

HONOURS SEMINAR: BEING BILINGUAL

Fall 2017

PSYCH 453

Time: MON 2:30-5:20

Location: PAS 4032

INSTRUCTOR

Dr. Katherine White

Office: PAS 4014

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Office Hours: By appointment

COURSE DESCRIPTION

Learning even a single language is a monumental task. Yet, while most research on how people acquire and use language focuses on monolinguals, the majority of the world's population speaks (or signs) more than one language. In this seminar, we will explore the complexities of multilingualism. Some of the questions we will ask include: In what ways does the developmental course of bilingual acquisition differ from or parallel the acquisition of a single language? How separate or interdependent are a bilingual's two languages? How does the brain process and handle multiple languages? And finally, does learning more than one language have effects outside of the language system itself, affecting other aspects of our cognition?

READINGS

There is no official textbook for this course. Readings listed on the syllabus will be made available through the course website. Announcements will be posted to LEARN or communicated over email. Please check both LEARN and UW email regularly.

Official version of the course outline

If there is a discrepancy between the hard copy outline (i.e., if students were provided with a hard copy at the first class) and the outline posted on LEARN, the outline on LEARN will be deemed the official version. Outlines on LEARN may change as instructors develop a course, but they become final as of the first class meeting for the term.

COURSE REQUIREMENTS

Class attendance and Participation (20% of your grade): As this is an honours seminar, it will not be sufficient for you to listen passively in class. Rather, you are expected to actively engage in class discussions. In order to be an informed participant in class, you will need to do the readings each week. Your participation grade will be determined by your preparedness (i.e., bringing in the articles being discussed, ability to answer questions posed by presenter, instructor, or other students), asking questions, and providing comments during the presentation.

Because it is difficult for everyone to participate in class regularly (we may run out of time, you may not feel comfortable talking on a particular day, or you may be absent*), you also have the option of submitting paper responses to contribute to your participation grade. The due date for a paper response is one week after the date of the topic you are responding to. By writing a paper response, you will earn participation points for that week. You may write about any aspect of one or both of the articles for that week. Your paper response should be approximately 1 page (double-spaced). You may find it helpful to structure your critical response by answering one or two of the following questions:

1. What is the problem or issue being addressed?
2. Do you feel the data support the claims made by the authors?
3. Given the research question, did the investigators employ the best approach?
5. What are the short-term and/or long-term implications of the results?
6. Do you think the authors have any biases or assumptions that have affected their methodology or framing of the problem? Or their interpretation of the results?
7. Do you feel that anything has been missed by the paper(s) or that there is an alternative explanation for the results?

*Note: if you are absent, to be able to apply a response paper to your participation grade, you must have notified the instructor of your absence in advance, and present a medical note within 48 hours of the missed class.

Weekly questions (10% of your grade): Each week, you should submit three questions about the readings to the instructor. The questions for each week should be submitted by **9pm on Sunday**. These questions will help get you thinking about the readings and serve as a foundation for our class discussion.

Discussion leader (25% of your grade): During the first week of the semester, you will look over the syllabus topics and reading list and submit your top 3 preferences to the instructor. During class on September 18, we will assign topics to each student. You will serve as a discussion leader for that class and will present one of the assigned articles. You should aim to make your presentation approximately 30 minutes long. Two/three students will present per week, depending on enrollment. The discussion leaders do not need to submit weekly questions for that week. In doing your presentation, you should make sure to cover the following areas:

1. Background and Question: what research question was addressed? What other background research on this topic is necessary to understand it?
2. Method: what methodology and material were used?
3. Results: what was found?
4. Conclusion: what was the main conclusion and what logic and/or assumptions were used to reach that conclusion? Was the conclusion convincing?
5. News: what was new or important about the findings?
6. Implications: what are the broader implications of this article? How is it connected to other issues we've talked about?
7. What do you think of the study? What's good about it? What's bad about it?
8. What are some remaining questions about this topic? Are there any follow-up studies you would do?

Critical review (15% of your grade): You will do a critical review of the article you present (details will be provided in a separate file). Your first draft will be worth 10% and should be submitted electronically to the instructor on the day of your class presentation (PRIOR to class). Your review should be 2-3 pages long (double-spaced). Your review will be returned the following week with comments from the instructor. Within one week of receiving the comments, you will rewrite your review. Your revised version will be worth another 5%. Your revised version will be assessed based on how thoroughly you addressed the comments. Please include a separate document explaining how you responded to the comments.

