UCLouvain

lfilo2003e

2023

Ethics in the Sciences and technics (sem)

2.00 credits	15.0 h + 15.0 h	Q2

Teacher(s)	Guay Alexandre (compensates Pence Charles) ;Jeanmart Hervé ;Rezsohazy René ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	Basic instruction in the philosophy of natural science and in ethical reflection ; Reading knowledge of English sufficient to allow for study of contemporary texts in philosophy of Nature and philosophy of natural science.
Main themes	The course will consist of a philosophical analysis of techno-scientific practices along parallel tracks. - It will examine the societal dimensions of techno-scientific practice, and introduce the fundamental concepts of the sociology of science as well as movements related to " Sciences, technologies, societies " . - It will also portray the ethical dimension of scientific practices, within the multiple dimensions of the techno-scientific sphere. The course will have two parts: • In the first, theoretical part it will provide an introduction to basic concepts in the sociology of science and the fundamental concepts of the ethical approach to science and technology. • The second part will analyze case studies chosen each year.
Learning outcomes	**At the end of this learning unit, the student is able to :** Upon completion of the course, the student shall be able to : 1 • analyze contemporary techno-scientific practices • distinguish the social and ethical significance of these practices
Evaluation methods	**1. Seminar for students in the Faculty of Sciences (2 ECTS)** Final projects will be prepared by inter-disciplinary groups (2-4 students) on a theme chosen in discussion with the professors. These projects will result in a written report and in an oral presentation with discussion, planned for the mini-symposium which closes the course. **2. Seminar for students in philosophy (3 ECTS)** Students in philosophy are asked to produce a philosophical work of around a dozen pages, expanding on the theme treated with the students in the sciences. Final evaluation will be based on both assignments presented, weighted according to the number of credits associated with each (40% group work, 60% individual work).
Teaching methods	• Topical presentations by the professors in pairs (scientist and philosopher), followed by a debate with the class • Watching a film • Presentation of group work by the students
Content	The objective of this course is to develop the fundamental concepts needed for a critical approach to the ethical relationship between science and society. The course is an interdisciplinary activity, both for the professors and the students. It consists of 2 ECTS for the scientists and 5 ECTS for the philosophers. The course thus consists of two distinct parts. 1) Part for all students: Six lecture sessions followed by in-class discussion on general themes (for example: ethical argument, biodiversity and the economy, genetically modified organisms, energy policy, in-vitro fertilization, etc.). 2) Part specifically for students in philosophy: Students in philosophy will also write a longer work of around a dozen pages on the philosophical and ethical dimensions of the group project undertaken with students in the sciences (see below).
Inline resources	PowerPoint presentations and other relevant reading accessible via Moodle.
Faculty or entity in charge	EFIL

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Data Science : Statistic	DATS2M	2		
Certificat d'université en éthique et société	ETES9CE	2		
Master [120] in Geography : Climatology	CLIM2M	2		
Master [120] in Biology of Organisms and Ecology	BOE2M	2		
Master [60] in Physics	PHYS2M1	2		
Master [120] in Environmental Science and Management	ENVI2M	2		
Master [60] in Geography : General	GEOG2M1	2		
Master [120] in Biochemistry and Molecular and Cell Biology	BBMC2M	2		
Master [120] in Statistics: Biostatistics	BSTA2M	2		
Master [60] in Biology	BIOL2M1	2		
Master [120] in Mathematics	MATH2M	2		
Master [60] in Mathematics	MATH2M1	2		
Master [120] in Chemistry	CHIM2M	2		
Master [120] in Statistics: General	STAT2M	2		
Master [120] in Public Administration	ADPU2M	2		
Master [120] in Physics	PHYS2M	2		
Master [60] in Chemistry	CHIM2M1	2		
Master [120] in Geography : General	GEOG2M	2		
Master [120] in Medical Physics	PHMD2M	2		