Psychology 4850: Speech development
Spring 2013

Class meetings: MW 16:00-17:15, B730   **Professor**: Fangfang Li
Office: C876，University Hall   **Office hours:** By appointment
Phone : 403-329-2568   **E-mail:** fangfang.li@uleth.ca

Course description: This is an advanced seminar course on child speech acquisition. This course will introduce basic concepts in speech science, evaluate classical theories and recent findings in child phonological development, and provide hands-on practice in the application of acoustic analytical tools.

Textbook:
Marilyn M. Vihman (1996) *Phonological development.* Blackwell Publishers.

Coursework and grading:
Your final grade is accumulated through several components. First, you will be assigned four labs during the first half of the semester, with each of them worth 5%. Second, as this is a seminar course, you are expected to actively participate in all aspects of this course, i.e., in-class discussions, raising intelligent questions, offering critiques to the readings, relating the course materials to major social issues, etc (10%). Third, each of you will be responsible to lead discussions on selected articles (10%). In addition, you will need to submit your written summaries (for journal articles only) during class time (10%) and be quizzed over some critical concepts introduced in class occasionally (10%). Finally, you are required to write a research proposal related to children's speech (40%).

Labs	4*5 = 20 %
Participation	10 %
Discussion leading	10 %
Summaries	10 %
Quizzes	10%
Research proposal	40 %
Total	100 %

Grading scale:

A+	95 – 100	B+	80 – 84	C+	67 – 69	D+	55 - 59	F	0 - 49
A	90 – 94	B	75 – 79	C	63 - 66	D	50 - 54		
A-	85 – 89	B-	70 – 74	C-	60 - 62				

Labs: We will have four lab sessions with associated assignments throughout this semester. These labs are designed to equip you with hands-on experiences of using *Praat* to analyze children's data. The lab sessions will be held in the computer labs. The assignment will be distributed in class time.

Summaries: For each journal article, you will need to write a brief summary outlining the "gist" of the article and at least three thought questions. Article summaries should be organized according to the following headings. It is fine to simply list the relevant information below each heading in point form; full sentences are not necessary. Your summary should be more than a simple restating of what appears in the article; carefully consider the strengths and weaknesses of the article, as well as the predictions and implications that emerge from the article.

1. Main points of the article. (What is the question or problem being addressed? Why this an interesting question?)
2. Crucial evidence. (What is the proposed hypothesis or model being examined? What is the crucial evidence or argument that supports the hypothesis?)
3. Predictions. (What predictions does the article make? Are these predictions confirmed by the data?)
4. Implications. (What are the broader implications of the article?)
5. Evaluation. (What are the strengths/advantages of the article? What are the weaknesses/disadvantages of the article? Do the data support the conclusions? Is the paper clearly written?)
6. Thought questions. (At least three questions. E.g. what does it mean by hierarchical linear modeling? What is fast Fourier transformation? What is the enhancement theory?)

No summaries are needed for textbook readings. Please bring a printed summary sheet with you to class. I will collect your summaries during class time.

Leading discussions: Every student is required to lead discussions on selected papers. You will FAIL the course if you are absent on your discussion-leading day. Be creative on the format of discussion. No matter how you organize it, however, you should cover three major aspects. First, you should make sure all students have a basic understanding of the article to be discussed. To achieve this end, you are encouraged to bring out questions related the main points of the article. Second, you should check with the audience whether they have any questions in regard to the technical jargons in the article. And if they do, you can either clarify them yourself or invite others to make the clarifications. Last but not least, you should prepare some major theme questions to propose to the audience. The theme questions could be about the implications of the work and its relation to a larger topic. At any rate, remember that when leading a discussion, you are not to lecture, but to facilitate a conversation. Therefore, you will need to find ways to encourage people to think and talk.

Research proposal: For this class, you will need to write a research proposal. Research proposal differs from regular research papers in that you have not done the study yet, and you do not have results either. You will propose a full research plan with justification of your ideas and the validity of the methodology you are about to employ to test your ideas. You may refer to the following link for more details regarding how to write a research paper in general and a research proposal in particular, as well as some writing tips. http://classes.uleth.ca/201003/psyc3330a/page3/page3.html
The research proposal should be no more than 10 pages with double space, not including references. The references should be submitted as well, but separately from the proposal itself. Please follow APA format specified in the link above. Your research proposal

should contain five parts: introduction, objectives, methods, predicted results and theoretical implications. The introduction should provide a thorough but succinct review of the relevant literature in the field, which your research will be situated in. The objectives part is where you should state clearly what goals to achieve through the current study. The methods should be valid and reliable. You need to submit your research proposal by 5:00pm, **April 22, 2013**. If you have a well-formed idea ready to be carried out early in the semester, you are encouraged to run a pilot study and include your pilot results in the proposal. Pilot data, especially those conforming to your hypothesis will be considered as a real asset.

Important to note: All written assignments have to be typed. No handwritten work is accepted.

Late and make-up policy: There is a late submission penalty for lab assignments (50% reduction to your received grade). In order to avoid the disadvantage by this policy, please provide reliable written document to justify your absence or late submission. Without authorized written proof, you can get only half credit. For reading summaries and the final research proposal, no late work is accepted. No make-up quiz will be offered without valid excuses accompanied by supporting documentations.

Students with Special Needs: If you have any special needs that require accommodation, it is your responsibility to contact Counseling Services to acquire an official letter concerning your situation. Accommodations will only be given upon receiving the official notification from that office.

