



**Karolinska  
Institutet**

Course syllabus for

# **Medical and odontological Subsidiary Subjects 2, 10.5 credits**

Medicinska och odontologiska stödämnena 2, 10.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

Please note that the course syllabus is available in the following versions:

Spring2008 , Spring2011 , Spring2013 , Spring2015 , Spring2016 , Spring2017

Course code	1TH003
Course name	Medical and odontological Subsidiary Subjects 2
Credits	10.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Dental Medicine
Participating institutions	<ul style="list-style-type: none"><li>• Department of Laboratory Medicine</li></ul>
Decided by	Programnämnden för tandhygienistprogrammet
Decision date	2007-10-11
Revised by	Education committee DENTMED
Last revision	2019-10-24
Course syllabus valid from	Spring 2017

## **Specific entry requirements**

For admission to the course, it is required that at least 20 credits from semester 1 are passed.

## **Objectives**

The course consists of three modules, 10.5 credits:

Module 1: Nutrition, 3.5 credits

Module 2: Cariology, 4.5 credits

Module 3: Pharmacology, 2.5 credits

Module 1: Nutrition, 3.5 credits

On completion of the course, the student can:

- Account for basic knowledge about nutrition from disciplinary foundation.
- Explain and understand the nutrition importance for the oral- and general health and for the general well-being.
- Account for the nutrition importance for the individual's life environment from cultural and social aspects.
- Give individually adjusted advices about the diet importance for the oral health from an ethical and professional attitude.

#### Module 2: Cariology, 4.5 credits

On completion of the course, the student can:

- Account for the aetiology and pathogenesis of the caries disease from a scientific bases.
- Describe theoretically the localisation and the appearance of clinical caries lesions and calculate caries index.
- Account for diagnostics of caries activity and assessment of caries risk theoretically.
- Account theoretically for and discuss appropriate caries prophylactic measures to prevent continued disease development.
- Account for the saliva effect on the oral health and the general well-being.
- Account for different fluoride agents, their modes of action and toxic aspects and can give recommendations concerning fluoride supply.
- Account for the caries disease considering different general diseases and their effect on the mouth and account for the effect of the oral health on the general well-being from a scientific perspective.
- Account for caries prevalence from a global perspective and discuss ethical aspects and reflect on the importance of caries prevention at an individual, group and community level.
- Account for the indication for and the purpose of restorative treatment.
- Demonstrate knowledge of the principles for the preparation of cavities, caries excavation (partial, step by step), and of different filling materials and their impact on the patient and the environment.

#### Module 3: Pharmacology, 2.5 credits

On completion of the course, the student can:

- Account for basic pharmacological principles of how drugs are delivered into the body and how drugs exercise their effect.
- Account for the importance of drugs in the interplay between the oral health and the general health.
- Account for drug-related problems as, for example, adverse drug reactions/interactions and how one handles them for increased patient security.
- Handle and prescribe drugs in a safe way.
- Search for, analyse and use relevant sources of information.

### **Nutrition, 3.5 hp**

Grading scale: VU

This module contains:

- Oral and general health
- Diet anamnesis
- Cultural and social aspects
- Professional attitude

### **Cariology, 4.5 hp**

Grading scale: VU

The module contains advanced knowledge in cariology:

- Aetiology – microbiology, diet and saliva
- Caries lesions in enamel, dentine and root surface
- Caries index
- Caries risk and prediction
- Caries therapy – non operative treatment; plaque, diet and saliva
- Caries therapy – operative treatment
- Fluoride agents
- Caries disease and its impact on the oral and general health at the individual, group and community level

## **Pharmacology, 2.5 hp**

Grading scale: VU

This module contains:

- Pharmacokinetics and pharmacodynamics
- Drug-related problems such as compliance, adverse drug reactions, interactions and adverse drug reactions related to the mouth and teeth.
- Laws and regulations extensive drug processing and promissory note of drugs
- Prescription
- Aspects of drug treatment during pregnancy and breastfeeding.

## **Teaching methods**

Module 1: Nutrition, 3.5 credits

Lectures, patient cases, own work as a homework assignment, monitoring and group work around homework and self-studies.

Module 2: Cariology, 4.5 credits

Lectures, group work and self-studies.

