pinker, S. & P. Bloom (1990). Natural language and natural selection. *Behavioral and Brain Sciences*.
- Talferman, M. & Gibson (2011). *Oxford Handbook of Language Evolution*.