

# DEPARTMENT OF PHILOSOPHY, LINGUISTICS AND THEORY OF SCIENCE

# LOG280 History of Logic, 7.5 credits

Logikens historia, 7,5 högskolepoäng Second Cycle

#### Confirmation

This course syllabus was confirmed by Department of Philosophy, Linguistics and Theory of Science on 2022-11-14 to be valid from 2023-01-16, spring semester of 2023.

*Field of education:* Science 100% *Department:* Department of Philosophy, Linguistics and Theory of Science

#### Position in the educational system

The course is included in the degree programme Logic, Master's (120 credits) programme (H2LOG) and can also be given as a freestanding course.

Main field of studies Logic Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

#### **Entry requirements**

For admission to the course successful completion of at least 7.5 credits of Logical theory (LOG111) or Logic in Computer Science (DAT060 or DIT201), or the equivalent, is required.

#### Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- demonstrate knowledge and understanding of Aristotle's syllogistics, as well as of the other historical moments studied in the course,
- demonstrate knowledge and understanding of the developments and departures

from Aristotle's syllogistics in each of the historical moments studied in the course,

• demonstrate knowledge and understanding of the historical process whereby logic emerges as a formal discipline,

## Competence and skills

• formulate and present proofs in the historical logical systems studied in the course, and

## Judgement and approach

• critically discuss, analyse and evaluate the results of the course and its applications.

## **Course content**

History of Logic aims to visit the history of Western logical thought at 5 crucial moments; i) Aristotle's syllogistic; ii) Leibniz' universal calculus; iii) Kant's logic of pure reason; iv) Bolzano's logic as theory of science; and v) Frege's logic as a foundation for arithmetics. The course aims to unveil the historical details of the shift from Aristotelian logic - which dominated Western logical thought until Frege's time - to post-Fregean logic, which, triggered by mathematical enterprises, departs in fundamental ways from the Aristotelian tradition.

## Form of teaching

Teaching is given in the form of lectures and seminars.

Language of instruction: English

## Assessment

The course is assessed individually through a written essay or project report, and oral presentation. The marking teacher may request supplementation of the examined student performance.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed. The same applies to placements and professional placements (VFU), although this is restricted to just one additional examination session.

### Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

#### **Course evaluation**

Students who are currently taking the course or have completed it will be given the opportunity to express their views and share their experiences in an anonymous course evaluation. A compilation of the course evaluation and the course coordinator's reflections on it will be made available to the students within reasonable time after the end of the course. The next time the course is taught the compilation and any measures based on it will be presented to the students.