

Bilingual Minds and Brains
LIN 4930/LIN 6932

Time: Friday 9:35AM-13:35AM
Classroom: Weil 408A

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Office Hours: *By email appointment.*

The Course: Psychology of Bilingualism: Bilingual Minds and Brains

Why bilinguals? Until recently, most studies of human cognition and language focused on monolingual speakers of one language alone. But more people in the world are bilingual or multilingual than monolingual. And within a given language, speakers may vary in the dialect of the language that they speak. Speaking two or more languages or dialects is common. In the past 20 years, we have come to understand that bilingual speakers are a model for understanding how the mind and brain change in response to experience and new learning. In this course we will examine the way that bilinguals and second language learners juggle two languages in a single mind. We will consider babies who are exposed to two languages from birth, young adults who are monolingual and want to learn a new language but struggle to do so, and older adults who have spoken two languages their entire lives. How do we understand language? Why do we easily adjust to a speaker with a foreign accent? How do young children come to speak the language to which they are exposed? Why is it difficult to learn a second language as an adult? How do skilled bilinguals code switch with one another, moving from one language to the other without hesitation? In this course we will examine the processes engaged by bilingualism and the ways that it changes minds and brains. We will see that far from harming cognition or confusing development, using two or more languages produces a range of positive consequences for bilingual speakers. And what does it mean to speak a language at home that is different than the language of the community? Or to speak a language or dialect that has been minoritized? We will consider how the variation in the languages that are spoken and the social contexts in which they are used may shape the way we communicate. We will also discuss the ways that the newly emerging science of bilingualism might be better communicated to the public to benefit all individuals, whether they are bilingual or not.

Course Requirements

Readings

There is no required text for the course but there will be weekly reading assignments in primary sources (journal articles, book chapters, etc.) and also in the media. The readings have been chosen to supplement the lectures in a number of ways, to give you a sense of how scientific research in is actually reported in the literature and translated for public consumption in the media, and to expose you to topics and new methods that are currently the focus of lively debate. A particular focus this term will be on neuroscience papers that report studies that examine brain activity. The readings will vary quite a bit in level of difficulty; some will seem relatively straightforward and others will require that you work through technical information that may be unfamiliar. I will give you guidelines as we go along as to what I expect you to be getting out of particular reading assignments. **The readings will all be available electronically on Canvas.**

Canvas

We will use Canvas to post course materials (powerpoint slides from lectures and all readings) and we will occasionally post class announcements but **please use ordinary email if you want to communicate with me.** If there are video recordings that I want to share with you I will create a google drive folder where you can access them more easily than Canvas. But all the class notes will be posted in Canvas.

Class notes

The notes from each class meeting will be posted on Canvas following each class. I do not provide outlines in advance of class because I think it is important to be in thinking mode during class sessions. But I will post the class notes promptly after each lecture. I am not planning to routinely record my lectures. The notes will be available after each class if you are sick and miss a class.

Assignments and Grades

You will be responsible for four things during the semester:

1. Biographical sketch (10 pts).

I would like you to write a **one page single-spaced biosketch in 12 pt font** in which you describe your own language experience. The idea is not to pry into anything private but give you a chance to tell us about the language experiences that you bring to this course. Check Canvas for the due date. The language bio sketches will be discussed in class.

2. Three exams (60 pts)

There will be three exams over the semester, all during the term. The dates for the exams are given on the schedule below and there will be no make up exams unless there is documentation that there are extenuating circumstances (e.g., if you are hospitalized). *Each exam will primarily emphasize the section of the course we have just completed but Exams 2 and 3 will include material from earlier in the term.* The format of the exams will be multiple choice. The three exams together will count towards 60 pts of your grade in the course. **The exam dates are marked in red.** Before the first exam, we will do a practice take-home exam that we will then go over at the next class. **There is no final exam in this class.** For the exams make sure to come with your laptop.

