UCL Université catholique de Louvain LFILO2241 2016-2017 Advanced Studies in the Philosophy of Natural Sciences B

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

Teacher(s) :	Guay Alexandre ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	Basic instruction in philosophy of natural science ; Reading knowledge of English sufficient to allow for study of contemporary texts in the philosophy of natural science.
Main themes :	Philosophical analysis of contemporary scientific practices in accordance with a two-fold approach. Methodologically, to ask questions about the applicability and the limits of validity of scientific explanations, relative to other approaches to reality. In terms of content, to learn to see the contributions of natural science as a more general means of comprehending particular phenomena.
Aims :	Upon completion of the course the student should be able - to pose critical questions about the importance and the limits of the validity of natural science - to connect scientific discourse with other forms of discourse about the same phenomenon 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 :	The evaluation consists of two elements: an in class oral presentation about a research article (50% of the final grade) and a personal research essay (50%). In second session, the evaluation consists of a personal research essay (50%) plus the oral presentation (50%). If the presentation grade is absent or has already been used, this part of the grade will be replaced by an exam.
Teaching methods :	This course will mostly be based on traditional lessons. The main method will be the systematic comparison between approaches and positions. Because of the diversity of authors and approaches studied, the students have to prepare for the lessons by carefully reading the suggested materials. Participation during discussions in class is also essential.
Content :	Physical symmetries: epistemological and ontological aspects. Symmetry considerations dominate modern physics, both in quantum mechanics and in relativity. This course is designed to give students the opportunity to explore the philosophical aspects of such theoretical developments. A special effort will be made to keep the conceptual issue.
Bibliography :	A list or references and reading material will be available via Moodle.
Other infos :	
Faculty or entity in charge:	EFIL

Programmes / formations proposant cette unité d'enseignement (UE)					
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage	
Master [120] in Philosophy	FILO2M	5	-	٩	
Master [120] in Ethics	ETHI2M	5	-	٩	
	FILA9CE	5	-	٩	
Master [60] in Philosophy	FILO2M1	5	-	٩	
Master [120] in Environmental Science and Management	ENVI2M	5	-	٩	