

Course: Genetics

credits: 5

Course code BOVH24RGENETICA
Name Genetics
Study year 2026-2027
ECTS credits 5
Language Dutch, with parts in English
Coordinator -

Modes of delivery Assignment
 Lecture
 Practical / Training
 Tutorial

Assessments Genetica Theorie - Computer, organised by STAD examinations
 Practicum Gen Expressie - Other assessment

Learning outcomes

This module consists of the following learning outcomes:

- You will present, as a member of a group, the research results of a genetic experiment on a eukaryotic organism at a biomedical laboratory and will visualize these results with a poster using scientific English according to the guidelines of the study program;
- You have acquired the knowledge about the principles of a diversity of molecular techniques and of comparative genomics and will apply this obtained knowledge within a genetic experiment using a eukaryotic model organism at a biomedical laboratory according to the provided protocols;
- You have acquired the knowledge about aging and the accompanied aberrations in eukaryotic organisms and can interpret this knowledge within the scientific context concerning 'healthy aging';
- You will prepare yourself for an interview with a trainee in the biomedical work field to be able to orient on a traineeship in a professional setting and will incorporate this interview in a reflective report according to the guidelines of the study program.

Content

Growing older is unfortunately still accompanied by unnecessary risks, such as a higher chance of chronic diseases. If this is also combined with an unhealthy lifestyle, such risks may increase even further. It is therefore important to research what a healthy lifestyle is and how you can age more healthily, ie. "healthy ageing."

Within genetics, "healthy ageing" is an important topic, because certain risk factors in the aging process are genetically determined.

During the Genetics lectures, you will learn what processes are responsible for aging in eukaryotic organisms, what aberrations are involved and what possible solutions for "healthy aging" could be.

This acquired knowledge can then be applied by the students during the practical course in which they work with a eukaryotic model organism, namely *C. elegans*, which is often used in the field to study genetic mutations to gain the necessary insights in the field of "healthy ageing."

Moreover, it is important to elaborate and present the data obtained from the practical *C. elegans* experiment in scientific English using a poster. The poster is one of the most widely used forms in the international biomedical field, therefore it is required to provide the necessary training.

At the conclusion of this module, you will orient to a possible internship and/or graduate position by interviewing a trainee or graduate and write a report about this.

Included in programme(s)

Major Biology and Medical Research

School(s)

Engineering, Life Sciences & ICT