Note that the exams will be available **online** during the regularly scheduled class time, and we will use part of the class to complete the exams. The exams will be multiple choice and will operate on the honor system. **The exams will be open book and open note, with the restriction that you cannot consult with other humans.** But life itself is open book so perhaps this is a way to reduce some of the stress at this time. We'll discuss all of this in class.

3. In class article summary and presentation(s) (30 pts)

For this assignment you will be asked to read, summarize and present in class a selected article that will be assigned to you the week prior. The presentation should summarize the content of the article, and propose

3 discussion points for the remainder of the class. You will need to upload your presentation in Canvas the morning of class. The students who will not present will also read the selected article and post 2 questions in a Q&A format in Canvas. More details will be provided in class. The rate of presentations will depend on the number of attending students!

4. Extra Credit (up to 10 pts)

You can earn up to **extra credit points** towards your grade in two ways. You can watch a video talk on by distinguished language scientists about bilingualism or bidialectal experience and writing a **paragraph** about what you have learned. **Your write up of the talk is worth 5 pts towards your grade.** I will provide a list of acceptable links to talks that can be used for this purpose. And will distribute that on the first day of class. You can submit **one talk write up any time before the last class meeting of the semester.**

Another way to earn **5 pts of extra credit is to participate in a research study.** The study should take no longer than 1.5 hours total, so similar to watching a one hour long video and writing about it. There are many on-going research studies, most of which are online and can be completed at a convenient time for you. Some of the studies may require specific language background, but others will not. I will provide more details about this in class. **Again, this extra credit would need to be completed by the last class of the semester**

The course **grading** scale is:


92-100 = A 89-91.9 = A- 86-88.9 = B+ 82-85.9 = B
79-81.9 = B- 76-78.9 = C+ 72-75.9 = C 69-71.9 = C-
66-68.9 = D+ 62-65.9 = D 58-61.9 = D- Below 58 = E

For UF grading policies for assigning grade points, see:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Tentative Schedule and Outline of Topics (subject to changes)			
Topic	Date	Media Coverage	Reading in Outside Sources
1. Introduction to the course	Jan 13	https://www.nytimes.com/2018/07/14/opinion/sunday/everyone-has-an-accent.html	Thurman, J. (2018). The Mystery of People Who Speak Dozens of Languages. What Can Hyperpolyglots Teach the Rest of Us? <i>New Yorker</i> .
2. More on the science of bilingualism and the context in which it occurs.	Jan 20	https://www.wired.com/2016/02/being-bilingual-changes-the-architecture-of-your-brain/ https://www.washingtonpost.com/local/education/half-the-world-is-bilingual-whats-our-problem/2019/04/24/1c2b0cc2-6625-11e9-a1b6-b29b90efa879_story.html https://www.theguardian.com/education/2014/sep/04/what-happens-to-the-brain-language-learning	Kroll, J. F. , Dussias, P. E., Bice, K., & Perrotti, L. (2015). Bilingualism, mind, and brain. In M. Liberman & B. H. Partee (Eds.), <i>Annual Review of Linguistics</i> , 1, 377-394.
3. Early exposure: When babies hear two languages	Jan 27	https://www.sciencedaily.com/releases/2016/04/160404141743.htm <p style="color: red; text-align: center;">Language Biosketch due today: Submit on Canvas</p>	Fort, M., Ayneto-Gimeno, A., Escrichs, A., & Sebastian-Galles, N. (2018). Impact of bilingualism on infants' ability to learn from talking and nontalking faces. <i>Language Learning</i> , 68, 31-57.
4. Does hearing two languages in infancy confuse young babies?	Feb 3	https://www.ted.com/talks/patricia_kuhl_the_linguistic_genius_of_babies?language=en <p style="background-color: yellow;">add here the interviewes from Tromso</p>	Fecher, N., & Johnson, E. K. (2019). Bilingual infants excel at foreign-language talker recognition. <i>Developmental science</i> , 22(4), e12778.
Dr. Rossi away			
Exam 1: Feb 10 During class time but online from your house			
5. Methods to track brain activity: MRI and EEG	Feb 17	https://npjscilearncommunity.nature.com/users/33701-ping-li/posts/15138-learning-a-second-language-remodels-our-brains	McLaughlin, J., Osterhout, L., & Kim, A. (2004). Neural correlates of second-language word learning: minimal instruction produces rapid change. <i>Nature Neuroscience</i> , 7, 703-704.

