UCL Université catholique de Louvain

LSC2220

2013-2014

Philosophy of science

2.0 credits	30.0 h	2q

Teacher(s) :	Guay Alexandre ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Each year three central themes are chosen related to the dialogue between the sciences and their methods, and philosophical questioning.
Aims :	The aim of the course is to invite Master students in science to reflect on some of the current central themes in the philosophy of science, which are related to their interests and the scientific discipline in which they have specialised. They will have to analyze, alone or in a group, a specific philosophical issue that they will choose in relation to the themes addressed in the classroom lectures. Students will have to convey the results and conclusions of their investigations in a written essay as well as through an oral presentation. *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 oral presentation in small groups during the semester, and an examination organised during the examination sessions. The final exam will cover all lectures and presentations.
Teaching methods :	The first part of the course consists in lectures on the three themes. In the meantime, students will register on iCampus and form teams of maximum three members. Each team will choose a presentation subject in relation with one of the themes. The subject, the related list of references and the oral presentation plan have to be approved by the professor. He remains available to help students to develop their presentation.The second part of the class will be devoted to the oral presentations. Attendance to all classes is mandatory.
Content :	The three themes chosen for 2013-14: 1) The concept of law of nature. What is a law of nature? Are laws of nature necessary? Are all scientific disciplines looking for laws? 2) The concept of an individual in physics and biology. What is an individual? How do we identify an individual? Are organisms, species or particles individuals? 3) Philosophical approaches to causality. What is causality? How do we identify a causal relation? What role does causality play in scientific explanations?
Bibliography :	A syllabus and a complete bibliography will be available via iCampus.
Cycle and year of study :	> Master [120] in Biology of Organisms and Ecology > Master [120] in Biochemistry and Molecular and Cell Biology > Master [120] in Mathematics > Master [60] in Mathematics > Master [120] in Environmental Science and Management > Master [60] in Biology > Master [120] in Physics > Master [60] in Physics > Master [120] in Philosophy > Teacher Training Certificate (upper secondary education) - Philosophy > Master [60] in Philosophy > Master [60] in Chemistry > Master [120] in Chemistry > Master [60] in Geography : General > Master [120] in Geography : General > Master [120] in Geography : Climatology
Faculty or entity in charge:	SC