

**COURSE DESCRIPTIONS**

Code of course: BMA-LOTD-412

BMI-LOTD-412E BBN-FIL-312

BBN-FIL18-312

BMA-FILD-312

Title of course: Special Topics in Philosophy of Language: Reflections on Language and Varied Perspectives

Lecturer: Zsófia Zvolenszky

General aim of the course:

Through the literary lens of two acclaimed black women's short stories, we'll consider how varied perspectives play a role in their story-telling and how the richness of understanding gained through story-telling has eluded traditional approaches in philosophy of language. The authors are the Nigerian-born **Chimamanda Ngozi Adichie** and the American sci-fi writer **Octavia E. Butler**. The varied perspectives involve shedding light on reality from a radically different angle. That might be the perspective of a Nigerian black woman in the U.S., confronting the heritage of slavery and the ensuing division of blacks and whites in U.S. society, confronting discrimination against African Americans, which remains rampant in so many ways in American society. Or the perspective of a black woman facing discrimination, sexual harassment, objectification at the workplace. Or, through sci-fi work of Butler's, the perspective of people confronting coexistence with alien species that sheds light on what it would be like for men to give birth (serving as hosts to the alien species), and the light that this sci-fi story, in turn, sheds on things we overlook about the physical burden child-bearing puts on human women. Or how sci-fi work can shed light on societal prejudices, stigmas about diseases; about the role of anger in humans if communication skills were massively impaired. We'll explore how those varied perspectives of the short stories can (and cannot) be captured with, can be informed by, the tools, observations of recent work in philosophy of language about phenomena like pejorative language, oppression through language, lexical effects.

Content of the course:

- ideal and non-ideal communication
- lying and misleading
- generics and defective reasoning,
- slurs and pejorative language
- linguistic oppressing, linguistic silencing
- lexical effects
- the speech act of consent
- each topic discussed will be coupled with a short story by Adichie or Butler

Grading criteria, specific requirements for the course:

- 40–60 pages of reading each week
- posting 2 questions/comments at the course discussion forum each week (the 6 best make up 25 % of the final grade), by 4 p.m. on Tuesday
- class participation (worth 20 %)

- writing 3 short (2-3-page-long) response papers during the semester (the best 2 of these go towards 35 % of the final grade)
- once during the semester, giving a presentation (this involves briefly introducing the readings as well as students' questions and comments, worth 20 %)
- Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.

Required readings:

Chimamanda Ngozi Adichie: *The Thing Around Your Neck* (2009, Fourth Estate).

Octavia Butler: *Bloodchild and Other Stories* (1995, 4W8W).

Herman Cappelen and Josh Dever: *Bad Language* (2019 OUP).

Code of course: BMA-LOTD-202, BMA-LOTD-202E

Title of course: Introduction to Philosophy of Language

Lecturer: Zsófia Zvolenszky

General aim of the course:

Our words, sentences are about—refer to—things in the world: objects, people, events. Plausibly, the meanings of expressions play a central role in explaining this referential feature: for example, it is in virtue of the meaning of the word 'horse' that it refers to horses. But what exactly does this role played by meaning consist in? The answer is not at all straightforward. Consider these two sentences:

Joanne K. Rowling is a famous novelist.

Robert Galbraith is a famous novelist.

How does the meaning of the first sentence differ from the meaning of the second? After all, both are about the same individual: who became famous as J. K. Rowling but has also written under the pseudonym 'Robert Galbraith'. Yet—according to Gottlob Frege—the two sentences cannot have the same meaning because someone may rationally believe one (the first, say), without believing the other. This is what Frege's "puzzle" consists in, providing the starting point for 20th-century philosophy of language. In the seminar, our aim is to gain a greater understanding of the nature of meaning, and its relation to reference, truth, communication.

The aim of the course is to review and discuss central issues in philosophy of language based on influential primary and secondary texts:

Content of the course:

- Frege on sense and reference, on proper names and definite descriptions
- Russell and Strawson on definite descriptions
- Kripke on proper names
- Kripke and Putnam on natural kind terms
- Grice on meaning
- Austin and Searle on speech acts
- Grice on communication
- Applications of Grice, Frege, Strawson: for example, pejorative language use

Grading criteria, specific requirements for the course:

- 30–40 pages of reading each week

- at the beginning of (almost) every seminar, a short online quiz for which you will receive an access link (the 6 highest scores count towards 20% of the final grade) in Canvas
- posting 2 questions/comments at the course discussion forum each week (the 6 best make up 20 % of the final grade), by 4 p.m. on Tuesday
- class participation (worth 15 %)
- writing 3 short (2-3-page-long) response papers during the semester (the best 2 of these go towards 30 % of the final grade)
- once during the semester, giving a presentation (this involves briefly introducing the readings as well as students' questions and comments, worth 15 %)
- Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.

