

SPN 6735, 0418: Psycholinguistics Fall 2016

**Professor Jorge Valdés Kroff Office:** 246 Dauer **Office Hours:** by appointment **Office Phone:** (352) 273-3744 Class Time: W 9-11 (4:05pm-7:05pm) Class Location: LEI 104 e-mail: jvaldeskroff@ufl.edu

### **Course Description:**

The exponential growth of the use of experimental methods in linguistic research has extended our ability to examine the cognitive processes underlying human language, thus making psycholinguistics an increasingly important branch of linguistics. In this seminar we will examine psycholinguistics through the lens of bilingualism. Bilingualism is of interest for a number of reasons. First, despite the prevalence of monolinguals in the United States, most people of the world are bilingual. To have a genuinely universal account of human cognition will therefore require a detailed understanding of the relations between language and thought in individuals who speak and understand more than one language. It will be essential that research on basic cognitive functions in bilinguals examine both the course and the consequence of second language acquisition.

The primary goal of this course will be to introduce the core themes of psycholinguistics, using multilingual speakers as the case study. We will begin with issues concerning the acquisition of core linguistic levels, continue with lexical (e.g. how do multilingual speakers process cognates [piano] and false cognates [fin]?) and sentence processing (e.g. How do the two languages influence each other in predictive processing or when resolving syntactic ambiguity?), and finish with the cognitive neural consequences of bilingualism on general cognition, examining both production and comprehension throughout.

A secondary goal for the course, is to help students become familiar with current experimental methods used in psycholinguistic and increasingly in traditional linguistic research, e.g. self-paced reading tasks, syntactic priming, eye-tracking methodologies, EEG recordings, and fMRI.

### **Course Readings**.

All readings will be made available through Canvas.

Course Grade. The semester grade will be calculated as follows:

Attendance and Participation: 10% Discussion Questions: 10% Presentations: 20% Project Proposal: 60% <u>Attendance and Participation (10 pts)</u>: I expect you to read each of the assigned papers prior to the class meeting, attend class, participate actively, and cooperate in facilitating discussion.

**Discussion Questions (10 pts)**: By 4pm two days prior to class (i.e. Monday), you will generate a discussion question for each of the assigned readings. Submit your discussion questions on Canvas.

<u>**Class Presentations</u>**: You will be expected to give two seminar presentations during the semester.</u>

a. <u>Presentation on a related paper (15 pts)</u>. One presentation will be based on a recent empirical paper that provides support for one of the theoretical alternatives we are considering in a given week. Presentations will be done during the last period of our class. The presentation should be approximately 30 minutes long + 10 minutes of questions. It will be helpful for you to let me know in advance the paper you plan to present so I can avoid talking about it myself during the tutorial portion of the class.

b. Leading a seminar discussion (5 pts). The other presentation consists of serving as a discussion leader during one week of the term. Each session will be structured such that I will give an initial tutorial lecture on the topic of the week for the first hour and a half or so of our class meeting. We'll then have one presentation on an outside paper, and we'll leave the final 25 minutes of the class for discussion. The responsibility of the week's discussion leader(s) is to organize the questions generated by class members into a meaningful discussion. The discussion leader will collect the questions generated by class members, remove identifying information, and bring the organized discussion questions to the class meeting. The discussion leader should prepare a brief PowerPoint presentation that summarizes the main themes in the questions and that focuses discussion on the set of issues that he/she takes to be most important.

## Proposal for a psycholinguistic study (60 pts).

**Part 1 (30 points).** Your will be required to write a proposal of no more than 20 pages double-spaced (excluding references) on an experiment that you could potentially carry out to ask a theoretically-motivated question in the psycholinguistic study of bilingualism. The proposal can ask a question about any of the topics covered during the semester, and can either involve typical or atypical populations.

The first half of the proposal (first 10 pages) should be the *Introduction*, which needs to incorporate the following elements in this order: (1) Identification of the problem (this should come within the first two pages of the *Introduction*). The Introduction will be worth 15 points. (2) A literature review that builds the motivation for the study; (3) The research question(s) and predictions.

The second half of the proposal (the next 10 pages) will be a description of the Method (*i.e., Participants, Materials and Design, Procedure and Analysis Plan*); this will be worth 10 points. The proposal should also include an Abstract, that will be worth 5 points.

**Part 2 (30 points).** You will be required to write two reviews on two of your classmates' *Introductions.* We will discuss in class how you will conduct these reviews and we will share examples of peer reviews of manuscripts in submission or accepted, so that you can have a model.

# **Grade Scale**

A = 100-93	C(S) = 76-73
A- = 92-90	C-(U) = 72-70
B+ = 89-87	D+ = 69-67
B = 86-83	D = 66-63
B- = 82-80	D- = 62-60
C+ = 79-77	E = 59-0

A grade of C- will not be a qualifying grade for major, minor, Gen Ed, Gordon Rule or Basic Distribution Credit courses. For further information regarding passing grades and grade point equivalents, please refer to the Undergraduate Catalog at

(http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html).