Final write-up (30% of your grade): Choose one of the topics that we talked about and conduct a brief literature review on this topic, highlighting an open question that you think deserves more attention. You should then propose an experiment (or variation on a previously discussed experiment) to address this question. You will need to consider which methods might be appropriate, how to design the experiment, and what the possible outcomes might be based

on the literature review you have conducted. The write-up should be approximately 6-8 pages, and will be due one week after the last day of classes (Dec 11).

Assignments

Late assignments will not be accepted, except in the case of personal illness or family emergency (see below). Written assignments should be typed.

Grading Summary

Participation: 20%

Weekly Questions: 10%

Discussion Leader: 25%

Article Review: 15%

Final Write-up: 30%

COURSE SCHEDULE

Date	Topic
9-11-17	Organizational meeting (no readings)
9-18-17	Lecture: Overview of language and bilingualism
9-25-17	Infant bilingualism
10-2-17	Child bilingualism 1
10-9-17	THANKSGIVING
10-16-17	Child bilingualism 2
10-23-17	Critical periods for second language acquisition
10-30-17	Language Disorders/Adult bilingualism 1
11-6-17	Adult bilingualism
11-13-17	Losing a first language
11-20-17	Bimodal bilingualism
11-27-17	Bilingualism and cognition 1
12-4-17	Bilingualism and cognition 2

PRELIMINARY READING LIST (note: we will narrow each week's reading list down to 2-3 articles!)

Sept 18: Overview: language, bilinguals, methodology

*Grosjean, F. (1989). Neurolinguists, beware! The bilingual is not two monolinguals in one person. *Brain and Language*, 36, 3-15.

*Grosjean, F. (1998). Studying bilinguals: Methodological and conceptual issues. *Bilingualism: Language and Cognition*, 1, 131-149.

*Kroll, J. F., Bobb, S. C., & Hoshino, N. (2014). Two languages in mind: Bilingualism as a tool to investigate language, cognition, and the brain. *Current Directions in Psychological Science*, 23, 159-163.

Sept 25: Infant bilingualism

*Burns, T. C., Yoshida, K. A., Hill, K. & Werker, J. F. (2007) The development of phonetic representation in bilingual and monolingual infants. *Applied Psycholinguistics*, 28, 455-474.

*Bosch, L. & Sebastian-Galles, N. (2001). Evidence of early language discrimination abilities in infants from bilingual environments. *Infancy*, 2, 29-49.

*Byers-Heinlein, K., Morin-Lessard, E., & Lew-Williams, C. (2017). Bilingual infants control their languages as they listen. *Proceedings of the National Academy of Sciences*, 34, 9032-9037.

*Fennell, C., & Byers-Heinlein, K. (2014). You sound like Mommy: Bilingual and monolingual infants learn words best from speakers typical of their language environments. *International Journal of Behavioral Development*, 38, 309-316.

*Pitts, C. E., Onishi, K. H., & Vouloumanos, A. (2015). Who can communicate with whom? Language experience affects infants' evaluation of others as monolingual or multilingual. *Cognition*, 134, 185-192.

General reading:

*Sebastian-Galles, N. (2010). Bilingual Language Acquisition: Where does the difference lie? *Human Development*, 53, 245-255.

Oct 2: Child bilingualism 1

*Byers-Heinlein, K. & Werker, J. F. (2009). Monolingual, bilingual, trilingual: infants' language experience influences the development of a word-learning heuristic. *Developmental Science*, 12, 815-823.

*Legacy, J., Zesiger, P., Friend, M., & Poulin-Dubois, D. (2015). Vocabulary size, translation equivalents, and efficiency in word recognition in very young bilinguals. *Journal of Child Language*.

*O'Toole, C., Gatt, D., Hickey, T. M. et al. (2017). Parent report of early lexical production in bilingual children: a cross-linguistic CDI comparison. *International Journal of Bilingual Education and Bilingualism*, 20, 124-145.

*Pearson, B. Z., Fernandez, S. & Oller, D. K. (1995). Cross-language synonyms in the lexicon of bilingual infants: one language or two? *Journal of Child Language*, 22, 345-368.

General reading:

*Paradis, J., Genesee, F. & Crago, M. (2011). Language Development in Simultaneous Bilingual Children. Chapter in *Dual Language Development and Disorders*. Baltimore: Paul H. Brookes Publishing Co.

