



Faculty of Medicine

BIMB51, Applied biomedicine, 7.5 credits

First Cycle

General Information

The course is compulsory in the Biomedicine programme and included in semester 5.

Language of instruction: English

Learning outcomes

Knowledge and understanding

On completion of the course, the students shall be able to

- describe the structure of a medical scientific article and what distinguishes scientific writing from other types of writing
- account for relevant statistical methods and their strengths and weaknesses in biomedical research projects
- account for basic publishing ethics rules, publishing forms and discuss bibliometric methods

Competence and skills

On completion of the course, the students shall be able to

- choose and justify statistical method for a scientific project
- plan and present how projects can be organized, managed and budgeted
- summarize relevant scientific and academic credentials in a curriculum vitae
- summarize research results in order to argue for and justify the significance of the research, for example as a cover letter
- identify ethical issues in a biomedical research project and reason about the need for ethical approval
- behave with a professional approach, respect the contributions of others in discussions about applied biomedicine as well as meet given deadlines

Judgement and approach

On completion of the course, the students shall be able to

- reflect on how the benefit of a biomedical project can be justified in relation to society's resources and sustainability
- reflect on the individual researcher's responsibility for conducting research in a reasonable ethics-based rationale

Course content

During the 5-weeks course, students work with the basics of project management, organization and planning of a biomedical research project that will result in a project plan. The purpose is to prepare their bachelor's project in biomedicine. This includes how science is financed and evaluated as well as training in how to organize a list of your own qualifications. The course also focuses on what characterizes scientific communication and what is required for publication in terms of both content and ethics.

Biostatistics has an important role in the course and includes choice and justification of statistical method for biomedical projects as well as identification of strengths and limitations with different methods. Bioethics and societal benefits in relation to the cost of implementing the projects are also discussed and argued about.