



Course syllabus

Course title	Modern Psycholinguistics
Instructor(s)	Albertyna Osińska, Ph.D.
Contact details	Albertyna.osinska@psych.uw.edu.pl
Affiliation	University of Warsaw
Course format	seminar
Number of hours	30 hours
Number of ECTS credits	3 ECTS credits
Brief course description	The course draws on experimental psychology, linguistics and neuroscience to help students appreciate the cognitive mechanisms underlying language.
	The material centers on topics related to language processing as well as learning. In order to better contextualize language in the mind, students learn about how language interacts with other aspects of cognition, including attention, memory and awareness. They also learn about language breakdown after stroke and in other impairments.
	By the end of the course students should be able to apply their knowledge to their further academic research, should they wish to pursue it, as well as language learning, teaching, and rehabilitation.
Full course description	The course draws on experimental psychology, linguistics and neuroscience to help students appreciate the cognitive mechanisms underlying language. How is word meaning represented in the mind? Why is acquiring language in adulthood harder than in childhood? Why do we make speech errors? What is the pattern of language breakdown in dementia or after stroke? What are the effects of having two languages in one mind? What does language learning have to do with "statistical learning" and does it always have to be conscious? These are example issues we are going to discuss.

questions have developed over time and what state of the art in the field is. They also learn about the opportunities offered by recent advances in neuroimaging. They gradually form their own opinions on selected





modern debates and learn to express themselves in a coherent academic essay. Two separate sessions are included in the course devoted to academic writing technique. Through this they develop their skills of evidence-based discussion, debate as well as writing. All of this will be useful not only when writing their dissertations but also later, in any career of their choice.

Learning outcomes

By the end of the course students should be able to:

- -formulate and justify their opinions on several enduring debates in psycholinguistics (K_W01, K_W02)
- conduct an in-depth literature overview (K W01, K W02, K U08)
- analyse empirical findings (K_U03, K_U04)
- write up synthesis of experimental findings (K_U02, K_U06)
- present an in-depth discussion of experimental findings (K_U01, K_U03)
- produce a written manuscript (K U06)
- work well in a group assuming different roles at different stages of a joint project (class activity) (K_K03)

Learning activities and teaching methods

Learning activities and teaching methods will be varied. Throughout the course students will: listen to lectures (recorded, asynchronous), participate in seminars (discussions, synchronous), annotate set texts (teamwork), write a practice essay (individually) for which they will receive constructive feedback as well as a final essay. They will also be able to test their knowledge on short revision quizzes.

List of topics/classes and bibliography

During classes we will discuss the following topics. Students choose 2 topics to write about: one in a practice essay and one in the final essay. The exact essay topics are provided at the beginning of the course each year.

Main textbook:

Traxler, M. J. (2012). Introduction to psycholinguistics: Understanding language science. Chichester, West Sussex: WileyBlackwell.

Secondary textbooks:

Harley, T. A. (2009). *Talking the talk: Language, psychology and science*. Psychology Press. - introductory

Harley, T. A. (2014). *The psychology of language: From data to theory* (4th ed.). Psychology Press. - more advanced

1) Human language vs animal communication





Hauser, M. D., Chomsky, N., & Fitch, W. T. (2002). The Faculty of Language: What Is It, Who Has It, and How Did It Evolve? *Science*, 298(5598). DOI: 10.1126/science.298.5598.1569

2) Nature vs nurture in first language acquisition

Chater, N., & Christiansen, M. H. (2018). Language acquisition as skill learning. *Current Opinion in Behavioral Sciences*, *21*, 205-208. (http://cnl.psych.cornell.edu/pubs/2018-cc-COBS.pdf)

Goldin-Meadow, S., & Yang, C. (2017). Statistical evidence that a child can create a combinatorial linguistic system without external linguistic input: Implications for language evolution. *Neuroscience & Biobehavioral Reviews*, *81*, 150-157. doi:10.1016/j.neubiorev.2016.12.016

Medeiros, D. P., Piattelli-Palmarini, M., & Bever, T. G. (2016). Many important language universals are not reducible to processing or cognition. *Behav Brain Sci*, *39*, e86. doi:10.1017/S0140525X15000722

Pinker, S. (2007). The language instinct (1994/2007).

Sampson, G. (2007). There is no language instinct. *Ilha do Desterro: A Journal of English Language, Literatures in English and Cultural Studies*, 52), 35-63.