Oct 16: Child bilingualism 2

*Bail, A., Morini, G., & Newman, R. S. (2015). Look at the gato! Code-switching in speech to toddlers. *Journal of Child Language*, 42, 1073-1101.

*Comeau, L., Genesee, F. & Mendelson, M. (2007). Bilingual children's repairs of breakdowns in communication. *Journal of Child Language*, 34, 159-174.

*Hoff, E. et al. (2012). Dual language exposure and early bilingual development. *Journal of Child Language*, 39, 1-27.

*Singh, L. & Quam, C. (2016). Can bilingual children turn one language off? Evidence from perceptual switching. *Journal of Experimental Child Psychology*, 147, 111-125.

Oct 23: Critical periods for second language acquisition

*Birdsong, D. & Molis, M. (2001). On the evidence for maturational constraints in second-language acquisition. *Journal of Memory and Language*, 44, 235-249.

*Finn, A. S., Hudson Kam, C. L. (2008). The curse of knowledge: First language knowledge impairs adult learners' use of novel statistics for word segmentation. *Cognition*, 108, 477-499.

*Flege, J. E., Munro, M. J., MacKay, I. R. A. (1995). Factors affecting strength of perceived foreign accent in a second language. *Journal of the Acoustical Society of America*, 97, 3125-3134.

*Flege, J. E., Yeni-Komshian, G. H., & Liu, S. (1999). Age constraints on second-language acquisition. *Journal of Memory and Language*, 41, 78-104.

*Johnson, J.S., & Newport, E.L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology*, 21, 60-99.

General reading:

*Newport, E., Bavelier, D. & Neville, H. (2001). Critical thinking about critical periods: perspectives on a critical period for language acquisition. In E. Dupoux (Ed.), *Language, Brain and Cognitive Development: Essays in Honor of Jacques Mehler*. Cambridge, MA: MIT Press.

Oct 30: Bilingualism and language disorders (or Adult bilingualism 1)

*Bird, E., Cleave, P., Trudeau, N. et al. (2005). The language abilities of bilingual children with Down Syndrome. *American Journal of Speech-Language Pathology*, 14, 187-199.

- *Edmonds, L. & Kiran, S. (2006). Effect of Semantic Naming Treatment on Crosslinguistic Generalization in Bilingual Aphasia. *Journal of Speech, Language, and Hearing Research*, 49, 729-748.
- *Fabbro, F. (2001). The bilingual brain: Bilingual aphasia. *Brain and Language*, 79, 201-210.
- *Gutierrez-Clellen, Simon-Cerejido, G. & Leone, A. E. (2009). Code-switching in bilingual children with specific language impairment. *International Journal of Bilingualism*, 13, 91-109.
- *Kohnert, K. (2010). Bilingual Children with Primary Language Impairment: Issues, Evidence and Implications for Clinical Actions. *Journal of Communication Disorders*, 43, 456-473.
- *Van Borsel, J., Maes, E., & Foulon, S. (2001). Stuttering and bilinguals: A review. *Journal of Fluency Disorders*, 26, 179-205.

Nov 6: Adult bilingualism

- *Bultena, S., Dijkstra, T., & Van Hell, J. G. (2015). Language switch costs in sentence comprehension depend on language dominance: Evidence from self-paced reading. *Bilingualism: Language and Cognition*, 18, 453-469.
- *Costa, A. & Santesteban, M. (2004). Lexical access in bilingual speech production: Evidence for language switching in highly proficient bilinguals and L2 learners. *Journal of Memory and Language*, 50, 491-511.
- *Goldrick, M., Runnqvist, E., & Costa, A. (2014). Language switching makes pronunciation less nativelike. *Psychological Science*, 25, 1031-1036.
- *Gullifer, J. W., Kroll, J. F., & Dussias, P. E. (2013). When language switching has no apparent cost: lexical access in sentence context. *Frontiers in Psychology*, 4, 1-13.
- *Marian V. & Spivey, M. (2003). Competing activation in bilingual language processing: Within- and between-language competition. *Bilingualism: Language and Cognition*, 6, 97-115.
- *Meuter, R. F. & Allport, A. (1999). Bilingual language switching in naming: Asymmetrical costs of language selection. *JML*, 40, 25-40.
- *Woumans, E. et al. (in press). Can faces prime a language? *Psychological Science*.
- *Xu, M., Baldauf, D., Chang, C., Desimone, R., & Tan, L. (2017). Distinct distributed patterns of neural activity are associated with two languages in the bilingual brain. *Science Advances*, 3, e1603309.

