UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Transferable Research Skills Laboratory

2526-2-F5105P032

Learning area

RESEARCH METHODS IN EXPERIMENTAL PSYCHOLOGICAL SCIENCES

Learning objectives

Knowledge and understanding

Identifying a research topic
Understanding the different steps that structure a research project
The different styles of results dissemination and communication

Applying knowledge and understanding

Designing a research project and the plan to accomplish it
Disseminating research results: preparing a talk, a poster, and an article

Making judgment

Students will gain the ability to use digital tools for scientific literature review, taking into account the specific critical aspects such as the impact factor of journal, its rankung and the impact on the scientifc community. Students will also gain the ability to properly select funding schemes and grant applications. Finally students, will learn to plan and draft a research proposal. This will be achieved through exercise, discussion and lectures.

Communication skills

Students will acquire communication skills that allow effective interaction with various professionals from different cultural and scientific backgrounds; through talk and poster presentations, students will learn how to propose

research projects and to communicate their results and conclusions to an audience of specialists and non-specialists in a clear, detailed, and scientifically grounded manner, using the specific lexicon of the discipline. Students will also learn how to coordinate during teamwork and collaborate effectively and competently in English.

Learning skills

The course will promote the acquisition of the ability to develope and write a research proposal. The course will also promote the use of specialized bibliographic resources to perform in-depth scientific reviews to critically judge lietrature, identify gaps and capitalize to propose further advancements in the field (e.g., through the development of new scientific projects). This will be achieved by discussing and reviewing research proposals and through class discussions.

Contents

The course will provide the tools to design and execute a research project. Students will be presented with the entire path leading to a research project, from literature review to result dissemination. The course will illustrate how to modulate the project at the different steps from the formulation of the initial proposal to the communication of the results. Students will have the opportunity to practice their knowledge designing a project, evaluating their peers' proposals, and practicing the different styles of disseminating the research results

Detailed program

1. Writing an effective research proposal

- Identify a research issue and the gap in the literature
- How to fund your research: identifying the “producer” of the project
- Outline the state-of-the-art of the theoretical and methodological framework
- Identify objectives and deliverables
- Defining the method to achieve the research objectives
- Ethical Implications
- Research impact, risk analysis and contingency plans
- Time management and project planning

2. Disseminating and Communicating research results

- The research products in a conference: talks and posters
- The journal article: preparing the manuscript (sections and formats)
- The journal article: the submission process (APA style and the guidelines for the authors)
- Peer review
- Science communication and public engagement

Prerequisites

Teaching methods

The course will be held in prensence and attendance is mandatory for at least 70% of the classes. Failure to meet this minimum attendance requirement may result in not passing the course
Teaching with frontal lessons and laboratory activities:

- 12 2-hours of interactive classwork :Lectures, Exercise on published research, and own research projects
- 1 8- hours interaction with students: Hands-on experience with a conference simulation: paper evaluation and preparation of a talk/poster

Assessment methods

The course will be assessed on a pass/fail basis only. There is no final exam; evaluation will be based on active participation and any assignments or activities carried out during the course.
Specifically, the last class will host the simulation of a conference: students will be asked to prepare their own contribution for the simulated conference, on the basis of the work carried out during the course. By doing so they will show to be able to identify the relevant information to run a research and communicate its results, as well as actively preparing the physical materials to do it (poster/presentation).

Textbooks and Reading Materials

Detailed information about the teaching material will be published on the e-learning page associated with the course.

Sustainable Development Goals

QUALITY EDUCATION | GENDER EQUALITY