1 Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Biomarkers in Molecular Medicine A1N. It comprises 7.5 credits and is on advanced level. The level of progression of the course is A1N.

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

- in detail describe how biomarkers are currently used in medicine, drug discovery and health monitoring,
- describe how bioinformatics tools can be used for biomarker discovery,
- in an individual project, theoretically study the applications of biomarkers,
- in a scientific way present the project orally,
- critically review scientific texts, and
- be able to discuss the use of biomarkers from a scientific and ethical perspective and their impact on society.

3 Course Content
The course gives the students knowledge in how biomarkers can be used as diagnostic, predictive and prognostic markers. The course also gives the students the necessary bioinformatics tool required to identify and verify different kinds of biomarkers. The course also contains an individual project where the students will solve a problem in an independent and scientific way and present this orally and in writing.

4 Forms of Teaching
The teaching comprises lectures, supervision, project work 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).

Registration of examination results:

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervised examination</td>
<td>4</td>
<td>A/B/C/D/E/F</td>
</tr>
<tr>
<td>Report</td>
<td>2.5</td>
<td>G/U</td>
</tr>
<tr>
<td>Written assignment</td>
<td>1</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
The prerequisites for this course are 150 higher education credits passed, of which at least 90 higher education credits must be courses within biology or medicine. Among these higher education credits, at least 15 must be on G2E-level or higher (or the equivalent).
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 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 October 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 20 December 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

Scientific articles within subject field.