

## LFILO2211

2014-2015

## Formalized logic B

5.0 credits	30.0 h	2q	This biannual
			course is taught on
			years 2014-2015,
			2016-2017,

Teacher(s):	Verdée Peter ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	Basic instruction in logic and philosophy of language.
Main themes :	Each year this course will select a particular theme - for example, theories of grammaticality, meaning, discourse analysis, pragmatics, modal logics, lambda calculus, theory of proof, set theory, non-classical logic, contemporary approaches to ancient logic, etc.
Aims :	At the end of the course the student should be able to understand the background of current debates in logic  - understood as including the theory of argumentation (rhetoric) and philosophy of language  - and eventually be able to conduct research in one of these areas.  At the end of the course the student should:  - Be able to use certain specific tools for research in logic and philosophy of language;  - Have a good general grasp of the breadth of contemporary research, and if appropriate, of the history of logic and philosophy of language;  - Be able to make use of contributions from other disciplines in philosophical research in logic and philosophy of language.  The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Evaluation methods :	Travail + examen oral
Teaching methods :	/
Content :	Non-classical logics for philosophical problems In this course the students will become acquainted with non-classical logic methods to solve philosophical problems. Classical logic is not suitable as a means to explain and analyze scientific and everyday reasoning by human agents. For some applications classical logic validates unreasonable conclusions, and for other application its logical vocabulary is simply inadequate. The main non-classical logics with philosophical motivation will be studied and general techniques will be acquired. Moreover, students will be introduced to contemporary research questions in non-classical logic.
	More specifically, the following research questions will be handled:  - how can we understand the use of counterfactual or subjunctive conditionals?  - how can we reason from inconsistent data? (paraconsistent logics)  - how can one warrant that the antecedents of logical implications are relevant for their conclusions (and vice versa)? (relevance logics)  - how can we reason with obligations and permissions? (deontic logics)  - what is the logic of constructive proofs in mathematics? (intuitionistic logic)  - how can we formalize reasoning with revisable conclusions? (adaptive logics)
Bibliography :	John P. Burgess, Philosophical logic, Princeton University Press, 2009. Lou Goble, ed., The Blackwell guide to philosophical logic, Wiley-Blackwell, 2001. Graham Priest, An introduction to non-classical logic: from if to is (2nd ed.), Cambridge University Press, 2008. Christian Straßer, Adaptive Logics for Defeasible Reasoning. Applications in Argumentation, Normative Reasoning and Default Reasoning, Springer, 2014.
Other infos :	
Cycle and year of study:	> Master [120] in Philosophy > Master [120] in French and Romance Languages and Literatures : General > Certificat universitaire en philosophie (approfondissement) > Master [120] in Linguistics > Master [60] in Philosophy

Université Catholique de Louvain - COURSES DESCRIPTION FOR 2014-2015 - LFILO2211

Faculty or entity in	EFIL
charge:	