



**Karolinska
Institutet**

Course syllabus for

Scientific Methods, 4.5 credits

Vetenskaplig metod, 4.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

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

[Autumn2014](#) , [Autumn2015](#) , [Autumn2017](#) , [Autumn2018](#) , [Autumn2019](#)

Course code	4BP031
Course name	Scientific Methods
Credits	4.5 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	Programme Committee 7
Decision date	2014-03-28
Revised by	Education committee LIME
Last revision	2017-10-25
Course syllabus valid from	Autumn 2017

Specific entry requirements

A bachelor's degree or a professional degree equivalent to a Swedish Bachelor's degree of at least 180 credits in health care, biomedicine, biology, cellular and molecular biology, pharmaceuticals, chemistry, medicine or biotechnology. Proficiency in the English language with the equivalence of English B at Swedish upper secondary school.

Objectives

The student should create a research plan for a scientific project within the bioentrepreneurial field, and be able to communicate this in written and oral format.

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

Regarding skills and abilities

- create a plan for a scientific project and justify the set-up,
- perform database searches and critically evaluate relevant literature in order to broaden and deepen his/her knowledge,

- motivate a research question in relation to the bioentrepreneurial field,
- choose and justify appropriate methods for data collection and data analysis,
- set up a plan for data collection and the processing of data, as well as discuss the possible results in relation to the subject area,
- communicate scientific knowledge in written and oral form and tailored to different target groups,

Regarding judgment and approach

- discuss ethical considerations in relation to the scientific project,
- critically review another scientific project and give relevant feedback.

Content

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 an active student participation. Teaching will be in the form of lectures and workshops analysing and discussing important parts of the scientific project in addition to a scientific project based on an academic research question from a bioentrepreneurial perspective.

Teaching methods

The course consists of lectures, seminars and workshops.

Examination

The examination consists of an individual assignment (Fail/pass/Pass with distinction), an oral presentation of that project (Fail/Pass) as well as a critical review of another groups project (Fail/Pass).

In order to get the grade Pass on the course, the student has to receive at least the grade Pass on all examinations. In order to receive the grade Pass with distinction on the course, the student must receive the grade Pass with distinction on the individual assignment.

Compulsory participation

The course coordinator decides if and how absence from compulsory education elements might be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the course coordinator's instructions, the student's results for the course will not be registered in LADOK. Absence from a mandatory training component could mean that the student cannot compensate for missed element until the next time the course is given.

Limited number of examinations

Students who have not passed the regular examination are entitled to participate in five more examinations. If the student has failed six examinations/tests, no additional examination or new admission is provided.

Participation in an examination is defined as an occasion on which a student attends an examination, even if the student submits a blank examination paper. If a student has registered to sit an examination, but does not attend the examination, this is not defined as participation in the examination.

Transitional provisions

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

Other directives

The course language is 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

Bryman, Alan; Bell, Emma

Business research methods

4. ed. : Oxford : Oxford Univ. Press, cop. 2015 - xxxvi, 778 s.

ISBN:9780199668649 LIBRIS-ID:17589693

[Library search](#)

Robson, Colin

How to do a research project : a guide for undergraduate students

Malden, MA : Blackwell Pub., cop. 2007 - xii, 159 s.

ISBN:978-1-4051-1489-9 (hardcover : alk. paper) LIBRIS-ID:10340568

URL: [Table of contents only](#)

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