# THE PSYCHOLINGUISTICS OF BILINGUALISM <br> LIN 4930-1389; LIN 6932-1H46 <br> SYLLABUS - FALL Semester 2014 

Classroom \& time: $\quad$ Tuesday $5+6^{\text {th }}$ periods AND 19 (11:45-1:40 pm)
Thursday $6^{\text {th }}$ periods AND 19 (12:50-1:40 pm)
Instructor: Dr. Edith Kaan
Office: 4127 Turlington Hall.
Office Hours: Tuesday 1:55-3:50 pm; Thursday 1:55-2:45 pm, and by appointment Phone: 352294 7453; E-mail: kaan@ufl.edu

Prerequisites: Undergraduates: LIN3010, and at least one of LIN4790, LIN4701, LIN4702C, LIN4721, EXP3604, DEP3053, DEP4163, SPA4104, SPA4402 or SPA4004

## Course description:

This course deals with basic issues in the processing and acquisition of a second language, and the psycholinguistic and brain imaging techniques can be applied to address these issues. Topics include: introduction to psycholinguistic and brain imaging methods, the bilingual lexicon, second language sentence processing, learning sounds in L2, controlling multiple languages, and code switching. Also the issue of proficiency versus age of acquisition and L1 attrition will be addressed.

## Objectives:

- To learn the basic questions and terminology related to the psycho/neurolinguistics of second language acquisition
- To learn to evaluate psycho/neurolinguistic studies of second language acquisition in terms of their scientific and methodological aspects
- To improve presentation skills


## Course website:

Course materials (reading, lecture notes, syllabus, etc.) will be made available on the Sakai course website on E-learning (https://lss.at.ufl.edu/). Deadlines and grades will also be posted on the website. You are responsible for checking the site regularly and for letting the instructor know promptly if anything is unclear, or if your grade has been entered incorrectly.

Overall grade. The weighting of the various requirements in the final grade is

|  | Graduates | Undergraduates |
| :--- | :--- | :--- |
| Summaries of research articles | $30 \%$ | $15 \%$ |
| Presentation of paper in class | $28 \%$ | N/A |
| Final paper (research <br> proposal) | $30 \%$ | N/A |
| 3 Tests (take-home) | N/A | $33 \%$ |
| Poster + written summary | N/A | $40 \%$ (15\% poster; 25\% paper) |
| Debate | $10 \%$ | $10 \%$ |
| Active participation | $2 \%$ | $2 \%$ (including Qs on papers; <br> handing in references/ <br> handout) |
| Optional: Participation in <br> LIN/SLHS experiments (or <br> alternative assignment) | $2 \%$ extra credit | $2 \%$ extra credit |

The course grading scale is:

$$
\begin{array}{llll}
\mathrm{A}=90-100 & \mathrm{~B}=80-83.9 & \mathrm{C}=70-73.9 & \mathrm{D}=60-63.9 \\
\mathrm{~A}-=87-89.9 & \mathrm{~B}-=77-79.9 & \mathrm{C}-=67-69.9 & \mathrm{D}-=57-59.9 \\
\mathrm{~B}+=84-86.9 & \mathrm{C}+=74-76.9 & \mathrm{D}+=64-66.9 & \mathrm{E}=<56
\end{array}
$$

For UF grading policies for assigning grade points, see: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

## Requirements and assignments:

## GRADUATE STUDENTS ONLY

## 1. Paper presentations (summary of research article)

- Approximately 20 minutes; one paper per presenter per session.
- Level should be advanced undergraduate level (your classmates)
- Powerpoint (put on Dropbox, bring it on a memory key, or bring your own computer; please mail a copy to kaan@ufl.edu after class)
- Last slide has points for discussion
- Will be followed by a 10-15 minute group discussion
- Please don't hesitate to contact Dr. Kaan if you have questions when preparing your presentation


## 2. Final written assignment

- About 12-20 pages long, double-spaced
- Structured like a grant proposal
- APA formatting and referencing guidelines
- Contains an overview of the literature on a selected topic related to the psycho/neurolinguistics of SLA or bilingualism
- Contains a proposal for a new, original experiment using the methods discussed in class, or language-impaired patients, to investigate an aspect of SLA or bilingualism.
- Topic should be chosen before October 21 (each will meet with Dr. Kaan around that time)
- Draft handed in before November 13 (Sakai).
- Final version due: morning of December 15, 2014 (Sakai)


## UNDERGRADUATE STUDENTS ONLY

## 1. Tests

Tests are take-home exams. These are non-cumulative and will test material covered in the lectures, discussions and course readings. These exams may be timed, and will consist of at least one essay question in which you will be asked to apply your knowledge to a new situation. Working together on a test is NOT allowed. Answers will need to be submitted on Sakai. Deadlines will be specified closer to the date.

