**Syllabus of the course “Experimental Studies of the Grammar”**

1. Course Description
   1. Title of a Course: Experimental Studies of the Grammar
   2. Pre-requisites: Introduction to Linguistics
   3. Course Type: compulsory, elective, optional
   4. Abstract:

The course is dedicated to experimental studies of syntax and morphology. It covers most prominent models of production and comprehension and explains how experimental studies can be used to tease apart different hypotheses formulated in theoretical linguistics (including anaphora resolution, long-distance dependencies, agreement, theories of predicate-arguments structure). Theoretical linguists started to use experimental evidence only recently, so getting acquainted with this novel and dynamic field seems especially interesting. Various behavioral and neurophysiological methods will be discussed (including lexical decision task, cross-modal priming, self-paced reading, eye-tracking while reading and visual world paradigm etc.). The students will also conduct one experimental study to gain hands-on experience in preparing stimuli, setting up the experiment, analyzing the data and interpreting the results.

1. Learning Objectives:

The goal of the course is to get acquainted with most prominent models of language production and comprehension and with experimental methods used in the psycho- and neurolinguistic studies of syntax and morphology, and to learn how experimental materials can be used to evaluate different hypotheses formulated in theoretical linguistics.

1. Learning Outcomes

After completing the course, the student should:

* Know: most prominent models of language production and comprehension; experimental methods used in the psycho- and neurolinguistics; experimental studies in several linguistic domains (long-distance dependencies, anaphora, agreement etc.); special features of experimental studies of the grammar in ontolinguistics and clinical linguistics.
* Be able to apply this knowledge when planning his or her own experimental studies and evaluating other studies.

1. Course Plan

* Major theoretical questions in the experimental study of language (competence and performance, psycholinguistic adequacy of the grammar, the problems of modularity and innateness).
* An overview of behavioral and neurolinguistic experimental methods.
* Mental grammar in comprehension: major parsing models.
* Mental grammar in production: major generation models.
* Mental lexicon (an overview of existing approaches with an emphasis on morphologically complex words and forms).
* Case studies: long-distance dependencies.
* Case studies: agreement (number, gender, case).
* Case studies: anaphora.
* One experiment from the beginning to the end: running a self-paced reading study.
* Specialized methods to assess children's syntax and morphology
* Comprehension and production in Broca's aphasia: an interaction of theory and experiment.

1. Reading List
   1. Required

* Ахутина Т. В. Порождение речи. Нейролингвистический анализ синтаксиса. 2-е изд. М., 2007.
* Венцов А. В., Касевич В.Б. Проблемы восприятия речи. 2-е изд. СПб., 2003.
* Traxler, M. (2011). Introduction to Psycholinguistics: Understanding Language Science. Cambridge: Wiley-Blackwell.
* Handbook of Psycholinguistics / Ed. by Traxler, M.J., Gernsbacher, M.A. 2nd ed. Amsterdam, 2006.
  1. Optional
* Лурия А. Р. Язык и сознание. М., 1979.
* Современная американская лингвистика: фундаментальные направления / Под ред. А. А. Кибрика, И. М. Кобозевой, И. А. Секериной. 2-е изд. М., 2002.
* Ahlsén E. Introduction to Neurolinguistics. John Benjamins Publ. Company, 2006.
* Bock, K., Miller, C.A. (1991). Broken agreement. Cognitive Psychology, 23, 45-93. Gleitman, L. R., Newport, E. The Invention of Language by Children: Environmental and Biological Influences on the Acquisition of Language // An Invitation to Cognitive Science. Vol. 1: Language / Ed. by L. R. Gleitman, M. Liberman. 2nd ed. Cambridge, MA, MIT Press, 1995. Pp. 1-24.
* Crain, S., & Thornton, R. Investigations in Universal Grammar: A Guide to Experiments on the Acquisition of Syntax and Semantics (Language, Speech, and Communication). Cambridge, MA, MIT Press, 2000.
* Ferreira, F., & Fodor, J. D. Reanalysis and Sentence Processing. Dordrecht, Kluwer, 1998.
* Frazier, L., & Clifton, C. Construal. Cambridge, MA, MIT Press, 1996.
* Gazzaniga M.S., Ivry R.B., Mangun G.R. Cognitive neuroscience: The biology of mind. New York, 1998.
* Handbook of Perception and Cognition. Speech, Language, and Communication / Ed. by Miller, J.L., Eimas, P.D. New York, 1995.
* Levelt, W. J. M. Speaking: From intention to articulation. Cambridge, MA, MIT Press, 1993.
* McClelland J. L., Patterson K. 2002. Rules or connections in past-tense inflections: what does the evidence rule out? // Trends in Cognitive Sciences. Vol.6. P. 465-472.
* Miller, J.L., & Eimas, P.D., eds. (1995). Handbook of Perception and Cognition. Speech, Language, and Communication. New York: Academic Press.
* Ni, W., Crain, S., & Shankweiler, D. Sidestepping Garden Paths: Assessing the Contributions of Syntax, Semantics and Plausibility in Resolving Ambiguities // Language and Cognitive Processes, 1996, 11, 283-334.
* Pinker S. The Language Instinct: How the Mind Creates Language. NY, 1994.
* Pinker S., Ullman M. T. (2002). The past and future of the past tense // Trends in Cognitive Sciences. Vol.6. P. 456-463.
* Pritchett, B. Grammatical Competence and Parsing Performance. Chicago, University of Chicago Press, 1992.
* The Cambridge Handbook of Child Language / Ed. by Bavin, L. Cambridge, 2009.
* The handbook of clinical linguistics / Ed. by Ball, M.J., et al. Oxford, 2008.
* The Handbook of Second Language Acquisition / Ed. by Doughty, C.J., Long, M.H. Oxford, Blackwell, 2005.
* Tomasello, M. Constructing a Language: A Usage-Based Theory of Language Acquisition. Harvard, MA, Harvard University Press, 2003.
* Wagers, M.W., Lau, E.F., Phillips, C. (2009). Agreement attraction in comprehension: Representations and processes. Journal of Memory and Language, 61, 206-223.

1. Grading System:

Participation in classes (20% of the final grade); taking part in conducting an experiment and analyzing the results (40% of the final grade); answering a question during an oral exam (40% of the final grade).

1. Guidelines for Knowledge Assessment:

Attending classes and participating in discussions; taking part in preparing materials for a self-paced reading experiment, running several participants and analyzing the results; knowing major models and methods used in the experimental studies of the grammar, being able to present this knowledge in a clear, concise and coherent forms during the oral exam.

1. Methods of Instruction:

Lectures (discussing existing studies and their theoretical implications) and seminars (learning how to set up several types of experiments).

1. Special Equipment and Software Support (if required): a projector.