## DEGREE PROFILE OF Bachelor í Lívfrøði Bachelor of Science in Biology

## Bachelor í Lívfrøði Bachelor of Science in Biology

| TYPE OF DEGREE & LENGTH | Single degree, 180 ECTS  |
|-------------------------|--|
| INSTITUTION(S)          | Fróðskaparsetur Føroya, Náttúruvísindadeildin<br>University of the Faroe Islands, Faculty of Science and Technology. |
| ACCREDITATION           | Ministry of Foreign Affairs and Culture (UMMR)   |
| ORGANISATION(S)         |  |
| PERIOD OF REFERENCE     | Accreditation from August 2020   |
| CYCLE /LEVEL            | Bachelor (BSc). QF-EHEA level: "1st cycle". EQF-LLL level 6.   |

## A PURPOSE

To give a broad education in biology, from ecology tomolecular biology with particular focus on marine biology, and provide the students with the necessary tools from supporting sciences. We will provide students with an education which is directly comparable to programmes in biology internationally, but with a particular focus on the Faroese context, in terms of nature, resources and people. The programme will enable students to develop the knowledge and skills required to work as biologists internationally, and in particular on the Faroe Islands.

| В | CHARACTERISTICS                   |  |
|---|-----------------------------------|--|
|   |                                   |  |
| 1 | DISCIPLINE(S) / SUBJECT           | Ecology and marine biology (40%), Molecular and cell biology (15%). Chemistry            |
|   | AREA(S)                           | (15%). Earth system science (10%). Mathematics and statistic (10%). Other (10%).         |
| 2 | GENERAL / SPECIALIST              | The focus of the programme is theoretical and practical biology.                         |
|   | FOCUS                             |  |
| 3 | ORIENTATION                       | The programme is based on existing knowledge but is supported with new examples          |
|   |                                   | from international and Faroese research. The degree programme provides good              |
|   |                                   | opportunities for employment and further studies.  |
| 4 | DISTINCTIVE FEATURES              | Numerous examples from the Faroe Islands are included in the programme (air, land,       |
|   |                                   | and sea). The teaching is mainly in Faroese, but English and Scandinavian languages      |
|   |                                   | are also utilized.   |
|   |                                   | The first two years of the degree are undertaken jointly with the Molecular Life Science |
|   |                                   | programme.   |
|   |                                   |  |
| С | EMPLOYABILITY & FURTHER EDUCATION |  |
| 1 | EMPLOYABILITY                     | In fisheries and food industry in addition to other companies (e.g. quality control), as |
|   |                                   | well as in research, administration, and management institutes (e.g. scientific          |
|   |                                   | adviser), and other settings.  |

|   | FURTHER STUDIES  | With this degree the student can expect to meet the requirements to continue their  |
|---|--|---|
|   |  | education on relevant programmes at other institutions. It is necessary to ensure that  |
|   |  | all pre-requisites have been met for the individual programmes applied for prior to   |
|   |  | applying, given that institutions will differ in their acceptance conditions.   |
|   |  |   |
| D | EDUCATION STYLE  |   |
| 1 | LEARNING & TEACHING  | Lectures, individual studying based on literature, supervision and discussion with  |
| • | APPROACHES   | academic staff, laboratory exercises, group work, oral presentations, written reports,  |
|   | ALLINOACHES  | excursions and fieldwork, and other means and methods as appropriate.   |
| 2 | ASSESSMENT METHODS   | Written examination, oral examination, laboratory reports, field reports, project   |
| _ |  | reports, essays; write, present and defend bachelor thesis, and other means and   |
|   |  | methods as appropriate.   |
|   |  |   |
| E | PROGRAMME COMPETENC  | Es .  |
| _ |  | eneric and specific competences up to a total of 15 (see page 28-29 for details).   |
|   |  |   |
|   |  | fessions, please refer to page 28-29.   |
| 1 | GENERIC  |   |
|   | o Learning: le   | dentify own learning needs and structure own learning in different learning   |
|   | environmen   | ts  |
|   | _  | e: Ability to search for, process, and analyse information from a variety of sources.   |
|   |  | skills: Ability to describe, analyse, and compose information by using rational   |
|   | _  | on based on evidence and facts  |
|   |  | Nuing. Ability to identify page, and colve problems using required knowledge  |
|   |  | olving: Ability to identify, pose, and solve problems using required knowledge.   |
|   | <ul> <li>Independer</li> </ul>   | nt work: Ability to organize and work independently.  |
|   | <ul><li>Independer</li><li>Language s</li></ul>  |   |
|   | <ul> <li>Independer</li> <li>Language s</li> <li>Communic</li> <li>in writing.</li> </ul>  | nt work: Ability to organize and work independently.  skills: Ability to use specific language, both written and oral, in Faroese and English.  ation: Ability to communicate and discuss in a clear and accurate way; both orally and  |
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## **COMPLETE LIST OF PROGRAMME LEARNING OUTCOMES**

- Explain and convey the overall levels of biology, from molecules, cells and organisms to ecosystems on land and in the sea.
- Describe and classify the diversity of life in the sea, on land and in air.
- Explain how the different levels and fields in biology are interconnected.
- Describe, classify and explain important factors in botanics, zoology, ecology, marine biology, molecular biology and related fields.
- Explain in general the analytical fields supporting biology (chemistry, mathematics, statistics), and how these enhance understanding of biology.
- Describe and explain basal physical environment (geology, oceanography, meteorology), and explain how changes in the earth systems can influence the biosphere.
- Describe and explain natural resources, including fisheries and aquaculture, and sustainable management thereof.
- Describe and explain structure and function of eukaryotic and prokaryotic cells.
- Describe how evolutionary processes, from the molecular level to the ecological level, have shaped the diversity of life.
- Describe the structure and functions of DNA, RNA and proteins, and explain how the functions of these
  molecules are important in a multitude of fields in biology and related areas (biochemistry, cell biology,
  genetics, microbiology, human health).
- Describe different kinds of environmentally polluting agents and explain the harmful influences of pollution in nature.
- Apply the practical competences in laboratory and field experiments and perform the calculations needed for such experiments (e.g., concentrations, dilutions, pH).
- Explain procedures and methods, and properly use instruments and equipment in laboratory and field experiments and evaluate and analyse the results from such experiments.
- Plan, execute and critically review a biological inquiry. This includes collecting, registering, identifying, interpreting, analysing and describing data relevant to biological inquiries.
- Use the knowledge, biological concepts, and scientific language and terms in a multitude of fields in biology.
- Write short scientific reports by combining, in a clear and succinct manner, (a) background knowledge, (b) methodological knowledge, (c) interpretational skills, (d) the ability to put their results into perspective, and (e) the ability to draw proper conclusions.
- Search the scientific literature for information to find primary references, review articles, and other relevant information, and use this information in a critical manner and in appropriate context.