



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Storia della Scienza

2021-2-E2004P010

Learning area

3: Study of socio-economic and cultural aspects related to communication processes.

Learning objectives

Knowledge and understanding:

- Main concepts and themes on the history of western scientific thought
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Applying knowledge and understanding:

- Improvement of the student's cultural background, increasing his critical attitude and awareness of scientific investigation as a tool for the management and solution of collective issues
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Contents

Title > Revolutions and «decentralizations»: Copernicus, Darwin, and Freud

The course is divided into two parts.

a) After some preliminary considerations on the concept of "science" and on the main models of interpretation of its development, the **first institutional part** will examine some fundamental moments of the history of Western scientific thought from antiquity to the 20th century. In this context, particular attention will be paid to the origins and developments of experimental psychology between the 19th and 20th centuries as an interdisciplinary synthesis among philosophy, physics, biology and neurophysiology.

b) After some preliminary considerations on the concepts of "revolution" and "decentralization", the **second monographic part** will examine three specific revolutions in the history of Western philosophical and scientific thought, together with their consequences in terms of "decentralization" and "change of perspective": the Copernican revolution as decentralization *of the world*, Darwinian evolutionism as decentralization *of man* and Freudian psychoanalysis as decentralization *of the ego*.

Detailed program

a) General part – *Fundamentals of history of scientific thought*

1. **Identifying the Problem:** The first step is to identify the problem or issue that needs to be addressed. This involves understanding the context, the scope of the problem, and the stakeholders involved.

2. **Defining the Problem:** Once the problem is identified, it is important to define it clearly and concisely. This involves stating the problem in a way that is specific, measurable, and achievable.

3. **Researching the Problem:** The next step is to research the problem to gather information and data. This can involve conducting interviews, surveys, or reviewing existing literature.

4. **Developing a Solution:** Once the problem is understood and researched, the next step is to develop a solution. This involves brainstorming ideas, evaluating options, and selecting the most effective solution.

5. **Implementing the Solution:** Once a solution has been developed, it is important to implement it effectively. This involves creating a plan, assigning responsibilities, and monitoring progress.

6. **Evaluating the Solution:** Finally, it is important to evaluate the solution to determine its effectiveness. This involves collecting feedback, analyzing results, and making adjustments as needed.

7. **Communicating the Solution:** Once the solution is implemented and evaluated, it is important to communicate the results to the relevant stakeholders. This can involve writing a report, giving a presentation, or holding a meeting.

8. **Reflecting on the Process:** Finally, it is important to reflect on the entire process to learn from the experience. This involves identifying what worked well, what didn't, and how the process can be improved for the future.

Prerequisites

None.

Teaching methods

Teaching methods consist in direct exposure, group discussion, analysis of historically and scientifically significant texts, the development of experiences and/or exercises, and in-depth studies of a seminar nature. **Class attendance is strongly recommended.**

Assessment methods

The verification of learning will be carried out through a written test, divided into a part with multiple-choice questions and a part with open questions. The questions are aimed at testing the effective acquisition of the topics illustrated during the course, as well as to ascertain the ability to manage the contents of the proposed bibliography and the capability to critically deal with them.

Upon student's request, the exam can be integrated by an oral examination, on all the course topics.

Textbooks and Reading Materials

- Maiocchi, R. (1995). *Storia della scienza in Occidente: Dalle origini alla bomba atomica*. Firenze: La Nuova Italia (pp. 16-43, 50-61, 71-89, 97-112, 124-126, 128-141, 156-157, 191-202, 207-227, 247-287, 314-321, 326-334, 337-344, 347-348, 365-368, 371-375, 450-451, 454-469) [available on line].
- Morabito, C. (2007). *Introduzione alla storia della psicologia*. Roma-Bari: Laterza (pp. 21-51, 55-85, 115-159).

NB. Additional supplementary materials (e.g. slides) will be made available on the e-learning platform at the end of the course. These supplementary materials are **part** of the examination program.
