

Course: Professional Competences 1

credits: 5

Course code BOVH24MDBEROEP1
Name Professional Competences 1
Study year 2026-2027
ECTS credits 5
Language Dutch, with parts in English
Coordinator P.A. Oude Weernink

Modes of delivery Assignment
 Tutorial

Assessments Diagnostische Methoden - Computer,
 organised by STAD examinations
 Projectmanagement en Kwaliteitszorg -
 Other assessment

Learning outcomes

You understand the operation of a number of important general biochemical and molecular diagnostic methods and relate the function and properties of biomolecules (e.g. enzymes, antibodies, probes) to these methods.

You understand the principles and applications of a number of physicochemical separation techniques (e.g. electrophoresis, centrifugation, HPLC, GC) and detection methods (mass) spectrometry, fluorescence) within medical diagnostics.

You will understand the principles and applications of some key molecular diagnostic techniques in medical diagnostics.

Together with fellow students, you delve into a diagnostic method by means of a literature study and you present the results in a relevant way to an audience of your peers, being aware of your role in the group process and the importance of your didactics for the understanding of this method.

In preparation for running a laboratory independently, you show awareness of your role in a group process, and of the importance of quality assurance in generating and delivering reliable results.

Content

In Diagnostic Methods, the first few weeks of short lectures will give you an overview of important physico-chemical separation techniques and molecular biological methods that are important for medical diagnostics. This is followed by assignments to further develop your knowledge. After this foundation, you and your fellow students will explore specific techniques and their application in the diagnostics of infectious organisms and hereditary diseases.

During the meetings, you will work together on the development and presentation of your diagnostic method, with lecturers present for theoretical support. These contact moments are used to work on understanding, analysing and interpreting issues in the context of (in-depth) assignments around diagnostic methods. Finally, you present the diagnostic method in class.

At the same time, in this module you will learn the relevance of both to an (optimally functioning) laboratory through the assignments project management and quality assurance.

Included in programme(s)

Major Medical Diagnostics

School(s)

Engineering, Life Sciences & ICT