## 2. Poster presentation and final summary paper

- The course is concluded with a poster presentation (individually, or in a team of two) on a selected topic. Topic should be chosen before October 21. You can choose among the topics provided by the instructor, or choose your own topic in discussion with the instructor. For this assignment you will need to do a literature search, and find a few relevant journal articles, each discussing different points of view. The poster should clearly summarize the main points and arguments in favor of one position or the other and should conclude with your own stance, and suggestions for further
experimentation. You will be graded on the quality of the poster and on the oral presentation of the poster during a poster session.
- The final paper is an extended version of the poster in running prose. The final paper should clearly summarize the main points and arguments (data) in favor of one position or the other and should conclude with your own stance. The final paper should be written and handed in individually. The paper should be double spaced and between 6 and 10 pages long, including references. It should be formatted according to APA guidelines, and submitted through Sakai. At various points throughout the semester draft versions of this paper, or other assignments related to this paper need to be handed in.


## ALL STUDENTS

3. Summaries of papers to be discussed in class.

- To be handed in (HARDCOPY!) on each of the days when we read a journal article for class
- 1-2 pages, double sided
- Contains: (1) an explanation of the research questions examined in the article; (2) the methodology followed and the general findings; (3) points of criticism. In addition,
- undergraduates should include at least one point for discussion, or question for clarification to help the discussion; graduate students should include at least two points for discussion.
- It is expected that all details of the article may not be understood, but that a sincere effort will be made to read and summarize the main points of each article before coming to class.
- USE YOUR OWN WORDS! Do not directly copy or slightly paraphrase sentences from the paper (or from somebody else). Cite references properly.


## 4. Debate (team assignment)

We will have one or two debates on a pre-assigned topic. Students will be divided into groups in advance and are expected to meet outside of class to prepare this debate. Each student will need to present at least one part of the debate (opening statement, arguments, rebuttal, closing statement). Detailed instructions will be provided in class. Students will be graded on team work, as well as the solidity of their argumentation.

## 5. Active participation:

- Contributing to discussion in class
- Coming to class prepared


## 6. Optional! Participation in LIN/SLHS experiments.

Before November 18! To encourage awareness of different aspects of experimental research in languagerelated fields, you can elect to participate in 2 hours of language or communication research during the semester. A list of experiments that qualify for this credit can be found at http://slhs.phhp.ufl.edu/student-info/participant-pool-2/ . This site will be updated throughout the semester. Please retain a copy of the IRB form as proof that you participated. You need to have participated in 2 hours of experiments before November 18, 2014 for you to receive credit. This assignment will be worth $2 \%$ of your course grade. If you choose not to participate or do not qualify for any of the studies, you can receive the same amount of course credit for reading a short research article and writing a 2 page synopsis. This article needs to cover a psycho/neurolinguistics topic, and cannot be one of the articles used for your final poster/paper assignment. This paper must be turned in no later than November 18, 2014. If you are currently enrolled in other classes that require participation in experiments, and your total participation requirement exceeds 4 hours this semester, please see the instructor.

## Policies:

- Emailing, web browsing, face-booking, texting, chatting and other cell phone or computer activity is not allowed during class unless this is part of the course assignments.
- Students are required to hand in all assignments and tests before the beginning of the class period they are due. Please contact the instructor in advance if you need to skip a class, or cannot make a deadline. Please also make sure you have at least one external backup of the assignments you make for this class. Computer problems will not be considered a valid excuse for missing assignments and test deadlines.
- Homework and exams that are not handed in before the deadline will be graded as " 0 points"
- There will be no make-up exams, make-up assignments or extensions of deadlines without a documented medical or academic excuse.
- If you miss more than 15 minutes of more than three class periods without a documented medical or academic excuse, one point will be deducted from your final score for each additional time you are absent, leave early, or come late.


## Teamwork and academic honesty:

Homework and exams should be submitted individually, unless the assignment guidelines state otherwise or you have made prior arrangements with the instructor. Although you are encouraged to discuss classrelated topics outside of class, this should not be confused with writing up the results of a classmate's work, having a classmate check your answers, or letting a classmate copy your answers - this is unacceptable. See the University of Florida Honor Code and the academic honesty guidelines at https://catalog.ufl.edu/ugrad/1213/advising/info/student-honor-code.aspx.

