

## Course Descriptions None 2022-2023

Course Title Laboratory and Research Skills  
Course Code BENS2002  
ECTS Credits 5,0  
Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	6-2-2023	31-3-2023	C				
5	11-4-2023	2-6-2023	C				

Level Intermediate

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Language of instruction English

Goals

- \* To be able to relate research questions to the appropriate scientific theory.
- \* To be able to relate scientific theory to a research experiment.
- \* To learn to setup a scientific research experiment.
- \* To familiarize students with the executing of scientific research experiments.
- \* To be able to perform basic laboratory experiments in a safe manner.
- \* To be able to analyse and process the data.
- \* To learn to report and communicate the outcomes in a scientific manner.

Description PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.

This course builds up on the course 'Experimentation in Science and Engineering'. After being introduced to the lab environment, students will continue and go further on performing scientific research in a laboratory setting. Starting with the planning of the experiments and understanding their fundamental principles. The topics of the experiments are related to industrial processes that are translated to small-scale laboratory settings. Importantly, students will keep in mind safety, sustainability and time management. The course is designed in a way that incorporates chemistry, biotechnology and engineering experiments.

Literature Relevant literature in the form of research papers will be provided during the course.

Prerequisites

Keywords

Teaching methods Assignment / Papers / Groupwork / Research

Assessment methods Final Paper / Attendance / Participation / Assignment / 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 Compulsory Skill(s)