

CORSO DI DOTTORATO IN BIOLOGIA

Ph.D. COURSES

Offerta didattica esclusiva

2025/2026

RESEARCH PROFESSIONAL SKILLS

Course coordinator: Alessandro Massolo (Università di Pisa)

Schedule: yearly course 2025/2026

Duration: 36 hours

Description: The course focuses on core skills that are fundamental for a young researcher to achieve in early stages of her career. The course is organized in three blocks: I) one on scientific writing; II) one on literature search and management, and ethical aspect related to it; III) the last in on general skills on project proposal writing, scientific communication and formal assessment of scientific contributions.

The course is hands-on based, and students will be asked to write up pieces of papers, projects, presentations and to run literature searches and organize their literature using specific software for literature management.

Prerequisites: None required.

Program divided in Blocks:

Specifically, the first block will be centered on the structure, content and style in scientific writing. This will include writing of projects, reports, PhD thesis, and scientific publications. It will be minimally focused on the use of the English language, just provide some basic suggestions on how to improve the writing style in scientific writing to ensure clarity and synthesis.

The second block will deal on where and how to search for scientific literature, and on how to organize it. It will introduce to the three most used citations platforms (Scopus, Web of science, PubMed) and how to elaborate a search string. It will also include a component related to the ethical use of literature, editorial copyright and plagiarism.

The third block is intended to be general in nature and will include lectures and activities related to how to prepare an efficient presentation of a scientific work, and on the statistics used in scientometry to estimate the impact and quality of scientific journals, publications and of the overall production of a researcher. It will also provide lectures on how to prepare the research project proposal needed at the beginning of the program, and to carry out and write up a literature review, starting from the various types of reviews and their structures to the way to actually run it using standard international protocols.

Final exam: yes (final assessment of the competences acquired)