

## Course Descriptions Bachelor 2021-2022

Course Title Biotechnology

Course Code BENC2005

ECTS Credits 5,0

Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	30-8-2021	15-10-2021		X		X	L

Level no level

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Language of instruction English

Goals

- \* Describe how biological systems are built and the basic principles of molecular biology
- \* Explain the relationship between genotype, phenotype and environment
- \* Illustrate the latest techniques and approaches used in biotechnology
- \* Give examples of commercially successful biotechnological processes in different fields of application
- \* Present about a scientific topic to an audience of peers

Description

This course aims at introducing students to the field Biotechnology and to make them aware of how biotechnological applications affect our daily lives. Starting from the definition of life, students will understand the basic characteristics and functioning of biological systems. They will then learn how the genetic information of an organism relates to its phenotype, and how modification of this information –using recombinant DNA technology or genome editing tools- allows us to harness biological processes. By being confronted with cutting-edge examples of applications in different fields, ranging from agriculture to medicine to materials science, students will understand the potential of biotechnology in driving innovation. They will also reflect on some of the current and future ethical questions and dilemmas dealing with biotechnology and society.

Literature A variety of articles, videos, and/or book chapters which will be made available online on a weekly basis.

Prerequisites

Keywords

Teaching methods Lecture

Assessment methods Written Exam / Presentation

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

Bachelor Business Engineering

Year 2 Elective Course(s)