# Philosophy of Psychology

## Prof. Nicolò Maria Gaj; Prof. Giuseppe Lo Dico

### **COURSE AIMS AND INTENDED LEARNING OUTCOMES**

The main aim of the course is to critically investigate the most important schools of contemporary psychology by using the conceptual tools provided by the philosophy of science. For this purpose, an analysis of the various psychological paradigms will be preceded by the illustration of the basic concepts of the general philosophy of science and the philosophy of human sciences. The course also includes an in-depth investigation. This year topic is robotics.

*Expected learning results*

At the end of the course, students will be able to critically outline the concepts learned and demonstrate a firm grasp on the specificity of the epistemological point of view presupposed by critical examination of the various psychological positions. They will also be able to argue for or against the various psychology models studied. Students will also gain a critical ability to analyze and evaluate the epistemological and anthropological dimensions of robotics.

***COURSE CONTENT***

The course presents the fundamental elements of general philosophy of science, philosophy of human sciences, philosophy of psychology and includes an in-depth investigation on robotics.

MODULE 1: *General Philosophy of Science*

Unit 1: Scientific theories

What scientific theories are

The relationship between the notions of theory, hypothesis, and law

Unit 2: Explanation and prediction in science

Deductive-nomological vs. inductive statistical explanations

Philosophical interpretations of the notion of probability

Explanation and prediction

Unit 3: Justification in science

Logical positivism from the first to the third phase

Popper’s rejection of the inductive method

Inductivism vs. anti-inductivism: Reichenbach vs. Popper

Popper’s hypothetico-deductive method

Corroboration and rational prediction: Salmon’s criticism of Popper

Theory-ladenness and evolutionary epistemology in Popper’s thought

Post-Popperian philosophy of science: T. Kuhn and P. Feyerabend

Theory-ladenness: moderate vs. radical versions

Unit 4: The dynamics of science

The dynamics of science: comparison of Logical positivism, Popperianism and Post-Popperian philosophy of science

Unit 5: Scientific realism

Truth and verisimilitude in Popper’s thought

Realism vs. anti-realism in science

MODULE 2: *Philosophy of the Human Sciences*

Unit 1: Historical development and contemporary perspectives in the debate between the human and the natural sciences

Explanation vs. understanding: the debate’s rise in the 19th Century and contemporary perspectives

Analytic philosophy: ordinary language philosophy vs. the causalistic approach to the sciences (neo-positivism and cybernetics)

Unit 2: Explanation in the human sciences

Popper’s situational logic

G.H. von Wright’s practical inference

Deductive-nomological explanation model and practical inference: similarities and differences

MODULE 3: *Philosophy of Psychology*

The debate on the scientificity of psychoanalysis: Grünbaum vs. Popper

The epistemological status of psychology according to W. Wundt

The epistemological foundations of behaviorism

The epistemological foundations of the cognitive sciences

The epistemological foundations of constructionism

The epistemological foundations of the systemic-relational approach

MODULE 4: In-depth investigation: *Robotics*

What is a robot?

A robot taxonomy

Biological robotics

Humanoid and android robots

***READING LIST***

Gaj, N., LO Dico, G. (a cura di). Essays on the philosophy of science. Antohology of essays available at Normadec, Catholic University, Largo Gemelli 1.

Gaj, N., Lo Dico, G. (a cura di). Robotics. Anthology of essays available at Normadec, Catholic University, Largo Gemelli 1.

***TEACHING METHOD***

Classroom lessons

***ASSESSMENT METHOD AND CRITERIA***

The examination takes place in oral form and consists of questions from the four parts of the course.

It aims to assess the degree to which students have succeeded in assimilating the contents of the course and grasped the specificity of the epistemological point of view in examining the various psychological models. To this end, specific consideration will be given to the ability to present and critically elaborate the arguments presented and to argue and critically assess problems.

***NOTES AND PREREQUISITES***

No prerequisites are required.

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching will be carried out following procedures that will be promptly notified to students.

*Office hours*

By appointment, professors meet the students before or after the lessons.