Required readings:

Alongside texts that have been highly influential in the development of 20th-21st-century philosophy of language (classic articles by Frege, Grice, Kripke, Strawson, Austin, Searle, Putnam), and a recent survey article on racism in language use (by Langton, Haslanger and Anderson), one more reading will function as a textbook:

W. Lycan (ed.) 2008: *Philosophy of Language: A Contemporary Introduction*, 2nd edition. London: Routledge (referred to as 'Lycan' in the schedule below). Excerpts from selected chapters will be assigned.

In the process of discussing the central ideas of the classic articles, we'll also reflect on limitations in their scope and recent philosophical attempts at responding to those limitations.

Electronic copies of all required readings are available in the course's Dropbox folder for the course. The classic texts (by Frege, Grice, Kripke and Strawson) can also be found in the following anthology:

- P. Martinich and D. Sosa (eds.) 2012: *The Philosophy of Language*, 6th edition. Oxford: OUP. (Previous editions are ok, except for Frege's "Sense and Reference", which appears in a different translation in earlier editions.)

Langton–Haslanger–Anderson's survey article "Language and Race" can be found in the following anthology of essays:

- G. Russell and D. G. Fara (eds.) 2012: *Routledge Companion to the Philosophy of Language*. New York: Routledge.

The bulk of the articles can also be found in the following anthology:

–P. Martinich (ed.) 1996 : *The Philosophy of Language*. Oxford: OUP.

Code of course: BMI-LOTD-317E

Title of course: A historical introduction into the philosophy of mathematics

Lecturer: András Máté assoc. prof. (retired)

General aim of the course:

Introduction to the problems of the philosophy of mathematics and its classical schools, with an outlook to the contemporary debates.

Content of the course:

The nature of mathematical objects and mathematical knowledge has been an important question in European philosophy since Plato and Aristotle. However, philosophy of mathematics as a substantive branch of philosophy closely connected with foundational research in mathematics originates with Frege's *Foundations of Arithmetics* (1884). Frege's work - as well as the works of his contemporaries - answered a problem situation formed by the developments of 19th century mathematics, but it led to a new problem situation because Frege's and Cantor's answer was encumbered by the same paradox. Their followers tried to eliminate the possibility of occurrence of paradoxes in mathematics in different ways. These endeavours led to the formation of the schools that are called the classical schools in philosophy of mathematics: logicism, formalism and intuitionism. They are not just philosophical opinions about mathematics, but research programs in the foundations of mathematics as well. The course presents this historical process from the problem situation in 19th century mathematics to the results of foundational research in the nineteen-thirties.

Topics:

Developments and problems in 19th century mathematics
Bolzano, Cantor and the infinite
Frege's logicism and his construction of natural numbers
Dedekind's construction of natural numbers
New paradoxes of infinity – the first fall of logicism
The logicism of Russell and Ramsey
Hilbert's program
Brouwer's intuitionism
Gödel's theorems and the second fall of logicism
The paradox of the liar and the indefinability of truth
Decision problem, Church-thesis, Church(-Turing)-theorem

Grading criteria, specific requirements:

For the grade, the student should produce a presentation about some subject connected with the topic of the course. It will be discussed at a "house conference" in the exam period. (S)he should participate in the discussion of the presentations of the other students, too.

Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.

Required reading:

Benacerraf, P. – H. Putnam (eds.): *Philosophy of mathematics*, Cambridge U.P., 1983

van Heijenoort, J. (ed.): *From Frege To Gödel: A Source Book in Mathematical Logic, 1879-1931*. Harvard U. P.; reprinted with corrections, 1977.

Mancosu, P. (ed.): *From Brouwer to Hilbert. The Debate on the Foundations of Mathematics in the 1920s*, Oxford University Press, 1998.

Code of course: BBN-FIL-302, BMA-FILD-302, BMA-LOTD-101, BMI-LOTD-101E

Title of course: Logic seminar

Lecturer: Márton Gömöri

General aim of the course:

The course provides an introduction to the basic concepts and methods of formal logic.

Content of the course:

The course covers the following topics:

- Truth and valid inference
- Aristotelian syllogisms
- Propositional logic
- Elements of predicate logic
- Aristotelian vs. recursive definitions
- Types of relations

Grading criteria, specific requirements:

Grading is based on homeworks.

Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.