Smith, N., & Allott, N. (2016). *Chomsky: Ideas and ideals*. Cambridge University Press. - selected chapters.

Tomasello, M. (2009). The usage-based theory of language acquisition. In *The Cambridge handbook of child language* (pp. 69-87). Cambridge Univ. Press. (https://pure.mpg.de/pubman/faces/ViewItemOverviewPage.jsp?itemId=item_155 4312)

3) How do we recognise spoken words?

Traxler, M. J. (2012). Introduction to psycholinguistics: Understanding language science. Chichester, West Sussex: WileyBlackwell. (p.54-71 & p. 97 - 113).

Magnuson J, M. D., & E., M. (2013). Spoken Word Recognition. In D. Reisberg (Ed.), *The Oxford Handbook of Cognitive Psychology*. Oxford University Press. - dobry overview, warto sięgnąć po pozycje z cytowanej literatury

Norris, D., McQueen, J. M., & Cutler, A. (2018). Commentary on "Interaction in Spoken Word Recognition Models". *Front Psychol*, *9*, 1568. doi:10.3389/fpsyg.2018.01568

Weber, A., & Scharenborg, O. (2012). Models of spoken-word recognition. *Wiley Interdiscip Rev Cogn Sci*, *3*, 387-401. doi:10.1002/wcs.1178 - good overview, worth looking at the references mentioned here.





4) Is speech production the same system as speech perception, just working the other way round?

Chater, N., McCauley, S. M., & Christiansen, M. H. (2016). Language as skill: Intertwining comprehension and production. *Journal of Memory and Language*, 89, 244-254. Retrieved from

https://www.sciencedirect.com/science/article/pii/S0749596X15001412

Gambi, C., & Pickering, M. J. (2013). Prediction and imitation in speech. *Frontiers in psychology*, *4*, 340. Retrieved from

https://www.frontiersin.org/articles/10.3389/fpsvg.2013.00340

McGettigan, C., & Tremblay, P. (2018). Links Between Perception and Production. In *The Oxford Handbook of Psycholinguistics* (p. 306). Oxford University Press. [pdf on COME]

Meyer, A. S., Huettig, F., & Levelt, W. J. M. (2016). Same, different, or closely related: What is the relationship between language production and comprehension? *Journal of Memory and Language*, 89, 1–7 [pdf available: https://pure.mpg.de/rest/items/item 2256065/component/file 2279898/content

Pickering, M.J., and Garrod, S. (2013) Forward models and their implications for production, comprehension, and dialogue.Behavioral and Brain Sciences, 36 (4). pp. 377-392. ISSN 0140-525X [pdf available:

https://core.ac.uk/download/pdf/42349596.pdf]

Special issue of Journal of Memory and Language (2016):

https://www.sciencedirect.com/journal/journal-of-memory-and-language/vol/89/suppl/C

5) How to write an academic essay?

Practical session. Materials will be distributed before class. Discussion of example essays. Writing technique.

6) Does a 'lemma' exist in the mind?

Selected textbook reading:

Traxler, M. J. (2012). *Introduction to psycholinguistics: Understanding language science*. Chichester,

West Sussex: WileyBlackwell. (p..54-71)

Harley, T. A. (2014). *The psychology of language: From data to theory* (4th ed.). Psychology Press.

(p.416 - 418)





Harley, T. A. (2009). *Talking the talk: Language, psychology and science*. Psychology Press. (p. 229 – 239)

Further reading:

Caramazza, A. (1997). How many levels of processing are there in lexical access? *Cognitive Neuropsychology, 14,* 177–208.

Caramazza, A., & Miozzo, M. (1998). More is not always better: A response to Roelofs, Meyer, and Levelt. *Cognition*, *69*(2), 231-241.

Jescheniak, J. D., Meyer, A. S., & Levelt, W. J. M. (2003). Specific-word frequency is not all that counts in speech production: Comments on Caramazza, Costa, et al.(2001) and new experimental data. Retrieved from https://pure.mpg.de/rest/items/item_726486/component/file_726485/content

*Kemmerer, D. (2019). From blueprints to brain maps: the status of the Lemma Model in cognitive neuroscience. *Language, Cognition and Neuroscience, 34*(9), 1085-1116. [very good state of the art overview]

Roelofs, A., Meyer, A. S., & Levelt, W. J. M. (1998). A case for the lemma/lexeme distinction in models of speaking: Comment on Caramazza and Miozzo (1997). *Cognition*, 69(2), 219-230.