Nov 13: Losing a first language?

- *Au, T. K., Oh, J. S., Knightly, L. M., Jun, S-A. & Romo, L. F. (2008). Salvaging a childhood language. *JML*, 58, 998-1011.
- *Choi, J., Broersma, M., & Cutler, A. (2017). Early phonology revealed by international adoptees' birth language retention. *Proceedings of the National Academy of Sciences*, 114, 7307-7312.
- *Oh, J. S., Jun, S-A., Knightly, L. M., Au, T, K. (2003). Holding on to childhood language memory. *Cognition*, 86, B53-B64.
- *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., Chen, J-K, et al. (2014). Mapping the unconscious maintenance of a lost first language. *Proceedings of the National Academy of Sciences*, 111, 17314-17319.
- *Singh, L., Liederman, J., Mierzejewski, R., & Barnes, J. (2011). Rapid reacquisition of native phoneme contrasts after disuse: you do not always lose what you do not use. *Developmental Science*, 14, 949-959.

General reading:

<http://nautil.us/issue/30/identity/the-strange-persistence-of-first-languages>

Nov 20: Bimodal bilingualism

- *Lillo-Martin, D., de Quadros, R. M., Pichler, D. C., & Fieldsteel, Z. (2014). Language choice in bimodal bilingual development. *Frontiers in Psychology*, 5, 1-12.
- *Pyers, J. E. & Emmorey, K. (2008). The face of bimodal bilingualism. *Psychological Science*, 19, 531-536.

*Shook, A. & Marian, V. (2012). Bimodal bilinguals co-activate both languages during spoken comprehension. *Cognition*, 124, 314-324.

Nov 27: Bilingualism and cognition 1

*Brito, N. H., Sebastian-Galles, N., & Barr, R. (2014). Differences in language exposure and its effects on memory flexibility in monolingual, bilingual, and trilingual infants. *Bilingualism: Language and Cognition*

*Bialystok, E., Craik, F. I. M., Freedman, M. (2007). Bilingualism as a protection against the onset of symptoms of dementia. *Neuropsychologia*, 45, 459-464.

*Bialystok, E. & Barac, R. (2012). Emerging bilingualism: Dissociating advantages for metalinguistic awareness and executive control. *Cognition*, 122, 67-73.

*De Baene, W., Duyck, W., Brass, M., & Carreiras, M. (2015). Brain circuit for cognitive control is shared by task and language switching. *Journal of Cognitive Neuroscience*, 27, 1752-1765.

*Emmorey, K., Luk, G., Pyers, J. E. & Bialystok, E. (2008). The source of enhanced cognitive control in bilinguals. *Psychological Science*, 1201-1206.

*Engel de Abreu, P. et al. (2012). Bilingualism enriches the poor: enhanced cognitive control in low-income minority children. *Psychological Science*, 23, 1364-1371.

*Giezen, M. R., Blumenfeld, H. K., Shook, A., Marian, V., & Emmorey, K. (2015). Parallel language activation and inhibitory control in bimodal bilinguals. *Cognition*, 141, 9-25.

*Luk, G., De Sa, E., & Bialystok, E. (2011). Is there a relation between onset age of bilingualism and enhancement of cognitive control? *Bilingualism: Language and Cognition*, 14, 588-595.

General reading:

Costa, A., & Sebastian-Galles, N. (2014). How does the bilingual experience sculpt the brain? *Nature Neuroscience Reviews*, 15, 336-345.

<https://www.scientificamerican.com/article/debate-rages-over-whether-speaking-a-second-language-improves-cognition/>

Dec 4: Bilingualism and Cognition 2

*Bylund, E. & Athanasopoulos, P. (2017). The Whorfian time warp: Representing duration through the language hourglass. *Journal of Experimental Psychology: General*, 146, 911-916.

*Chabal, S., Schroeder, S. R., & Marian, V. (2015). Audio-visual object search is changed by bilingual experience. *Attention, Perception, and Psychophysics*, 77, 2684-2693.

*Corey, J. D., Sayuri, H., Foucart, A., Aparici, M., Botella, J., Costa, A., & Keysar, B. (2017). Our moral choices are foreign to us. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 43, 1109-1128.

*Costa, A. et al. (2014). Your morals depend on language. *PLOS One*, 9, 1-7.

