

## Course Descriptions None 2021-2022

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      | 31-1-2022 | 25-3-2022 | C   |     |     |     |     |
| 5      | 11-4-2022 | 25-5-2022 | C   |     |     |     |     |

Level no level

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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 The ultimate goal of the Science Lab course is to give students hands-on lab experience in chemistry, biology, physics and engineering. Furthermore the course wants to introduce the entire process behind scientific research. Students will first have to identify their research question and design their experiment while keeping safety, sustainability and time management in mind. In a next stage the experiment will be initialized and executed in a scientific and safe way. During the last step of the process they have to critically analyse the generated data and communicate their findings in a scientific report and/or presentation.

Literature Recommended reading:  
\* Zubrick, J. W. The Organic Chem Lab Survival Manual: A student's Guide to Techniques, 2016, Wiley  
\* Reed R., Holmes D., Weyers J. & Jones A. Practical Skills in Biomolecular Sciences, 2016, Pearson

Prerequisites

Keywords

Teaching methods

Assessment methods

Final Paper / 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)