7) To what extent is word meaning 'embodied'?

Traxler, M. J. (2012). *Introduction to psycholinguistics: Understanding language science*. Chichester, West Sussex: WileyBlackwell. (p.89-97)

*Meteyard, L., Rodriguez Cuadrado, S., Bahrami, B. and Vigliocco, G. (2012) Coming of age: a review of embodiment and the neuroscience of semantics. *Cortex*, 48 (7). pp. 788-804. [available on COME]

*Meteyard, L. and Vigliocco, G. (2018) <u>Lexico-semantics.</u> In: Rueschemeyer, S.-A. and Gaskell, G. (eds.) Oxford Handbook of Psycholinguistics. Oxford University Press. [available on COME]

Pulvermüller, F. (2013a). Semantic embodiment, disembodiment or misembodiment? In search of meaning in modules and neuron circuits. *Brain Lang*, 127(1), 86-103. doi:10.1016/j.bandl.2013.05.015

*Pulvermüller, F. (2013b). How neurons make meaning: brain mechanisms for embodied and abstract-symbolic semantics. *Trends Cogn Sci*, 17(9), 458-470.

Simmons, W. K., & Barsalou, L. W. (2003). The similarity-in-topography principle: reconciling theories of conceptual deficits. *Cogn Neuropsychol, 20*(3), 451-486. doi:10.1080/02643290342000032. [duża teoria, próba pogodzenia różnych nurtów i idei, pdf dostępny na KOME przy wykładzie o Znaczeniu]

The debate is the central topic of a special issue of *Psychonomic Bulletin & Review* 2016: https://link.springer.com/journal/13423/23/4





8) Is the classical model of language processing (Lichtcheim-Wernicke) outdated?

Basic:

https://en.wikipedia.org/wiki/Wernicke%E2%80%93Geschwind model

Inspiring discussion:

http://www.talkingbrains.org/2008/09/pulvermuller-wernicke-lichtheim.html

Replies in comments:

http://www.mrc-cbu.cam.ac.uk/people/friedemann.pulvermuller/responsetohickokpoeppel.htm/

Further reading:

Dronkers, N. F., Ivanova, M. V., & Baldo, J. V. (2017). What Do Language Disorders Reveal about Brain-Language Relationships? From Classic Models to Network Approaches. *J Int Neuropsychol Soc, 23*(9-10), 741-754. doi:10.1017/S1355617717001126 [tekst dostepny online]

Friederici, A. D. (2012). The cortical language circuit: from auditory perception to sentence comprehension. *Trends in Cognitive Sciences*, 16(5), 262–268. doi:10.1016/j.tics.2012.04.001

Tremblay, P., & Dick, A. S. (2016). Broca and Wernicke are dead, or moving past the classic model of language neurobiology. *Brain Lang*, *162*, 60-71. doi:10.1016/j.bandl.2016.08.004

Greg'a Hickok's lecture: https://www.youtube.com/watch?v=uLUOzUYC3u4

9) Does bilingualism bring cognitive benefits?

For inspiration, a lecture by a Polish researcher dr Thomas Bak: https://www.youtube.com/watch?v=qNSGwH-qC3g

Basic literature:

https://www.theatlantic.com/science/archive/2016/02/the-battle-over-bilingualism/462114/

Traxler, M. J. (2012). *Introduction to psycholinguistics: Understanding language science*. Chichester,

West Sussex: WileyBlackwell. (p.434-436)

Further reading:

Alladi, S., Bak, T. H., Duggirala, V., Surampudi, B., Shailaja, M., Shukla, A. K., . . . Kaul, S. (2013). Bilingualism delays age at onset of dementia, independent of education and immigration status. *Neurology*, *81*(22), 1938-1944.





Bak, T. H., Nissan, J. J., Allerhand, M. M., & Deary, I. J. (2014). Does bilingualism influence cognitive aging. *Annals of neurology*, 75(6), 959-963. [https://www.research.ed.ac.uk/portal/files/21840512/Bak_LAB_2016_The_imp_act_of_bilingualism_on_cognitive_aging.pdf]

Martin-Rhee, M. M., & Bialystok, E. (2008). The development of two types of inhibitory control in monolingual and bilingual children. *Bilingualism: language and cognition*, *11*(1), 81-93.