## Accommodations for students with disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office: http://www.dso.ufl.edu/drc/. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. The Disability Resource Center is located in 001 Building 0020 (Reid Hall). Their phone number is 392-8565.

## Readings (subject to change)

All readings are required. Readings are available through uflib.ufl.edu. Papers that are not available through the UF library will be made accessible through e-reserves or the course website.

## Background literature:

Bialystok, E. (2009). Bilingualism: The good, the bad, and the indifferent. Bilingualism: Language and Cognition, 12, 3-11.
Clahsen, H., \& Felser, C. (2006). How native-like is non-native language processing? Trends in Cognitive Sciences, 10, 564-570.
Desmet, T., \& Duyck, W. (2007). Bilingual language processing. Language and Linguistics Compass, 1, 168-194.
Huettig, F., Rommers, J., \& Meyer, A. S. (2011). Using the visual world paradigm to study language processing: A review and critical evaluation. Acta Psychologica, 137(2), 151171. doi: http://dx.doi.org/10.1016/j.actpsy.2010.11.003

Kaan, E. (2007). Event-Related Potentials and language processing: A brief overview. Language and Linguistics Compass, 1, 571-591.
Köpke, B. (2004). Neurolinguistic aspects of attrition. Journal of Neurolinguistics, 17, 3-30.
Kroll, J. F., Dussias, P. E., Bogulski, C. A., \& Valdes-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 (Vol. 56, pp. 229-262 ). San Diego: Academic Press

Roberts, L. (2012). Review article: Psycholinguistic techniques and resources in second language acquisition research. Second Language Research, 28, 113-127.
Steinhauer, K., White, E. J., \& Drury, J. E. (2009). Temporal dynamics of late second language acquisition: evidence from event-related brain potentials. Second Language Research, 25, 13-41.
Strange, W., \& Shafer, V.L. (2008). Speech perception in second language learners. In J. G. Hansen Edwards \& M. L. Zampini (Eds.), Phonology and Second Language Acquisition (pp. 153-191). Amsterdam: John Benjamins.
Van Heuven, W., \& Dijkstra, T. (2010). Language comprehension in the bilingual brain: fMRI and ERP support for psycholinguistic models. Brain Research Reviews, 64, 104-122.

## Discussion (and graduate student presentations)

(3) Elston-Güttler, K. E., Gunter, T. C., \& Kotz, S. A. (2005). Zooming into L2: Global language context and adjustment affect processing of interlingual homographs in sentences. Cognitive Brain Research, 25, 57-70.
(11): Ettlinger, M., Bradlow, A. R., \& Wong, P. C. M. (2012). Variability in the learning of complex morphophonology. Applied Psycholinguistics, FirstView, 1-25.
(6) Hartsuiker, R. J., Pickering, M. J., \& Veltkamp, E. (2004). Is syntax separate or shared between languages?: Cross-linguistic syntactic priming in Spanish-English bilinguals. Psychological Science, 15, 409-414.
(0) Kim, K. H. S., Relkin, N. R., Lee, K.-M., \& Hirsch, J. (1997). Distinct cortical areas associated with native and second languages. Nature, 388, 171-174. (Kaan presents this one)
(4) Kovács, Á. M., \& Mehler, J. (2009). Cognitive gains in 7-month-old bilingual infants. Proceedings of the National Academy of Sciences USA, 106, 6556-6560.
(10) McLaughlin, J., Osterhout, L., \& Kim, A. (2004). Neural correlates of second language word learning: Minimal instruction produces rapid change. Nature Neuroscience, 7, 703-704.
(5) Misra, M., Guo, T., Bobb, S. C., \& Kroll, J. F. (2012). When bilinguals choose a single word to speak: Electrophysiological evidence for inhibition of the native language. Journal of Memory and Language, 67, 224-237.
(8) Molnar, M., Polka, L., Baum, S., \& Steinhauer, K. (2014). Learning two languages from birth shapes pre-attentive processing of vowel categories: Electrophysiological correlates of vowel discrimination in monolinguals and simultaneous bilinguals. Bilingualism: Language and Cognition, 17, 526-541. doi:10.1017/S136672891300062X
(2) Morford, J. P., Wilkinson, E., Villwock, A., Piñar, P., \& Kroll, J. F. (2011). When deaf signers read English: Do written words activate their sign translations? Cognition, 118, 286-292
(9) Perrachione, T. K., Lee, J., Ha, L. Y. Y., \& Wong, P. C. M. (2011). Learning a novel phonological contrast depends on interactions between individual differences and training paradigm design. Journal of the Acoustical Society of America, 130, 461-472
(7) Pliatsikas, C., \& Marinis, T. (2012). Processing empty categories in a second language: When naturalistic exposure fills the (intermediate) gap. Bilingualism: Language and Cognition, FirstView, 1-16.
(1) Spivey, M. J., \& Marian, V. (1999). Cross talk between native and second languages: Partial activation of an irrelevant lexicon. Psychological Science, 10, 281-284.