Required reading:

P. D. Magnus and T. Button, forallx:Cambridge, 2017.

Suggested further reading:

J. Barwise and J. Etchemendy, Language, Proof and Logic. CSLI Publications, 2011.

L. T. F. Gamut, Logic, Language, and Meaning. Volume I: Introduction to Logic. University of Chicago Press, 1991.

Code of course: BMA-LOTD-613, BMI-LOTD-613E

Title of course: Philosophy of probability and statistics

Lecturer: Márton Gömöri

General aim of the course:

The course covers selected topics in the foundations of probability and statistical methods.

Content of the course:

Depending on the interest of students, topics may include: interpretations of probability in specific scientific theories; conceptual problems in statistical testing; subjective probability and Bayesian epistemology; chance, randomness and determinism; implications of chaos theory; the method of arbitrary functions; Monod's conception of chance; chance and causation; the Common Cause Principle; propensity and 'primitivist' approaches to probability; frequentism; the logical conception of probability; the principle of indifference; 'no-theory' theories of probability.

Grading criteria, specific requirements:

Preparing from readings + a 45-minute seminar talk + active participation in the discussions

Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.

Required reading:

Hájek, Alan, "Interpretations of Probability", The Stanford Encyclopedia of Philosophy (Fall 2019 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2019/entries/probability-interpret/>.

Gillies, Donald (2000). Philosophical theories of probability. London New York: Routledge.

Jan von Plato, The method of arbitrary functions, The British Journal for the Philosophy of Science 34 (1), 37-47.

Claus Beisbart & Stephan Hartmann (eds.), Probabilities in Physics, Oxford University Press (2011)

Bandyopadhyay, P., and Forster, M. (eds.), 2011, Handbook for the Philosophy of Science: Philosophy of Statistics, Elsevier.

Romeijn, Jan-Willem, "Philosophy of Statistics", The Stanford Encyclopedia of Philosophy (Spring 2022 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2022/entries/statistics/>>.

Code of course: BMA-LOTD-208, BMA-LOTD-208E

Title of course: Determinism--Indeterminism in Quantum Mechanics

Lecturer: Prof. László E. Szabó

General aim of the course:

Web site: <http://phil.elte.hu/leszabo/QM/2022-2023-1>

The lecture course provides introduction to the basic issues in foundations of quantum mechanics, with special focuses on the determinism–indeterminism problem.

Content of the course:

- The worldview of the end of 19th century physics: determinism, locality, Markovity
- The fundamental conceptions of QM
- QM as non-classical probability theory
- Classical probability theory
- Interpretations of probability
- Probability on Hilbert lattice
- Relationship between quantum and classical probability
- Quantum logic
- Two different interpretations of quantum probability
- The measurement paradox
- Two different interpretations of the wave function
- The measurement paradox and its popular formulations (Schrödinger's cat, etc.)
- No Go theorems of QM
- Neumann theorem
- Jauch--Piron theorem
- Kochen--Specker theorem
- The Einstein--Podolsky--Rosen argument
- "Laboratory Record" theorem
- Bell theorem
- Reichenbach's common cause principle
- Greenberger--Horne--Zeilinger theorem
- No Go theorems and determinism
- Free will and QM
- The context of the problem of free will
- The Newcomb paradox
- Phenomenology of free will
- Free will and QM
- Possible Resolutions

- The "Kolmogorovian Censorship" hypothesis
- Arthur Fine's Interpretation of Quantum Statistics

Grading criteria, specific requirements:

Oral exam from the material of the lectures. Video records and the slides of the lectures will be available.

Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.

Required reading:

- The slides and lecture notes to the course, which will be available in PDF form.
- L. E. Szabó: The Einstein-Podolsky-Rosen Argument and the Bell Inequalities, Internet Encyclopedia of Philosophy (2008)

Suggested further reading:

- E. Szabó László: A nyitott jövő problémája - véletlen, kauzalitás és determinizmus a fizikában, Typotex Könyvkiadó, Budapest, 2002. (http://phil.elte.hu/leszabo/nyitott/nyitott_web_hu.pdf) (L. E. Szabó, The Problem of Open Future: Chance, Causality, and Determinism in Physics, draft manuscript will be available)
- Michael Redhead: Incompleteness, Nonlocality, and Realism: A Prolegomenon to the Philosophy of Quantum Mechanics (Clarendon Paperbacks) [elérhető az olvasóteremben is]
- H. Reichenbach: Philosophic Foundations of Quantum Mechanics, University of California Press, 1944. [elérhető az olvasóteremben]
- Bas C. van Fraassen: Quantum Mechanics: An Empiricist View (Clarendon Paperbacks) [elérhető az olvasóteremben]
- Pitowsky, I., Quantum Probability - Quantum Logic (Lecture Notes in Physics 321), (Springer, Berlin)(1989)
- M. Rédei: Quantum Logic in Algebraic Approach (Fundamental Theories of Physics Vol. 91.) Kluwer Academic Publishers, Dordrecht, Boston and London, 1998. (5. fejezet)
- L. E. Szabó and Arthur Fine: A local hidden variable theory for the GHZ experiment, Physics Letters A295 (2002) pp. 229-240
- L. E. Szabó: Critical reflections on quantum probability theory, in M. Rédei, M. Stoeltzner (eds.), John von Neumann and the Foundations of Quantum Physics, Vienna Circle Institute Yearbook 2001, Kluwer, Dordrecht.
- L. E. Szabó: What remains of probability?, in D. Dieks, W. Gonzalez, S. Hartmann, M. Weber, F. Stadler and T. Uebel (eds.), The Present Situation in the Philosophy of Science, Springer, forthcoming. [PDF]
- L. E. Szabó: Objective probability-like things with and without objective indeterminism, Studies in History and Philosophy of Modern Physics 38 (2007) 626–634 [Preprint (PDF)]
- G. Hofer-Szabó, M. Rédei, L. E. Szabó: The Principle of the Common Cause, Cambridge University Press, 2013.