Paap, K. R. (2019). "Bilingualism in cognitive science: the characteristics and consequences of bilingual language control," in *The Cambridge Handbook of Bilingualism*. In: A. De Houwer and L. Ortega (eds.) Cambridge: Cambridge University Press, 435–465.

Lecture by prof Ellen Bialystok: https://www.youtube.com/watch?v=DxPniZ7lz5Q

10) Can a learner ever represent words in the second language as the native speaker?

For inspiration (especially the second half) – fascinating lecture by Judith Kroll: https://www.youtube.com/watch?v=7HLxYcd84YI

Basic literature:

Traxler, M. J. (2012). *Introduction to psycholinguistics: Understanding language science*. Chichester, West Sussex: WileyBlackwell. (p.415-440)

Further reading:

Paap, K. R. (2019). "Bilingualism in cognitive science: the characteristics and consequences of bilingual language control," in *The Cambridge Handbook of Bilingualism*. In: A. De Houwer and L. Ortega (eds.) Cambridge: Cambridge University Press, 435–465.

Thierry, G., & Wu, Y. J. (2007). Brain potentials reveal unconscious translation during foreign-language comprehension. *Proceedings of the National Academy of Sciences*, 104(30), 12530-12535. Retrieved from https://www.pnas.org/content/104/30/12530.short

*Williams, J. N. (2014). The bilingual lexicon. In *The Oxford Handbook of the Word*. [pdf on COME]

11) What do the studies of implicit learning contribute to our understanding of second language acquisition?

Basic literature:

Traxler, M. J. (2012). Introduction to psycholinguistics: Understanding language science. Chichester, West Sussex: WileyBlackwell. (p. 436)





https://www.brainscape.com/blog/2011/12/implicit-language-learning/

https://www.eltresearchbites.com/201801-implicit-learning-and-input-enhancement-long-2017-part-2/

Further reading:

Conway, C. M., Bauernschmidt, A., Huang, S. S., & Pisoni, D. B. (2010). Implicit statistical learning in language processing: word predictability is the key. *Cognition*, *114*(3), 356–371. https://doi.org/10.1016/j.cognition.2009.10.009

Ellis, N. C. (2015). Implicit *and* explicit learning: Their dynamic interface and complexity. In P. Rebuschat (Ed.), *Implicit and explicit learning of languages* (pp. 3-23). Amsterdam: John Benjamins.[pdf dostępny pod linkiem: Implicit_AND_Explicit_Learning_EllisPreprint.pdf] – szczególną uwagę warto zwrócić na concept "learned attention" i "blocking".

Monaghan, P., Schoetensack, C., & Rebuschat, P. (2019). <u>A single paradigm for implicit and statistical learning</u>. *Topics in Cognitive Science*, 11(3), 536-554. [Open access]

Morgan-Short, K., Faretta-Stutenberg, M., & Bartlett, L. (2015). Contributions of event-related potential research to issues in explicit and implicit second language acquisition. In P. Rebuschat (Ed.), *Implicit and Explicit Learning of Languages*. Amsterdam: John Benjamins.

Paciorek, A., & Williams, J. N. (2015). Semantic generalization in implicit language learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *41*(4), 989.

*Williams, J. N. (2009). Implicit learning in second language acquisition. In *The New Handbook of Second Language Acquisition*, William C. Ritchie and Tej K. Bhatia (Eds.), Emerald Group Publishing Limited, pp. 319-353. [pdf available on COME]

*Williams, J. N. (2005). Learning without awareness. *Studies in second language acquisition*, *27*(2), 269-304.

Edited volume published in 2015. *Implicit and Explicit Learning of Languages*: https://benjamins.com/catalog/sibil.48,

Assessment methods and criteria

- 70% of the final grade is the final essay.
- 15% of the final grade is the practice essay
- 15% of the final grade is class activity (doing the exercises and quizzes provided, participation in class discussion)

All parts of the course need to be fulfilled.





Attendance rules	Attendance is a necessary condition to pass the course. Three absences are allowed. Any additional one requires a note from a doctor or an exceptional personal circumstance. No more than 5 absences are permitted.
Prerequisites	None.
Academic honesty	Students must respect the principles of academic integrity. Cheating and plagiarism (including copying work from other students, internet or other sources) are serious violations that are punishable and instructors are required to report all cases to the administration.
Remarks	Any remarks you would like students to know