



Faculty of Health, Science and Technology  
Oral Health

## Syllabus

### Preclinical studies for the dental hygienist, theory and method

**Course Code:** OHG007

**Course Title:** Preclinical studies for the dental hygienist, theory and method  
*Prekliniska studier för tandhygienistens yrkesområde, teori och metod*

**Credits:** 15

**Degree Level:** Undergraduate level

**Progressive Specialisation:** First cycle, has only upper-secondary level entry requirements (G1N)

#### **Major Field of Study:**

OHA (Oral Health)

#### **Course Approval**

The syllabus was approved by the Faculty of Health, Science and Technology 2025-02-18, and is valid from the Autumn semester 2025 at Karlstad University.

#### **Prerequisites**

General admission requirements and upper secondary level Mathematics 2a, 2b, or 2c, Civics 1b or Civics 1a1 + 1a2, Natural Science 2 or Physics 1, Chemistry 1, and Biology 1

#### **Learning Outcomes**

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

Knowledge and understanding

- Give an account of ordinances that regulate radiation protection, documentation in medical records, and confidentiality

- Give an account of basic X-ray physics, the function of the X-ray machine, the physical properties and biological effects of X-radiation
- Give an account of the emergence of the digital X-ray image and the factors that influence its technical quality
- Give an account of clinical data and medical records in dental care
- Give an account of the collection of anamnesis/case history
- Give an account of measuring instruments used for risk assessment in relation to cavities and periodontal disease
- Distinguish normal oral anatomy from cavities and periodontal disease based on X-rays
- Describe normal oral tissues and mucous membranes
- Give an account of dental materials, instruments, and equipment and their function and use for treatment within the professional area of dental hygiene
- Give an account of the basic etiology, pathogenesis, diagnostics, and prevention of caries and periodontal disease based on applicable evidence
- Explain the significance of ergonomic work procedures in dental care

#### Competence and skills

- Apply basic hygiene routines
- Apply extraoral and intraoral examination methods
- Apply methods for visual and instrumental examination of erosion, caries and periodontal diagnostics
- Apply a professional approach and use functional and adequate language for the context, including correct professional terminology
- Apply projection science and setting techniques for odontological radiology and interpret intraoral images within the area of competence of the dental hygienist
- Carry out sharpening of instruments
- Carry out scaling by hand and using a machine
- Carry out professional dental cleaning
- Use an ergonomic position while setting up instruments during patient treatments
- Perform CPR

#### Judgement and approach

- Demonstrate and reflect upon a professional approach
- Reflect upon sustainable development in relation to materials and instruments used in dental care
- Reflect upon their own learning and need for further knowledge

#### **Content**

- Ordinances regulating radiation protection, documentation in medical records, and confidentiality
- National guidelines for dental care
- Documentation in medical records
- Odontological radiology
- Normal anatomical structures in X-rays
- Characteristics of normal oral mucous membranes
- Dental materials
- Instruments and equipment used in the profession of dental hygiene
- Caries disease
- Periodontal disease
- Risk assessment instruments
- Professional dental cleaning
- Ergonomic work procedures
- CPR
- Sustainable development

## **Reading List**

See separate document.

## **Examination**

Assessment is based on:

- individual written take-home exams
- individual written exams
- seminars
- clinical examination
- an individual written reflection report

The number of assessment opportunities is limited to six.

In order to pass the course, students also have to attend and participate in mandatory preclinical method exercises in the laboratory and the training clinic. The number of opportunities to do so is limited to two. For a clinical examination or re-examination later than six months after the method exercises and patient activities, the student is required to complete the mandatory method exercises and patient activities again.

Results will not be reported until a student has participated in the mandatory sessions or completed supplementary assignments in accordance with instructions from the course coordinator. Failure to participate in a mandatory session may mean that the student will not be able to complete that course component until the next time the course is offered.

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.

Students have to receive and pay for any and all vaccinations required for clinical practice. Students also have to pay for CPR equipment and dental instruments.