

## Higher Institute of Philosophy


**FILO1210** **Philosophy of Nature**

[30h] 4 credits

This course is taught in the 1st semester

**Teacher(s):** Michel Ghins  
**Language:** French  
**Level:** First cycle

**Aims**

The aim of the course is to introduce the student to a metaphysical reflection on nature that takes into consideration the main advances of the philosophical tradition and of modern science.

By the end of the course, the student is expected to have mastered the central topics and the main authors that have articulated a philosophical approach to nature. The student should be able to present a question, orally or in writing, in a clear, synthetic, and precise manner. The student will be able to argue in a rigorous manner in favor of one of the positions addressed while also taking a critical stance towards that same position. Finally, the student will be able to orient him or herself in the primary and secondary literature in the philosophy of nature.

**Main themes**

The course is organized around the study of some fundamental concepts: matter, space, time, causality. Each of these concepts is studied in the main contexts that marked the development of rational thought: Greek, Classical, and Contemporary philosophy; Classical and Contemporary physics; Contemporary biology. The main emphasis is on the transition from the classical idea of nature, linked to mechanism, to contemporary conceptions (dominated either by the most recent developments in physics or in the social sciences), which more and more regard nature in its evolutionary aspects and place ever greater importance on the phenomena of emergence, of teleonomy, and on what one might call the "historicity" of nature. The course ends with a schematic examination of the problem of the meaning of nature in relation to the human being and attempts also to link this reflection on nature to philosophical anthropology in the context of the problems arising from contemporary ecology.

**Content and teaching methods**

Philosophy of nature is defined as an ontological approach of natural beings and nature as whole, which takes the results of natural sciences into account, but is not reducible to them.

To begin with, we shall study two influential classical positions in philosophy of nature: that of Aristotle (formalism), and that of Descartes (mechanism), which, although developed with reference to the science of their times, continue to mark our own times. We shall then focus on Newtonian science and Kant's philosophical takeover of it. Finally, we shall reflect upon the image of nature offered by contemporary biological sciences (theory of evolution) and cosmology (anthropic principles) and on the question of the place of human beings in nature.

Throughout the course, we shall address several topics of current interest, such as the status of space, time, and causality. Space and time: are these real? Do we live in a deterministic universe? Or, quite to the contrary, do we live in an undeterministic universe, as some interpretations of quantum physics and chaos-theory appear to indicate? Is a finalist vision of nature still rationally defensible today?

As this is an introductory course, it will be based on classroom lectures in which students are strongly encouraged to participate with questions that not only lead to a deepening of their grasp of the subject but also to discussions. Discussion sessions will also be organized. Finally, the students are encouraged to read part of the class notes as well as some indicated writings before the lectures.

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

Pre-requisites: We shall assume that the student has a basic knowledge of the history of philosophy.

Assessment: The assessment will be based either on an oral exam addressing the issues discussed in the class or on an essay written by the student.

Supporting material: Complete class-notes as well as a bibliography are available.

Course Holder/Course Supervision: Exclusively by the lecturer.

**Other credits in programs**

<b>FILO12BA</b>	Deuxième année de bachelier en philosophie	(4 credits)	Mandatory
<b>ISPA9CE</b>	Certificat universitaire en philosophie (fondements)	(4 credits)	Mandatory