Academic misconduct: I am required by my contract with the university to report suspected cases of academic misconduct to the University. The most common form of misconduct is plagiarism. Remember that any time you use the ideas or the statements of someone else, you must acknowledge the source in a citation.

Tentative weekly schedule

Month	Date	Day	Topic	Reading	Assignment due
Jan	9	W			
	14	M	Introduction to phonological development	Chapter 1	
	16	W	- *Lab 1: measuring f0 (E630)*		
	21	M	Theoretical perspectives	Chapter 2	
	23	W	Initial perceptual capacities	Chapter 3	Lab 1
	28	M	- *Lab 2: measuring VOT (E630)*		
	30	W		Vouloumanos (2010); Stager & Werker (1997)	
Feb	4	M	Developmental change in perception	Chapter 4	Lab 2
	6	W		Curtin et al (2009); Fennell & Waxman (2011)	
	11	M	- *Lab 3: measuring vowels (E630)*		
	13	W		Kuhl et al. (2008)	
	18	M	No class		
	20	W	No class		
	25	M	Infant vocal production	Chapter 5	Lab 3
	27	W	- *Lab 4: measuring fricatives (E640)*		
Mar	4	M	Abstract presentation		Abstract
	6	W		MacNeilage & Davis (2005)	Lab 4
	11	M	The transition to Language	Chapter 6	
	13	W		Nittrouer & Miller (1997); Gibbon (1999)	

	18	M	Linguistic perception and word recognition	Chapter 7	
	20	W		Beckman & Edwards (2007)	
	25	M	Speech & motor development	Iverson (2010)	
	27	W	No class		
Apr	1	M	Motherese	Kuhl et al. (1997); Werker et al. (2007)	Research proposal: Introduction
	3	W		Kuhl et al. (2003); Singh et la. (2002)	
			Second language acquisition	Flege (1995)	
	10	W	Final project presentation (I)		Draft proposal (Optional)
	15	M	Final project presentation (II)		
	17	W	FL away for conference		
	22	M			Final proposal

Reading list:

Beckman, M., Munson, B., & Edwards, J. (2007). Vocabulary growth and the developmental expansion of types of phonological knowledge. In J. Cole & J. Hualde (Eds.), Laboratory Phonology 9 (pp. 241-264). Mouton de Gruyter. (http://learningtotalk.org/sites/learningtotalk.org/files/BeckmanEtAl2007LabPhon_0.pdf)

Curtin, S., Fennell, C., & Escudero, P. (2009). Weighting of vowel cues explains patterns of word-object associative learning. Developmental Science, 12(5), 725-731.

Fennell, C., & Waxman, S. R. (2010). What paradox? Referential cues allow for infant use of phonetic detail in word learning. Child Development, 81, 1376-1383.

Flege, J. E. (1995). Second-language speech learning: Theory, findings, and problems. In W. Strange (Ed.), Speech Perception and Linguistic Experience (pp. 233-277). Timonium, MD: York Press. (http://jimflege.com/files/Flege_in_Strange_1995.pdf)

Gibbon, F. (1999). Undifferentiated lingual gestures in children with articulation/phonological disorders. Journal of Speech, Language, and Hearing Research, 42, 382-397.

Iverson, J. M. (2010). Developing language in a developing body: the relationship between motor development and language development. Journal of Child Language, 2010, 229-261.

Kuhl, P. K., Andruski, J. E., Chistovich, I. A., Chistovich, L. A., Kozhevnikova, E. V., Ryskina, V. L., . . . Lacerda, F. (1997). Cross-language analysis of phonetic units in language addressed to infants. Science, 277, 684-686.

Kuhl, P. K., Conboy, B. T., Coffey-Corina, S., Padden, D., Rivera-Gaxiola, M., & Nelson, T. (2008). Phonetic learning as a pathway to language: new data and native language magnet theory expanded (NLM-e). Philosophical Transitions of the Royal Society, 363, 979-1000.

Kuhl, P. K., Tsao, F., & Liu, H. (2003). Foreign-language experience in infancy: Effects of short-term exposure and social interaction on phonetic learning. Proceedings of Natural Science Academy, 100, 9096-9101.

MacNeilage, P. F., & Davis, B. L. (2005). The frame/content theory of evolution of speech. Interaction Studies, 6(2), 173-199.

Nittrouer, S., & Miller, M. E. (1997). Predicting developmental shifts in perceptual weighting schemes. Journal of the Acoustical Society of America, 101(4), 2253-2266.

Stager, C. L., & Werker, J. F. (1997). Infants listen for more phonetic detail in speech perception than in word-learning tasks. *Nature, 24*, 381-382.

Singh, L., Morgan, J. M., & Best, C. T. (2002). Infants' listening preferences: Baby talk or happy talk? Infancy, 3(3), 365-394.
Stager, C. L., & Werker, J. F. (1997). Infants listen for more phonetic detail in speech perception than in word-learning tasks. Nature, 24, 381-382.

Vouloumanos, A., Hauser, M. D., Werker, J. F., & Martin, A. (2010). The tuning of human neonates' preference for speech. Child Development, 81, 517-527.

Werker, J. F., Pons, F., Deitrich, C., Kajakawa, S., Fais, L., & Amano, S. (2007). Infant-directed speech supports phonetic category learning in English and Japanese. Cognition, 103, 149-162.