Faculty of Medicine

BIMM05, Biomedicine: Research Project Management, 7.5 credits

Biomedicin: Projektledarskap i forskning, 7,5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Master's Programmes Board on 2021-03-16 to be valid from 2021-03-24, autumn semester 2021.

General Information

The course is included in the academic research path and is compulsory in the *specialisation in experimental biomedical research.* It is included in semester 3 of the Master's Programme in Biomedicine.

Language of instruction: English

Main field of studies	*Depth of study relative to the degree requirements*
Biomedicine	A1F, Second cycle, has second-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

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

- give an account of project management and areas of responsibility for project manager, project owner and reference group during planning, implementation and reporting of a research project

Competence and skills

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

- write a project plan and produce a schedule for implementation and reporting of a research project

- produce a cost analysis of their research project and relate costs to the benefit of the project in terms of society and UN's global sustainable development goals
- write a popular science summary and present data in a graphical abstract
- choose and argue for methodology and strategies for data collection
- behave with a professional approach, respect others' opinions in discussion of project management and meet set deadlines

Judgement and approach

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

- reflect on their own expertise in project management, including teamwork, leadership and communication
- reflect on research ethical issues in planning and implementation of a planned research project.

Course content

The course mainly consists of preparation for second cycle project work in the academic research path. The course content primarily concerns how to lead and carry out a second cycle research project from planning to reporting. Research ethics also constitutes an important part of the course.

The course has five modules:

- Module 1 covers general presentation of the forthcoming project and reflection on the importance of the project. The students practice giving/receiving constructive feedback.
- Module 2 builds on leadership, group dynamics and diversity from earlier courses in the biomedical profession from the project management perspective.
- Module 3 covers documentation and data processing in a project.
- Module 4 covers time planning, cost analysis and self-management as well as practical examples of documentation and reporting of experimental work such as graphical abstracts and popular science summaries. The estimated cost of the project is placed in relation to the importance of the project.
- Module 5 covers publication of research results, ethical aspects of publication, how to write a research manuscript, citation tools and authorship. There is also discussion of how to write a final report on work in a laboratory and the importance of a referral letter.

Course design

The working methods in the course mostly active learning, requiring the students to prepare before each teaching component. The students are expected to behave professionally and, just as in a future work situation, participate constructively in the working group to achieve joint progress. The course contains several practical components that entail both individual training and cooperation in groups to solve problems. The course includes lectures, seminars with presentations of applied assignments and case-based discussions.

Assessment

The assessment consists of a course portfolio that contains a project plan and project presentation as well as reflections, popular science communication and projects in working groups. A few tests with multiple-choice questions assess learning outcomes for knowledge and understanding in project management.

If there are special reasons, other forms of assessment may apply.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.
To achieve the grade of Pass as a final grade requires a grade of Pass on all components. To achieve the grade of Pass with Distinction as a final grade, the grade of Pass with Distinction is required on the course portfolio.

Entry requirements

Passed examinations and course components in semester 1 of the Master's Programme (30 credits) and at least 15 credits from semester 2 and the completion of BIMM03 (Innovation and Entrepreneurship).

Further information

The course is preparatory for BIMM81 (Research Project in Academia, 45 credits).

Subcourses in BIMM05, Biomedicine: Research Project Management

Applies from H21

2101 Course portfolio, 6,0 hp
Grading scale: Fail, Pass, Pass with distinction
2102 Multiple-choice questions, 1,5 hp
Grading scale: Fail, Pass