



SC2220

Philosophy of science

[30h] 2 credits

This course is taught in the 2nd semester

Teacher(s): Michel Ghins
Language: French
Level: Second cycle

Aims

The aim of this course is to make last year students in science to think about some current central themes in philosophy of science, which are related to their interests and the scientific discipline in which they have decided to specialize. They will have to analyse, alone or with others, a specific philosophical question that they will choose in relation to the themes discussed in classroom lectures. The students will have to be able to convey the results of their investigation in a written essay and an oral presentation.

Main themes

Each year, three central topics are examined. For example: the issue of the arrow of time and irreversible processes in thermodynamics and chaos theory, the epistemological status of models in science and the problem of their correspondence with some unobservable entities and processes, the ethical status of human embryos and cloning.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Method:

The course begins with a few lectures in which we present our methodology and the three main topics. The students register on iCampus and form groups of at most three people. Each group chooses a precise topic of investigation and a bibliography, with the instructor's approval. The instructor is readily available to the students to give them the relevant information and help them to write their essay. At the end of the course, the students make an oral presentation of their essay during a study day, in the presence of all students.

Attendance to lectures is required.

Lecture notes and selected bibliography are made available.

The evaluation is based on the essay and the oral presentation.

Other credits in programs

BIOL22/A	Deuxième licence en sciences biologiques (Biologie moléculaire, cellulaire et humaine)	(2 credits)	Mandatory
BIOL22/B	Deuxième licence en sciences biologiques (Biologie des organismes et des populations)	(2 credits)	Mandatory
CHIM22	Deuxième licence en sciences chimiques	(2 credits)	Mandatory
MATH22/E	Deuxième licence en sciences mathématiques (Economie mathématique)	(2 credits)	Mandatory
MATH22/G	Deuxième licence en sciences mathématiques	(2 credits)	Mandatory
PHYS22/A	Deuxième licence en sciences physiques (Physique appliquée)	(2 credits)	Mandatory
PHYS22/G	Deuxième licence en sciences physiques	(2 credits)	Mandatory
PHYS22/T	Deuxième licence en sciences physiques (Physique de la terre, de l'espace et du climat)	(2 credits)	Mandatory