6. Bilingual experience in childhood	Feb 24	https://www.languageonthemove.com/children-as-language-brokers/ Exam 1	Brito, N. H., Sebastian-Galles, N., & Barr, R. (2015). Differences in language exposure and its effects on memory flexibility in monolingual, bilingual, and trilingual infants. <i>Bilingualism: Language and Cognition</i> , 18, 670-682.
7. More on bilingual experience in childhood	March 3	https://developingchild.harvard.edu/science/key-concepts/executive-function/ <div style="border: 1px solid red; padding: 5px; text-align: center;"> <p><i>Speaking in Tongues: We will watch the film together online during class</i></p>  </div>	Bialystok, E. (2011). Coordination of executive functions in monolingual and bilingual children. <i>Journal of Experimental Child Psychology</i> , 110, 461-468.
7. Bilingual and bidialectal experience in early childhood	March 10	https://www.nytimes.com/interactive/2019/08/14/magazine/1619-america-slavery.html https://www.csmonitor.com/Podcasts/Rethinking-the-News/rtn_ep_47	Washington, J. A., Terry, N. P., & Seidenberg, M. S. (2013). Language variation and literacy learning: The case of African American English. <i>Handbook of language and literacy: Development and disorders</i> , 204-221.
NO CLASS SPRING BREAK	March 17	NO CLASS SPRING BREAK	NO CLASS SPRING BREAK
7. The consequences of language experience for young children.		https://media.ed.ac.uk/media/BilingualisMinority+Languages+-+Professor+Antonella+Sorace+%28full+29/1_xigsk40v	Hartanto, A., Toh, W. X., & Yang, H. (2019). Bilingualism narrows socioeconomic disparities in executive functions and self-regulatory behaviors during early childhood: Evidence from the early childhood longitudinal study. <i>Child development</i> , 90(4), 1215-1235.
7. How do bilinguals understand and speak the two languages?	March 24	https://www.theguardian.com/science/2016/aug/07/being-bilingual-good-for-brain-mental-health EXAM 2	Shook, A., & Marian, V. (2019). Covert co-activation of bilinguals' non-target language: Phonological competition from translations. <i>Linguistic approaches to bilingualism</i> , 9, 228-252.

