



**Karolinska
Institutet**

Course syllabus for

Degree Project in Bioentrepreneurship, 30 credits

Examensarbete i bioentreprenörskap, 30 hp

This course syllabus is valid from spring 2022.

Please note that the course syllabus is available in the following versions:

Spring2022 , Spring2023 , Spring2024 , Spring2025

Course code	4BP050
Course name	Degree Project in Bioentrepreneurship
Credits	30 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Bioentrepreneurship
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Learning, Informatics, Management and Ethics
Decided by	Utbildningsnämnden LIME
Decision date	2021-10-20
Revised by	Education committee LIME
Last revision	2021-10-20
Course syllabus valid from	Spring 2022

Specific entry requirements

At least the grade "Pass" on the courses given during semesters 1 and 2 as well as the course "Marketing and sales in life sciences", within the Master's Programme in Bioentrepreneurship.

Objectives

The course aims to enable students to independently, from a scientific problem within Bioentrepreneurship, the main field of study, plan and carry out a scientific project.

Upon completion of the course, the student should be able to:

Regarding knowledge and understanding

- Demonstrate broad knowledge and understanding in the main field of study, as well as a considerable degree of specialised knowledge within the scope of the current project,
- search and critically assess relevant scientific literature in support of both broadening and deepening his/her knowledge within the scope of the current project,

- establish a relevant and realistic research plan for the current project,
- demonstrate a in-depth methodological knowledge and justify the choice of methods to solve a scientific problem within the main field of study.

Regarding skills and ability

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information,
- demonstrate the ability to independently identify and formulate relevant research questions and to critically, and creatively plan and, using appropriate methods, undertake advanced tasks within predetermined time,
- demonstrate the ability to analyse and critically evaluate the results of his/hers scientific study in the specific research field of the project as well as in a broader scientific and societal perspective,
- critically and objectively assess others' scientific work and give and receive relevant feedback,
- present his/her own work, its conclusions and the knowledge and arguments on which they are based on in written and oral form both in an academic context, for a possible collaborative partner and from a broader popular science perspective.

Regarding judgement and approach

- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her continuous learning.
- demonstrate a professional attitude concerning time planning, collegial cooperation and cooperation with a possible collaborative partner,
- demonstrate the ability to carry out the project work in a correct research-ethical way.

Content

The course consists of an independent assignment as well as lectures and peer-review seminars where different aspects relevant to writing and implementing a scientific study are discussed.

The project can be carried out at Karolinska Institutet or at another university, company/organisation or public authority.

Teaching methods

The course is given at the master's level, where the students are assumed to be familiar with the most common study methods in higher education. The fundamental pedagogical view is based on entrepreneurial learning and requires active student participation. Teaching will be in the form of independent work with a scientific report, mandatory scheduled peer review seminars where the students account for their progress and give one another feedback as well as presentations and public reviews.

A project proposal should be written according to instructions and be approved by the course leader before the student can start the project.

Compulsory participation

The examiner assesses if and how absence from compulsory parts can be compensated. Before the student has participated in compulsory parts or compensated absence in accordance with the examiner's instructions the student's course results will not be reported. Absence from a compulsory part may result in the student having to wait to compensate until the next time the course is given.

Examination

The examination is conducted in several steps:

- A project plan should be written according to instructions (Fail/Pass) and presented orally at a seminar (Fail/Pass).
- A mid-term report should be written according to instructions (Fail/Pass) and presented orally at a seminar (Fail/Pass).
- A written scientific report should be written and submitted according to instructions. The project should be presented orally (Fail/Pass). The student should also perform an oral critical review of another project (Fail/Pass). The final version of the written scientific report should be submitted after the oral presentation and forms the basis for the grade (Fail/Pass/Pass with distinction).

In order to pass the course, the student must get at least a grade of "Pass" on all examinations. In order to receive the grade "Pass with distinction" on the whole course, the student needs to get the grade "Pass with distinction" on the written scientific report and pass on all other examinations, as well as hand in the report by the due date. Submission of the written report after the deadline will result in the student missing the chance to get the grade "Pass with distinction".

Limitation in the number of examinations

The students that have not passed the course after the examination has the right to rework the report and/or the presentation and take part in another five examinations of the same examination. If the student has failed on six examination occasions the student will not be given any new opportunity to present or to retake the course.

Placement

The examiner may immediately suspend a student's internship or the equivalent if the student shows such serious deficiencies in knowledge, skills or attitudes that the trust vis-à-vis the collaborative partner is damaged or broken. When the internship is interrupted in this way, the student will fail this part and this project placement opportunity is exhausted. In such cases, an individual action plan should be established, where it is apparent which activities and examinations are required for the student to be able to pass the course.

Transitional provisions

After each course occasion there will be at least four occasions for the examination within a two-year period.

Other directives

The course is given in English.

Course evaluation will be carried out in accordance with the guidelines established by the Board of Higher Education.

Oral evaluation in the form of course council meetings will be carried out during the course.

Literature and other teaching aids

Literature for the specific project will be decided by the project coordinator at UBE/LIME in collaboration with the examiner when the project plan is accepted. Method literature will also be chosen based on project content.

One of the suggested books shall be used as main literature.

Saunders, Mark; Lewis, Philip; Thornhill, Adrian.

Research methods for business students

7. ed. : Harlow : Pearson Education, cop. 2016 - xxvi, 741 s.

ISBN:978-1-292-01662-7 LIBRIS-ID:18291653

[Library search](#)

Other literature

Yin, Robert K.

Case Study Research : design and methods

5 ed. : London : SAGE, 2013 - 282 s.

ISBN:9781452242569 LIBRIS-ID:14588864

[Library search](#)

Brinkmann, Svend; Kvale, Steinar

InterViews : learning the craft of qualitative research interviewing

3. ed. : Los Angeles : Sage Publications, cop. 2015 - xviii, 405 s.

ISBN:9781452275727 LIBRIS-ID:16594194

[Library search](#)

How to do a Research Project - A Guide for Undergraduate Students

Colin Robson (University of Huddersfield)

<http://www.blackwellpublishing.com/book.asp?ref=9781405114899>