Module 3: Pharmacology, 2.5 credits

Lectures, seminars and self-studies.

Compulsory attendance at seminars, group work and laboratories.

The course coordinator decides how absence from compulsory course elements can be made up. Study results cannot be reported until the student has participated in compulsory course elements or compensated for any absence in accordance with instructions from the course coordinator. Absence from a compulsory course element could mean that the student can not retake the element until the next time the course is offered.

## **Examination**

Module 1: Nutrition, 3.5 credits

Written examination.

Module 2: Cariology, 4.5 credits

Written examination.

Module 3: Pharmacology, 2.5 credits

Written examination.

For a Pass grade in the course, attendance at compulsory parts is also required. For the grade Pass with distinction, the grade Pass with distinction in Cariology and Nutrition is required and at least the grade

Pass in Pharmacology .

Limited number of examinations or practical training sessions

Students who do not pass a regular examination are entitled to re-sit the examination on five more occasions. If the student has failed six examinations/tests, no additional examination is given. Each occasion the student participates in the same test counts as an examination. Submission of a blank exam paper is regarded as an examination. In case a student is registered for an examination but does not attend, this is not regarded as an examination.

## Transitional provisions

The course has been cancelled and was offered for the last time in the spring semester of 2019.

Examination will be provided until the spring of 2021 for students who have not completed the course.

## Other directives

A course evaluation will be carried out in accordance with the guidelines established by the Board of Higher Education.

## Literature and other teaching aids

### Mandatory literature

#### Näringslära för högskolan

*Abrahamsson, Lillemor; Andersson, Agneta; Becker, Wulf; Nilsson, Gerd*

5. [rev.] uppl. : Stockholm : Liber, 2006 - 461 s.

ISBN:91-47-05355-0 (inb.) LIBRIS-ID:10125744

[Library search](#)

*Hansson, Bengt Olof; Ericson, Dan*

#### Karies : sjukdom och hå

4., [rev.] uppl. : Stockholm : Gothia Fortbildning, 2016 - 159 s.

ISBN:9789188099570 LIBRIS-ID:19353625

[Library search](#)

#### Farmakologi

*Lindström, Erik; Norlén, Per*

3. uppl. : Stockholm : Liber, 2014 - 443 s.

ISBN:9789147114221 LIBRIS-ID:16357182

[Library search](#)

Current scientific articles are additional

### Recommended literature

*Sjögren, Karin; Käll, Mattias*

#### Boken om fluor

[Ny, rev. utg.] : Mölndal : Karin Sjögren i samarbete med Actavis, [2009] - 73 s.

ISBN:9789163344091 LIBRIS-ID:11484093

[Library search](#)

**Karies - diagnostik, riskbedömning och icke-invasiv behandling : en systematisk litteraturöversikt**

**: december 2007**

Stockholm : Statens beredning för medicinsk utvärdering (SBU), 2007 - 403 s.

ISBN:9789185413218 LIBRIS-ID:10674162

URL: [http://www.sbu.se/upload/Publikationer/Content0/1/Karies\\_2007\\_fulltext.pdf](http://www.sbu.se/upload/Publikationer/Content0/1/Karies_2007_fulltext.pdf) z Fulltext  
[Library search](#)

**Att förebygga karies : en systematisk litteraturöversikt**

*Holm, Anna-Karin*

Stockholm : SBU, 2002 - 372 s. +e Summary and conclusions (26 s.)

ISBN:91-87890-81-X LIBRIS-ID:8755500

[Library search](#)

**Dental erosion : bakgrund och kliniska aspekter**

*Johansson, Ann-Katrin; Carlsson, Gunnar E.*

1. uppl. : Stockholm : Gothia, 2006 - 190 s.

ISBN:91-7205-469-7 LIBRIS-ID:10280428

[Library search](#)

**Nationella riktlinjer för vuxentandvård 2011 : stöd för styrning och ledning**

Stockholm : Socialstyrelsen, 2011 - 246 s.

ISBN:978-91-86885-09-0 LIBRIS-ID:12199431

[Library search](#)

*Johansson, Ulla*

**Näring och hälsa**

3., [rev.] uppl. : Lund : Studentlitteratur, 2014 - 460 s.

ISBN:9789144079820 LIBRIS-ID:16666129

[Library search](#)