## Schedule:

The following schedule is an estimate of the course's progress, with readings for the given week and approximate dates of the tests. I will let you know when the tests and assignment deadlines are exactly as they approach, and will keep you updated if we go off track. Please also regularly consult the schedule on the course website on Sakai for updates.

| Week/date | Tuesday | Thursday | Deadlines | Background readings (required) |
| :---: | :---: | :---: | :---: | :---: |
| 1 -Aug 26/28 | Intro to the course lexicon | lexicon |  | syllabus |
| 2 - Sept 2/4 | Pres0 (Kim et al., 1997) lexicon | lexicon | Sign up for presentations (grad students) | Kroll, Dussias, Bogulski, \& Valdes- <br> Kroff, 2012 (sections 1-2.1); <br> Van Heuven \& Dijkstra, 2010 <br> (sections 1- 2.1) <br> Huettig, et al. (2011) pp. 152- <br> 156,161; <br> Roberts (2012) |
| 3-Sept 9/11 | Pres1 (Spivey \& Marian, 1999) | Pres2(Morford, Wilkinson, Villwock, Piñar, \& Kroll, 2011) |  | Desmet \& Duyck, 2007 <br> Van Heuven \& Dijkstra, 2010 |
| 4 -Sept 16/18 | Pres3(Elston-Güttler, Gunter, \& Kotz, 2005) | lexicon <br> Cognitive control | Test 1 | Kaan, 2007; <br> Kroll, et al., 2012 (section 4); |
| 5 -Sept 23/25 | Pres4(Kovács \& Mehler, 2009) | Cognitive control |  | Bialystok, 2009; <br> Kroll, et al., 2012 (section 3); <br> Van Heuven \& Dijkstra, 2010 |
| 6 -Sept $30 /$ Oct 2 | Cognitive control | Syntactic/morphologic al processing |  |  |
| 7-Oct 7/9 | Pres5(Misra, Guo, Bobb, \& Kroll, 2012) <br> Prep for Judy Kroll Intro to debate | JUDY KROLL | Start prep for debate | Kroll, et al., 2012 |
| $8-$ Oct 14/16 | Pres6(Hartsuiker, Pickering, \& Veltkamp, 2004) | Syntactic/morphologic al processing | prep for debate | Clahsen \& Felser, 2006; <br> Desmet \& Duyck, 2007 (p 81-88); <br> Kroll et al., 2012(section 2.2) |


| 9-Oct 21/23 | Syntactic/morphological processing <br>  <br> Marinis, 2012); <br> Prep for debate | Sounds | Test 2 <br> Select topic for final paper/poster <br> (Oct 21) <br> Prep for debate | Strange \& Shafer, 2008; |
| :---: | :---: | :---: | :---: | :---: |
| 10-Oct28/30 | Debate-1 | Pres8 (Molnar et al., 2014) | Find articles for final project |  |
| 11-Nov 4/6 | Debate-2 <br> Sounds | TBA |  |  |
| 12-Nov 13 | NO CLASS | Pres9 (Perrachione, Lee, Ha, \& Wong, 2011) | Draft of paper due(Nov 13) | Steinhauer, White, \& Drury, 2009 |
| 13 -Nov 18/20 | Pres10(McLaughlin, <br> Osterhout, \& Kim, 2004) <br> Learning <br> Pres11(Ettlinger et al., <br> 2012) <br> learning | UG Poster presentations(4x) | Hand in proof of experimental participation (Nov 18) |  |
| 14-Nov25 | UG Poster presentations (8x) Learning | NO CLASS |  |  |
| 15-Dec 2/4 | UG Poster presentations (8x) <br> Attrition | Attrition Grad presentations |  | Köpke, 2004 |
| 16-Dec 9 | Grad presentations Wrap-up |  | Test 3 <br> Final paper due <br> Monday morning <br> Dec 15 |  |