# **Attendance Policy**

Attendance is mandatory and will be taken on a daily basis. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <u>https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</u>.

# In the case of approved absences:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx, you must provide official documentation to your instructor within *a week* after the absence in order to be excused. Any work missed due to excused absences will be handled on a case-by-case basis in conjunction with advice from the administrative coordinator.

# Academic Integrity

All students are required to abide by the Academic Honesty Guidelines which have been accepted by the University. The UF Honor Code reads:

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." For more information please refer to <u>http://www.dso.ufl.edu/studentguide</u>.

# Accommodations

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who

must then provide this documentation to the Instructor when requesting accommodation. For more information see <u>http://www.dso.ufl.edu/drc</u>.

#### **Counseling and Wellness**

A variety of counseling, mental health and psychiatric services are available through the UF Counseling and Wellness Center, whose goal is to help students be maximally effective in their academic pursuits by reducing or eliminating emotional, psychological, and interpersonal problems that interfere with academic functioning. The Center can be found online at <a href="http://www.counseling.ufl.edu/cwc">http://www.counseling.ufl.edu/cwc</a> or reached by phone at 392-1575.

#### **Course Evaluation Process**

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

### Tentative Class Schedule (Subject to change)

### Week 1 (8/24) Introduction to course

Kroll, J., Dussias, P., Bogulski, C., & Valdés Kroff, J. (2012). Juggling two languages in one mind: What bilinguals tell us about language processing and its consequences for cognition. In B. Ross (Ed.), *The psychology of learning and motivation*.

## Week 2 (8/31) Critical Period Hypothesis and its consequences

Steinhauer, K. (2014). Event-related potentials (ERPs) in second language research: A brief introduction to the technique, a selected review, and an invitation to reconsider critical periods in L2. *Applied Linguistics*.

Pallier, C. et al. (2003). Brain imaging of language plasticity in adopted adults: Can a second language replace the first? *Cerebral Cortex*, *13*, 155-161.

Pierce, L., Klein, D., et al. (2014). Mapping the unconscious maintenance of a lost first language. *PNAS*, www.pnas.org/cgi/doi/10.1073/pnas.1409411111

### Week 3 (9/7) Speech Perception

Werker, J.F., & Byers-Heinlein, K. (2008). Bilingualism in infancy: first steps in perception and comprehension. *Trends in Cognitive Sciences*, *12*, 144-151.

Sundara, M., Polka, L., & Molnar. (2008). Development of coronal stop perception: Bilingual infants keep pace with their monolingual peers. *Cognition, 108,* 232-242.

Antoniou M., Liang, E., Ettlinger, M., Wong, P.C.M. (2015). The Bilingual Advantage in Phonetic Learning. *Bilingualism: Language and Cognition.* 

### Week 4 (9/14) Grammar Acquisition

Clahsen & Felser. (2006). Grammatical processing in language learners. *Applied Psycholinguistics*, 27, 3-42.

Pliatsikas, C., & Marinis, T. (2013). Processing empty categories in a second language. When naturalistic exposure fills the (intermediate) gap. *Bilingualism: Language and Cognition, 16,* 167-182.

Tanner, D., McLaughlin, J., Herschensohn, J., & Osterhout, L. (2013). Individual differences reveal stages of L2 grammatical acquisition: ERP evidence. *Bilingualism: Language and Cognition*, 16(2), 367-382.

## Week 5 (9/21) Lexical & Conceptual Representation

Potter, M. C., So, K-F., von Eckhardt, B., & Feldman, L. B. (1984). Lexical and conceptual representation in beginning and proficient bilinguals. *Journal of Verbal Learning and Verbal Behavior*, *23*, 23-28.

Sunderman, G., & Kroll, J. F. (2006). First language activation during second language lexical processing: An investigation of lexical form, meaning, and grammatical class. *Studies in Second Language Acquisition, 28,* 387-422.

McLaughlin, J., Osterhout, L., & Kim, A. (2004). Neural correlates of second-language word learning: minimal instruction produces rapid change. *Nature Neuroscience*, *7*, 703-704.

## Week 6 (9/28) Comprehension I: Word Recognition and Lexical Access,

Dijkstra, T. (2005). Bilingual Visual Word Recognition and Lexical Access. In Kroll & De Groot.

Thierry, G., & Wu, Y. J. (2007). Brain potentials reveal unconscious translation during foreign language comprehension. *Proceeding of National Academy of Sciences, 104*, 12530-12535.

Midgley, K. J., Holcomb, P. J., & Grainger, J. (2011). Effects of cognate status on word comprehension in second language learners: An ERP Investigation. *Journal of Cognitive Neuroscience, 23*, 1634–1647.

