



Course syllabus for

## **Scientific Methodology 1, 3 credits**

Vetenskaplig metodik 1, 3 hp

This course syllabus is valid from autumn 2018.

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

[Autumn2016](#) , [Autumn2018](#) , [Autumn2023](#)

Course code	1BA083
Course name	Scientific Methodology 1
Credits	3 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Biomedical Laboratory Science
Level	G1 - First cycle 1
Grading scale	Pass, Fail
Department	Department of Laboratory Medicine
Decided by	Education committee Labmed
Decision date	2016-05-12
Revised by	Education committee LABMED
Last revision	2017-11-06
Course syllabus valid from	Autumn 2018

### **Specific entry requirements**

Biology 2, Physics 1a / Physics 1b1 + 1b2, Chemistry 2, Mathematics 3b / 3c (field specific entry requirements A12). Or: Biology B, Physics A, Chemistry B, Mathematics C (field specific entry requirements 12).

### **Objectives**

The general aim of the course is to place the basis for the scientific approach that dominates the biomedical laboratory science programme. During the time of the education, a continuous development of the student's scientific abilities and attitudes in accordance with the scientific progression ladder of the programme takes place. A specialisation in scientific methodology and statistics takes place during the course scientific methodology 2 in the education.

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

#### ***Knowledge and understanding***

- account for and discuss basic scientific concepts
- account at a general level for the basics of scientific methodology

- identify the central stages in the research process
- reflect on the relationship between research and development in biomedical laboratory science

### ***Skill and ability***

- formulate a hypothesis based on a given context
- analyse conclusions based on a given context critically
- apply simple statistics
- seek information source-critically
- speak clearly in writing with for the subject area relevant terms

### ***Assessment skill and attitude***

- apply a scientific and reflecting attitude in his learning

## **Content**

Scientific theory and method including statistical processing and literature project.

## **Teaching methods**

The course is given in the form of seminars, self-study and lectures.

## **Examination**

Examination takes place in the form of a written examination, written assignments and group-/cross-group presentations. Grade Pass/Fail

A re-examination is given in connection with the course as well as during a re-examination period in August. The students who not are passed after regular examination session have a right to participate at five further examination sessions. In case of absence from compulsory components, an agreement between student and course coordinator concerning supplementary qualification is made.

## **Transitional provisions**

Examination according to this syllabus will be provided during one year after the decision to terminate the course or revision of the syllabus.

## **Other directives**

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

## **Literature and other teaching aids**

*Olsson, Henny; Sörensen, Stefan*

**Forskningsprocessen : kvalitativa och kvantitativa perspektiv**

3. uppl. : Stockholm : Liber, 2011 - 328 s.

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