

National Research University Higher School of Economics
Syllabus for the course “Linguistic Theory and Language Description” for the Master’s Programme “Linguistic Theory and Language
Description”

Government of Russian Federation

Federal State Autonomous Educational Institution of High Education
«National Research University Higher School of Economics»

School of Linguistics
Master’s programme 'Linguistic Theory and Language Description'

Syllabus for the course “Formal Models in Language Description”

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Formal models in language description A syllabus for 2016-2017

The course is compulsory for the students of the MA program Linguistic theory and language description (NRU HSE). Essentially, there are no prerequisites; background information is introduced in the lectures opening fragments of which the course consists (phonological models, morphological models etc.) and in the preparatory reading for each of the fragments.

Abstract. The course provides a closer look at the use of formal models in treating linguistic data. Unlike conventional courses of formal linguistics, instead of giving an exhaustive overview of one linguistic model instructors only provide a general overview of its architecture and then proceed to show how its formal machinery is applied to specific problems of language description at all levels of language structures, such as modelling *alternations* in phonology or *free word order* in generative theory. Where possible, treatment of the same empirical phenomenon in different models is compared, and advantages of each model are weighted.

The **objectives** of the course is to introduce the students to applications of theoretical models to description of specific elements of language structure. The course combines theoretical thinking with skills of language description.

Intended outcomes include, for the students:

- learning the architecture and the internal logic of individual theoretical models on various levels of language structure, including phonology, morphophonology, syntax, semantics and discourse
- developing skills in application of these theories in modelling empirical data and describing individual languages
- training in formal and not-so-formal linguistic theories and way of theoretical thinking they are associated with

Course plan. The course comprises the following components, each treating its own level of language structure.

Models in phonology and morphophonology: phonologization Alexander Piperski (4+8+16 hours)

One of the most challenging problems in historical phonology is the mechanism of phonologization, namely how new phonemes enter the phonemic inventory of a language. In order to discuss this, one has to consider many important problems in phonology, such as the (rather dubious) status of the phoneme within phonological theory, the organization of underlying representations and segment inventories, etc. This course segment will cover approaches to phonologization proposed in different frameworks (Structuralism, rule-based Generative Phonology, Stratal OT, Parallel OT) as well as the consequences of phonologization relevant to morphophonology. All these topics will be illustrated with case studies from Germanic and Slavic languages.

Reading:

Hyman, Larry M. 1976. Phonologization. *Linguistic studies offered to Joseph Greenberg*, vol. 2, 407–18. Saratoga, CA: Anma Libri.

Kiparsky, Paul. 2015. Phonologization. In Patrick Honeybone & Joe Salmons (eds.). *The Oxford handbook of historical phonology*. Oxford: Oxford University Press.

Yu, Alan C. L. (ed.). 2013. *Origins of sound change: approaches to phonologization*. 1st ed. Oxford: Oxford University Press.

Models in morphology: infixation. Michael Daniel (0+8+16 hours)

Conventional approaches to language models include assuming separate and independent linguistic modules responsible for syntax, morphology and phonology. Empirical research shows, however, that some morphological operations strongly interact with formal properties of the forms they are applied to. The

course introduces principles of prosodic morphology: phonological constraints on morphological structure, focusing on treatment of infixation.

Reading:

Spencer, Andrew and Arnold Zwicky. Handbook of morphology. Blackwell, 1998.

John McCarthy and Alan Prince. Prosodic morphology. Constraint Interaction and Satisfaction. (Manuscript)

Syntax: movement. Anna Volkova (4+8+32 hours)

Syntactic movement is a tool proposed within the derivational theories of grammar to deal with discontinuities such as wh-fronting, topicalization, extraposition, scrambling, and inversion. It is also used to account for case assignment as well as cross-linguistic variation in word order. The course segment starts by introducing the main assumptions of generative grammar, and the role of movement in the Principles and Parameters model (Chomsky 1981, 1986) and then addresses the developments on the topic brought about by the Minimalist Program (Chomsky 1993 and subsequent work). The aim of the course segment is to familiarize students with the theoretical construct of movement and evaluate its potential and limitations.

Reading:

Carnie, A. (2013) *Syntax: A generative introduction. Third edition.* Oxford: Blackwell.

Radford, Andrew (2006) *Minimalist Syntax Revisited.* Available online at:

<http://www.public.asu.edu/~gelderren/Radford2009.pdf>

Formal semantics: pronouns. Alexandr Podobrjajev (6+6+16 hours).

Compositionality. Lambda calculus. The main rules of composition in formal semantics. Pronominal semantics. Referential indices. Pronominal presuppositions. Pronouns as free and bound variables. Constraints on anaphora.

The semantic module starts with an overview of the basics of formal semantics including the principle of compositionality and the rules of semantic composition in a typed lambda calculus. This is supposed to set the background for a detailed discussion of semantics of pronouns: their role in reference, their presuppositions, their uses as free and bound variables. Towards the end of the module we discuss the constraints on anaphora from the point of view of formal semantics.

Reading:

Büring, D. 2005. *Binding Theory.* Cambridge: Cambridge University Press.

Heim, I., Kratzer, A. 1998. *Semantics in Generative Grammar.* Oxford: Blackwell.

Formal pragmatics: scalar implicatures. Natalia Ivlieva (6+6+16 hours)

After situating pragmatics in current linguistic theory and introducing the main contemporary theories of presupposition and implicature in formal pragmatics, we proceed with a detailed discussion of scalar implicatures in neo-Gricean and grammatical theories building on a case study of disjunction. The case study focuses on the problem of the (non-)existence of “exclusive or” in the natural language, different views on deriving the formal alternatives of disjunction, the scope of disjunction and its scalar implicatures in various syntactic and semantic contexts.

Reading:

Chierchia, G., Fox, D., Spector, B. Scalar implicature as a grammatical phenomenon. *Semantics: An International Handbook of Natural Language Meaning*, ed by C. Maienborn, K. von Stechow, P. Portner, Mouton de Gruyter, Berlin, 2012, pp. 2297–2332.

Grice, P. *Logic and conversation. Syntax and semantics*, vol. 3, ed. by P. Cole and J. L. Morgan, Academic Press, New York, 1975.

Sauerland, U. Scalar implicatures in complex sentences. *Linguistics and Philosophy*, 2004, no 3, pp. 367–391.

Gazdar, G. *Pragmatics: Implicature, Presupposition, and Logical Form*, Academic Press, New York, 1979.

Horn, L. R. *A Natural History of Negation*, University of Chicago Press, Chicago, 1989.

Grading system is based on cumulative grading of all course elements in proportion to the number of the lectures read in the element. There is no final exam.

A student’s success in each segment is **assessed** basing on a written assignment which may be a mini-research, an essay or a test, to be determined by the instructor responsible for this segment and to be submitted / accomplished at the end of the segment. In the case of a mini-research, the grade is based on the coverage of the topic / relevancy of the methodology and outcomes to the topic of the segment. In the case of

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an essay, the grade is based on how exhaustively the topic is covered. In the case of the test, the grade is based on the number of questions answered in their entirety.

The course is delivered as lectures and classes including discussion of home reading. The course requires regular **equipment** for presentations.