### Week 7 (10/5) \*\*\*\*Work on introduction to Project Proposal due October 11

Week 8 (10/12) In-class Panel review

### Week 9 (10/19) Comprehension II: Semantic Representation and Access

Kotz, S. A. & Elston-Güttler, K. (2004). The role of proficiency on processing categorical and associative information in the L2 as revealed by reaction times and event-related brain potentials. *Journal of Neurolinguistics* 17, 215-235.

Schwartz, A. I., & Kroll, J. F. (2006). Bilingual lexical activation in sentence context. Journal of Memory and

Language, 55, 197-212.

Ameel, E., Storms, G., Malt, B. C., & Sloman, S. (2005). How bilinguals solve the naming problem. *Journal of Memory and Language*, *53*, 60-80.

## Week 10 (10/26) Comprehension III: Reading and Sentence Processing in L2

Dussias, P. E., & Sagarra, N. (2007). The effect of exposure on syntactic parsing in Spanish-English bilinguals. *Bilingualism, Language and Cognition, 10*,101-116.

Elston-Güttler, K. E., & Gunter, T. C. (2009). Fine tuned: Phonology and semantics affect first-to secondlanguage zooming. *Journal of Cognitive Neuroscience*.

Foucart, A., & Frenck-Mestre, C. (2012). Can late L2 learners acquire new grammatical features? Evidence from ERPs and eye-tracking. *Journal of Memory and Language*, *66*, 226-248.

#### \*Dussias, P. E., Carlson, M., & Perrotti, L. (submitted). \***10/28 Peer reviews to introduction due**

#### Week 11 (11/2) Production I: Models and Tasks

Kroll, J. F., & Gollan, T. H. (2014). Speech planning in two languages: What bilinguals tell us about language production. In V. Ferreira, M. Goldrick, & M. Miozzo (Eds.). *The Oxford Handbook of Language Production* (pp. 165-181). Oxford: Oxford University Press.

Guo, T., Misra, M., Tam, J. W., & Kroll, J. F. (2012). On the time course of accessing meaning in a second language: An electrophysiological investigation of translation recognition. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 38*, 1165-1186.

Strijkers, K., Costa, A., & Thierry, G. (2010). Tracking lexical access in speech production: electrophysiological correlates of word frequency and cognate effects. *Cerebral Cortex, 20*, 912-928.
Week 12 (11/9)
Production II: Bilingual Language Control

Green, D. W., & Abutalebi, J. (2013). Language control in bilinguals: The adaptive control hypothesis. *Journal of Cognitive Pyschology*, DOI:10.1080/20445911.2013.796377

Meuter, R., Allport, A. (1999). Bilingual language switching in naming: Asymmetrical costs of language selection. *Journal of Memory and Language, 40,* 25-40.

Gullifer, J., Kroll, J., & Dussias, P. (2013). When language switching has no apparent cost: Lexical access in sentence context. *Frontiers in Psychology*, *4*. doi:10.3389/fpsyg.2013.00278

### Week 13 (11/16) Bimodal bilingualism & Simultaneous Interpretation

Emmorey, K., Borinstein, H. B., Thompson, R.,& Gollan, T. H. (2008). Bimodal bilingualism. *Bilingualism: Language and Cognition*, *11*, 43-61.

Christoffels & De Groot (2005). Simultaneous interpreting: A cognitive perspective. In Kroll & De Groot (2005).

Macizo, P., & Bajo, M. T. (2006). Reading for repetition and reading for translation: Do they involve the same processes?. *Cognition*, *99*, 1-34. DOI:10.1016/j.cognition.2004.09.012.

#### Week 14 (11/23) Thanksgiving Break

#### Week 15 (11/30) Code-switching

Guzzardo Tamargo, Valdes Kroff, & Dussias. (2016). Using code-switching as a tool to study the link between production and comprehension. *Journal of Memory and Language*.

Valdes Kroff et al. (2016). Experience with code-switching modulates the use of grammatical gender during sentence processing. *Linguistic Approaches to Bilingualism*.

Kootstra, G. J., Van Hell, J. G., & Dijkstra, T. (2010). Alignment in the production of code-switched sentences: The role of word order and dialogue partner. *Journal of Memory and Language*, *63*, 210-236.

### Week 16 (12/7) Cognitive Consequences of Bilingualism

Bialystok, E., Craik, F. I. M., Green, D. W., & Gollan, T. H. (2009). Bilingual Minds. *Psychological Science in the Public Interest*, *10*, 89-129.

Kovacs, A. M., & Mehler, J. (2009). Cognitive gains in 7-month-old bilingual infants. *Proceedings of the National Academies of Science*.

Bak, T. H., Nissan, J. J., Allerhand, M. M., & Deary, I. J. (2014). Does bilingualism influence cognitive aging? *Annals of Neurology*.

#### \*\*Final Proposal Due 12/7