
Non-Classical Logic
A proposal of a seminar for Erasmus PhD students

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The aim of the course is to provide an introduction to non-classical logic. From a philosophical point of view, the most important non-classical logics are: many-valued Łukasiewicz's logics, modal logics, and intuitionistic logic. We will discuss the philosophical origins of these logics, and present then their semantic description. The basic tools here employed are logical matrices and Kripke structures. By means of these, at the end of the course, students should be able to solve typical exercises such formalizing sentences of everyday language, and decide whether a given formula is a tautology of a given non-classical logic.

Recommended literature:

- [1] R. Epstein, *The Semantic Foundations of Logic, Vol. 1: Propositional Logics*, Springer (Nijhoff International Philosophy Series 35), 1990.
- [2] G. Priest, *An Introduction to Non-Classical Logic*, Cambridge University Press, 2008.