COURSE SYLLABUS

Biovetenskaplig metodik och design G1F
Method and Design in Life Science G1F
7.5 credits

Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Method and Design in Life Science G1F. It comprises 7.5 credits and is on basic level. The level of progression of the course is G1F.

Objectives
After completed course the student should be able to:
- describe the fundamentals in life science methodology,
- understand and describe the basic concepts in theories of science as well as understand and apply basic principles of research ethics in life science,
- understand and apply descriptive statistics,
- understand how and when to use parametric and non-parametric tests,
- apply the parametric and non-parametric tests included in the course, and
- independently plan and perform an experimental trial and critically analyse the results, ethical aspects as well as sex and gender perspectives.

Course Content
This course handles basic statistics such as spread of data and common parametric and non-parametric tests. During the course, the theoretical parts will be illustrated with practical computer exercises using statistical software. The course deals with ethical aspects in life science. The course also includes individual projects where the student plan and perform a minor experiment with emphasis on analysis of the results.

Forms of Teaching
The teaching comprises lectures, supervision, project work and presentations.

Depending on the study period, the language of tuition may be Swedish or English. Even if the teaching is conducted in Swedish, some English may still occur.

Examination
The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

Registration of examination results:

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written examination in computer lab</td>
<td>3 credits</td>
<td>A/B/C/D/E/F</td>
</tr>
<tr>
<td>Written assignment 1</td>
<td>1.5 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Written assignment 2</td>
<td>1.5 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Project presentation</td>
<td>1.5 credits</td>
<td>G/U</td>
</tr>
</tbody>
</table>

1 Determines the final grade of the course.

Admission Requirements
The prerequisites for this course are at least 30 higher educational credits passed within biomedicine, bioinformatics, bioscience, chemistry or equivalent.

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.
7 Subject, Main Field of Study and Disciplinary Domain

The course forms a part of the academic subject area of Bioscience. The course is a part of the main field of study in Bioscience at the University of Skövde. The course can also be a part of the main field of study in Biomedicine. The disciplinary domain of the course is Natural Sciences.

Every course at the University of Skövde belongs to a subject. The division of subjects is used for follow-up and quality assurance. A main field of study is an area in which a degree can be awarded. Disciplinary domain is a division which is used by the government for the allocation of resources for studies at basic level and advanced level.

8 Approval of Course and Course Syllabus

The course was approved by the Curriculum Committee for Bioscience on 25 January 2018. This course syllabus was approved by the Curriculum Committee for Bioscience on 27 February 2020. It is valid from 1 July 2020 and replaces the course syllabus approved 24 October 2019.

9 Overlapping with Another Course

This course cannot constitute a part of a degree also containing a course the content of which is totally or partly equivalent to the content of this course.

10 Additional Information

Further information will be available on the university’s website before a course is given.

National and local regulations for higher education are available on the university’s website.

Upon completion of the course there will be a follow-up. The main purpose of this follow-up is to contribute to improvements of the course. The students’ experiences and views constitute one of the criteria for the follow-up and are gathered by means of course evaluations. The students will be informed of the results of the follow-up and any decisions regarding actions that are to be taken.

11 Course Literature and Other Educational Materials


Scientific articles and provided material.