

Course: Medical Microbiology

credits: 5

Course code BOVH24MDMEDMICRO
Name Medical Microbiology
Study year 2026-2027
ECTS credits 5
Language Dutch, with parts in English
Coordinator M.K.S. van Duijl

Modes of delivery Lecture
 Tutorial

Assessments Microbiologie 1 - Computer, organised by STAD examinations
 Microbiologie 2 - Computer, organised by STAD examinations

Learning outcomes

You identify and describe the structure and function of (parts of) prokaryotic cells and establish links between the structure and physiology of the microorganism – including metabolism and biosynthesis – both from a general cell biology perspective and as applied in medical diagnostics, using the correct medical terminology.

You have an understanding of growth and the factors influencing that growth in various parts of a healthy body, and establish links with the physiological functions of microorganisms in these locations.

You are familiar with and understand the (virulence) factors that influence the growth, multiplication and spread of microorganisms in invasive pathological conditions, and relate the action of a number of antibiotics and antiviral agents to the molecular structure and metabolism of microorganisms and the development of resistance to them.

You analyse the patient's medical history and clinical and microbiological laboratory results, and use these to explain the onset and progression of infectious diseases in the human body.

Content

Microbiology 1 provides an introduction to the field of microbiology. Understanding the physiological characteristics and behaviour of microorganisms provides insight and knowledge needed in medical diagnostics for the detection, identification and treatment of infectious diseases.

Microbiology 2 focuses on (opportunistically) pathogenic bacteria and viruses. Various micro-organisms are discussed in detail, covering both the diseases they cause, diagnostics in the laboratory and the action of antimicrobial agents.

Included in programme(s)

Major Medical Diagnostics

School(s)

Engineering, Life Sciences & ICT