*de Bruin, A., Treccani, B. & Della Sala, S. (2014). Cognitive Advantage in Bilingualism: An Example of Publication Bias? *Psychological Science*.

*Dunabeitia, J. A. et al. (2014). The inhibitory advantage in bilingual children revisited. *Experimental Psychology*, 61, 234-251.

*Goetz, P. J. (2003). The effects of bilingualism on theory of mind development. *Bilingualism: Language and Cognition*, 6, 1-15.

*Greenberg, A., Bellana, B. & Bialystok, E. (2013). Perspective-taking ability in bilingual children: Extending advantages in executive control to spatial reasoning. *Cognitive Development*, 28, 41-50.

*Hayakawa, S., Tannenbaum, D., Corey, J. D., & Keysar, B. (2017). Thinking more or feeling less? Explaining the foreign-language effect on moral judgment. *Psychological Science*.

*Kovacs, A. M. (2009). Early bilingualism enhances mechanisms of false-belief reasoning. *Developmental Science*, 12, 48-54.

*Paap, K. R., Johnson, H. A., & Sawi, O. (2015). Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances. *Cortex*, 69, 265-278.

*Yeung, C. M., St John, P. D., Menec, V., & Tyas, S. L. (2014). Is bilingualism associated with a lower risk of dementia in community-living older adults? *Alzheimer Disease And Associated Disorders*, 28, 326-332.

Late Work

You will not receive credit for weekly questions that are submitted after the 9 pm deadline. This is because the questions are designed to facilitate class discussion. If you are the discussion leader, the first draft of your article review is due *prior* to your presentation. If you do not submit it by the beginning of class on your presentation date, but still submit it the same calendar day, you will receive a maximum score of 7/10. For each additional day there will be an additional 1-point penalty.

Accommodation for course requirements

Students are entitled to a rescheduling of tests or an extension of deadlines for legitimate medical reasons. It is your responsibility to inform the instructor of your illness and provide documentation in a timely manner. If there is undue delay, the instructor reserves the right to refuse an extension or makeup. The timing of the extension or makeup will be at the discretion of the instructor.

- Students requesting accommodation for course requirements (assignments, midterm tests, final exams, etc.) due to illness should do the following:
 - a. Consult the University's [examination regulations](#) for information about procedures and policies for requesting accommodations
 - b. seek medical treatment as soon as possible
 - c. obtain documentation of the illness with a completed uWaterloo [Verification of Illness Form](#)
 - d. submit that form to the instructor within 48 hours. Students in Centre for Extended Learning (CEL) courses must submit their confirmation of the illness to CEL.
 - e. (if possible) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming.
- In the case of a missed assignment deadline, midterm test, or quiz, the instructor will either:
 - waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
 - provide an extension.
- In the case of bereavement, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.
- Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.
- Elective arrangements such as travel plans are not acceptable grounds for granting accommodations to course requirements per the [uWaterloo Examination Regulations and Related Matters](#).

If you miss an assignment deadline or test for a reason other than serious personal illness or family emergency (documentation required in both cases), you will not be granted an extension or be permitted to take a make-up test.

Mental Health Services

Mental Health Services aim is to provide holistic programming and services to help you lead a healthy and balanced life. We strive to provide a secure, supportive environment for students of all orientations and backgrounds.

Students suffering from problems with anxiety, depression, problems with sleep, attention, obsessions or compulsions, relationship difficulties, severe winter blues, etc., may make an appointment by phone or in person. Appointments are usually available within two days of initial contact with one of our medical doctors. All contacts are completely confidential.

Contact Health Services

[Health Services Building](#)

Call 519-888-4096 to schedule an appointment

Call 1-866-797-0000 for free 24/7 advice from a health professional

Contact Counselling Services

[Needles Hall Addition, NH 2401](#)

Call 519-888-4567 x 32655 to schedule an appointment

counserv@uwaterloo.ca

Academic Integrity

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity webpage](#) and the [Arts Academic Integrity webpage](#) for more information.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

Concerns About a Course Policy or Decision

Informal Stage. We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Richard Eibach) is available for consultation and to mediate a resolution between the student and instructor: Email: reibach@uwaterloo.ca; Ph 519-888-4567 ext. 38790

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact Richard Eibach, the Associate Chair for Undergraduate Affairs who will provide further assistance; reibach@uwaterloo.ca.

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#)

Accommodation for Students with Disabilities

Note for students with disabilities: The [AccessAbility Services](#) office, located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.