8. What are the consequences of bilingualism for language processing?	March 31	https://languageattrition.org/what-is-language-attrition/ https://qz.com/508785/these-companies-use-language-to-determine-which-migrants-get-to-stay-in-europe-but-does-it-work/	<p>Bice, K., & Kroll, J. F. (2015). Native language change during early stages of second language learning. <i>NeuroReport</i>, 26, 966-971.</p> <p>Dussias, P. E., Kroff, J. R. V., Johns, M., & Villegas, A. How Bilingualism Affects Syntactic Processing in The Native Language. In <i>The Oxford Handbook of Language Attrition</i>.</p>
9. Code switching between languages	April 7	https://www.theatlantic.com/magazine/archive/2018/04/the-code-switcher/554099/	<p>Beatty-Martínez, A. L., & Dussias, P. E. (2017). Bilingual experience shapes language processing: Evidence from codeswitching. <i>Journal of Memory and Language</i>, 95, 173-189.</p>
10. Code switching between dialects	April 14	https://paisano-online.com/29302/arts-life/th-mislabeling-of-aave-as-internet-slang/ <div style="border: 1px solid red; padding: 10px; text-align: center;"> <p>Talking Black in America: We will watch the film together online during class</p>  </div>	<p>Lee-James, R., & Washington, J. A. (2018). Language Skills of Bidialectal and Bilingual Children. <i>Topics in Language Disorders</i>, 38(1), 5-26.</p>
11. Bilingualism and aging	April 21	https://www.livescience.com/41002-worried-about-dementia-learn-a-second-language.html	<p>Abutalebi, J., Canini, M., Della Rosa, P. A., Sheung, L. P., Green, D. W., & Weekes, B. S. (2014). Bilingualism protects anterior temporal lobe integrity in aging. <i>Neurobiology of aging</i>, 35, 2126-2133.</p>
		https://www.bbc.co.uk/programmes/p03tknz9	<p>Mendez, M. F. (2019). Bilingualism and Dementia: Cognitive Reserve to Linguistic Competency. <i>Journal of Alzheimer's Disease</i>, 71(2), 377-388.</p>
12. Is bilingualism always good for you? Some claims pro and con.		https://www.theatlantic.com/science/archive/2016/02/the-battle-over-bilingualism/462114/	<p>Bak, T (2016). Cooking pasta in La Paz: Bilingualism, bias and the replication crisis. <i>Linguistic Approaches to Bilingualism</i>.</p>

<p>13. What we learn from the contexts in which we live and how we can apply the science to the real world.</p>		<p>https://www.youtube.com/watch?time_continue=8&v=ZKju678qQiw&feature=emb_logo</p> <p>https://www.amacad.org/project/language-learning</p> <p>Exam 3: During class time</p>	<p>Pierce, L. J., Klein, D., Chen, J. K., Delcenserie, A., & Genesee, F. (2014) Mapping the unconscious maintenance lost first language. <i>Proceedings of the National Academy of Sciences, 111</i>, 1 17319.</p> <p>Bice, K., & Kroll, J. F. (2019). English only? Monolinguals in linguistically diverse contexts have an edge in language learning. <i>Brain & Language</i>.</p>
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Extra Credit Talks

Any of these talks that can be watched for extra credit write ups (5 pts): You pick one to watch and write about but you are of course encouraged to watch all of them! ©

Ellen Bialystok:

https://www.youtube.com/watch?v=DpuqI9pa_5U

Christos Pliatsikas:

<https://www.youtube.com/watch?v=gI7etFRlhIw&t=3251s>

Fred Genesee:

<https://www.youtube.com/watch?v=pkUtAJut1Bk>

Krista Byers-Heinlein:

<https://www.youtube.com/watch?v=KuGcd7nnYCo>

Thomas Bak:

<https://www.youtube.com/watch?v=qNSGwH-qC3g>

Gigi Luk:

<https://www.youtube.com/watch?v=KFvPtGAqDfY>

Ethan Kutlu:

<https://www.youtube.com/watch?v=OPYCYmDgele>

Covid statement:

In response to COVID-19, the following recommendations are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.

- If you are not vaccinated, get vaccinated. Vaccines are readily available and have been demonstrated to be safe and effective against the COVID-19 virus. Visit one.uf for screening / testing and vaccination opportunities.
- If you are sick, **stay home**. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 to be evaluated.
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

Policy on working together: You are more than welcome to work together on homework assignments and the EEG training and testing,

Late policy and attendance: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Incorrect grades: It is your own responsibility to keep track of whether your grade has been entered correctly. If you think a grade for an assignment or test is missing or incorrect, please contact the instructor promptly.

Respect for others: Students are expected to behave in a manner that is respectful to the instructor and to fellow students. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Accommodations for students with disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Health and wellness: If you or a friend is in distress, please contact umatter@ufl.edu or 352-392-1575 so that a U Matter We Care team member can reach out to the student in distress. In case of emergency, call 9-1-1.

Course evaluations: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations 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/>.