



Faculty of Health, Science and Technology  
Clinical Medicine

# Syllabus

## Pathology I

**Course Code:** MDGSJ1

**Course Title:** Pathology I  
*Sjukdomslära I*

**Credits:** 7.5

**Degree Level:** Undergraduate level

**Progressive Specialisation:** First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

### Major Field of Study:

#### Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2025-02-17, and is valid from the Autumn semester 2025 at Karlstad University.

#### Prerequisites

Anatomy and physiology, 7.5 ECTS credits, or equivalent

#### Learning Outcomes

The aim of the course is for students, upon completion, to have acquired fundamental knowledge in pathology and related therapeutic strategies.

Upon completion of the course, students should be able to:

- describe pathophysiological mechanisms in the cells, tissues, and organs of the body and how these contribute to the development of disease,
- describe the principal and basic pathological changes associated with common diseases in both acute and chronic forms,
- demonstrate general knowledge of the epidemiology and underlying causes, that is, etiology, symptoms, treatment, and prognosis, of major somatic disease groups within the population,

- provide an overview of pharmacological therapies and other potential forms of treatment
- give an account of how pathological changes in certain organs can affect other organs and organ systems in the body,
- describe how various pathophysiological processes can be measured using analyses and diagnostic methods,
- relate biomedical knowledge to current medical research, and
- discuss ethical aspects related to disease conditions and diagnostics.

## **Content**

Instruction is in the form of lectures and supervision.

The course covers the following:

- Cellular injury
- Inflammation
- Healing
- Neoplasia
- Genetic disorders
- Cardiovascular diseases
- Respiratory diseases
- Endocrine diseases
- General pharmacology

Treatment strategies, chemical and physiological examinations, and disease prevalence in different population groups will be linked to each respective disease category.

## **Reading List**

See separate document.

## **Examination**

Assessment is based on an written exam and seminars completed in groups. For the seminars, submissions for assessment must clearly indicate individual contributions.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

## **Grades**

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

## **Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

## **Course Certificate**

A course certificate will be provided upon request.

## **Additional information**

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.