Code of course: BMI-LOTD17-207E

Title of course: Philosophy of Science Seminar

Lecturer: Dr. Márton Gömöri, Prof. László E. Szabó

General aim of the course:

Web site: <http://phil.elte.hu/leszabo/TudfilSzeminarium/2022-2023-1>

The aim of the course is to review and discuss the most important issues in philosophy of science, on the bases of the following readings:

- M. Schlick: Positivism and Realism, in *The Philosophy of Science*, R. Boyd et al. (eds.) The MIT Press, Boston 1992.
- H. Reichenbach: *Meaning, in Experience and Prediction: An Analysis of the Foundations and the Structure of Knowledge*
- P. Bridgman: *The Operational Character of Scientific Concepts*, in *The Philosophy of Science*, R. Boyd et al. (eds.) The MIT Press, Boston 1992.
- A. Garfinkel: *Reductionism*, in *The Philosophy of Science*, R. Boyd et al. (eds.) The MIT Press, Boston 1992.
- T. Kuhn: *Scientific Revolutions*, in *The Philosophy of Science*, R. Boyd et al. (eds.) The MIT Press, Boston 1992.
- Arthur Fine: *The Natural Ontological Attitude*, in *The Philosophy of Science*, R. Boyd et al. (eds.) The MIT Press, Boston 1992.
- M. Colyvan: *Indispensability Arguments in the Philosophy of Mathematics*, *The Stanford Encyclopedia of Philosophy* (Fall 2004 Edition), Edward N. Zalta (ed.).
- W. V. O. Quine: *Two Dogmas of Empiricism*, *Philosophical Review* 60 (1951) 20–43.
- W. V. O. Quine: *On Empirically Equivalent Systems of the World*, *Erkenntnis* 9 (1975), pp. 313–328.
- B. van Fraassen: *Arguments concerning scientific realism*, Ch. 2 in *The Scientific Image*, Oxford University Press Inc., New York 1980.
- W. V. O. Quine: *Epistemology Naturalized*, in: *Ontological Relativity and Other Essays*, Columbia University Press, New York.
- L. E. Szabó: *Meaning, Truth, and Physics*, In G. Hofer-Szabó, L. Wroński (eds.), *Making it Formally Explicit*, *European Studies in Philosophy of Science* 6. (Springer International Publishing, 2017) DOI: 10.1007/978-3-319-55486-0_9.
(Preprint: <http://philsci-archive.pitt.edu/12891/>)
- L. Carroll: "What the Tortoise Said to Achilles" which is available here: <http://www.ditext.com/carroll/tortoise.html>
- Selection from Plato's *Meno*. The text is available from the online library. The item is "The Dialogues of Plato, Volume 1: Euthyphro, Apology, Crito, Meno, Gorgias, Menexenus", please read the section "A Proof of Recollection" (pp. 164–171)
- Hilary Putnam, *Brains in a vat*, http://ieas.unideb.hu/admin/file_2908.pdf
- Bruce MacLennan, "Synthetic Ethology - An Approach to the Study of Communication". In *Artificial Life II: The Second Workshop on the Synthesis and Simulation of Living Systems*, Santa Fe Institute Studies in the Sciences of Complexity, proceedings Vol. X, edited by Christopher G. Langton, Charles Taylor, J. Dooyne Farmer, and Steen Rasmussen. Redwood City, CA: Addison-Wesley, 1992, pp. 631–658. (Available from the online library.

Grading criteria, specific requirements:

Preparing from the corresponding papers + a 45-minute seminar talk + active participation in the discussions.

Erasmus students may obtain extra credits for the fulfilment of additional tasks at the discretion of the lecturer.