

Course: Infectious Diseases

credits: 5

Course code LSVX24INFECTIE
Name Infectious Diseases
Study year 2026-2027
ECTS credits 5
Language Dutch, with parts in English
Coordinator M.K.S. van Duijl

Modes of delivery Guest lecture
Lecture
Tutorial

Assessments Infectieziekten portfolio - Other assessment
Infectieziekten symposium - Other assessment

Learning outcomes

You will work effectively together to investigate a case study, outbreak or other problem in a group setting, applying knowledge about infectious diseases, transmission routes, resistance, surveillance, epidemiology, disease prevention and control strategies.

You investigate the effect of different (prevention) measures on the spread of infectious diseases using a disease compartment model.

You evaluate and use scientific literature and reliable internet sources to develop application assignments on infectious diseases.

You prepare a short self-reflection halfway through and at the end of the module to improve and evaluate your own actions.

Content

With increasing globalisation, rising population density and the effects of climate change, we are seeing a rise in the incidence of a large number of infectious diseases. In addition, the number of infections that are resistant to treatment with antibiotics or antiviral drugs is on the rise.

This elective module covers the epidemiological aspects of infectious diseases. You will learn more about the causes of outbreaks and the transmission of diseases, including factors such as the host, the pathogen and the environment. The module covers the surveillance and reporting of infectious diseases, prevention and treatment strategies, and the role of epidemiology in health policy. You will be introduced to the SIR model to predict and understand the spread of infectious diseases.

The module consists of introductory lectures, guest lectures and a series of seminars and assignments. You will compile both the assignments completed during the module and a short self-reflection into a portfolio (partial assessment 1). As a final assignment, you will work in a group to investigate a case study, outbreak or other problem and present your findings to your fellow students during a closing symposium (partial assessment 2).

Included in programme(s)

Major Medical Diagnostics
Major Biology and Medical Research
Bio-Informatics
Chemistry
Chemical Engineering

School(s)

Engineering, Life Sciences & ICT