1 Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Molecular Biodesign I G1F. It comprises 7.5 credits and is on basic level. The level of progression of the course is G1F.

2 Objectives
After completed course the student should be able to:

- describe different techniques used in molecular biology to perform cloning, mutagenesis and to study the expression profiles of genes and proteins,
- describe different tools and methods used in molecular biotechnology to modify and design molecules and organisms,
- plan and execute laboratory work involving cloning and expression of genes, and
- orally present results from experimental labs in a scientific way.

3 Course Content
The course involves the underlying theories of techniques used in the field of molecular biology such as cloning, mutagenesis, primer design, and expression profiling of genes and proteins. The course also contains laboratory work which involves planning, execution, analysis of cloning experiments and expression studies.

4 Forms of Teaching
The teaching comprises lectures, laboratory sessions, presentations and seminars.

The teaching is conducted in English.

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

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervised examination(^1)</td>
<td>4 credits</td>
<td>A/B/C/D/E/F</td>
</tr>
<tr>
<td>Laboration</td>
<td>2.5 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Oral presentation</td>
<td>0.5 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Computer laboration</td>
<td>0.5 credits</td>
<td>G/U</td>
</tr>
</tbody>
</table>

\(^1\) Determines the final grade of the course.

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.

6 Admission Requirements
Prerequisite courses for this course are: Passed courses: MB130G-Cell Biology G1N and BM124G-Genetics G1N.

7 Subject, Main Field of Study and Disciplinary Domain
The course forms a part of the academic subject area of Molecular Biology. The course is a part of the main field of study in Molecular Biology at the University of Skövde. 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 26 April 2018. This course syllabus was approved by the Curriculum Committee for Bioscience on 26 April 2018. It is valid from 1 July 2018.

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

