NEWMANINSTITUTET

HÖGSKOLA FÖR TEOLOGI, FILOSOFI OCH KULTUR

Logic and Analysis of Argumentation (7,5 ECTS credits)

Level: 1st cycle
Discipline: PHILOSOPHY
Course ID: 0126

Admission requirements

General entry requirements for studies at universities. Students taking part in the course as a part of their Bachelor's degree program must have completed Course A, Introduction in Philosophy and Theology (30 ECTS credits). Students taking part in the course as a freestanding course are expected to have corresponding prior knowledge.

Educational goals

After having completed the course the students are expected to be able to:
- Translate between natural language and symbolic logic, treat propositional and predicate logic syntactically and semantically as well as give an account of basic concepts such as truth, consequence, equivalence and derivability in this context;
- Reason about the relation between symbolic logic, on the one hand, and argumentation in different areas and especially theology, on the other.

Course contents

The traditional logic has its roots in Aristotle, who investigated the validity of arguments by studying their formal structure. The question of what separates a valid from an invalid argument, as well as good from bad argumentation is one of the central problems in modern logic. In order to answer this question, arguments expressed in natural languages are translated into formal languages of symbolic logic. In this way, the logic structure stands out clearer. In this course, two such formal languages are studied: propositional- and predicate-logic language. Different ways of evaluating the validity of arguments comprising propositions in these languages are thereafter looked at. Last, and in relation to this, the question of what symbolic logic can – and cannot – tell us on validity of arguments in different areas of argumentation, especially in theology, is treated.

Teaching and examination

The course is taught in English. The examination is in the form of a written exam at the end of the course.

Bibliography

Bowell, Tracy and Kemp, Gary, *Critical Thinking. A Concise Guide*, 4th ed., Routledge, 2014.
Halbach, Volker, *The Logic Manual*, Oxford University Press, 2010.
A compendium written by Taeda Tomic will be distributed to the students. Its first part is on propositional logic and will be distributed two weeks before the course start; its second part is on predicate logic and will be distributed two weeks before starting to work on the corresponding part of the course.

Literature for extra reading:
Dalen, Dirk van, *Logic and Structure*, Berlin: Springer, 2004.
Read, Stephen, *Thinking About Logic*, Oxford, UK: Oxford University Press, 1995.

See also "Kursplaner: allmänna bestämmelser" (Course plans: General rules)

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