



**Karolinska  
Institutet**

Course syllabus for

## **Clinical Odontology 4, 10.5 credits**

Klinisk odontologi 4, 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:

Autumn2010 , Autumn2014 , Spring2015 , Autumn2018 , Autumn2020 , Autumn2021

Course code	2TL029
Course name	Clinical Odontology 4
Credits	10.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Odontology
Level	AV - Second cycle
Grading scale	Pass, Fail
Department	Department of Dental Medicine
Decided by	programnämnd 10
Decision date	2010-06-30
Revised by	Programme Committee 10
Last revision	2014-04-28
Course syllabus valid from	Autumn 2014

## **Specific entry requirements**

Ma D, Phy B, Che B and Bi B.

## **Objectives**

The course contains 7 parts

Part 1:

Cariology 4: 1.4 HE credits

On completion of the course, the student should be able to assess and discuss the importance of saliva factors in the individual's caries process, be able to determine the function of the salivary glands and diagnose functional disorders in the salivary glands, be able to assess medical and/or pharmacological causes of reduced salivary gland function, be able to present and inform the patient about appropriate caries prevention programs in saliva secretion disorder and/or xerostomia, independently be able to excavate caries, independently be able to assess caries damage in enamel and dentin and treat the damage with relevant, correctly performed treatment. be able to critically analyse and report a patient with cariologic problems.

## Part 2:

## Endodontics 3: 0.5 HE credits

On completion of the course, the student should be able to analyse and assess the topographical anatomy of the tooth and the pulp cavity, be able to diagnose pathological conditions in the pulp as well as periradicular tissue, and suggest adequate treatment strategies. be able to assess and evaluate endodontic status. independently be able to perform a clinical treatment according to the principles of cavum preparation, pulp ectomy and restorative endodontic treatment

## Part 3:

## Oral Surgery 2, Principals of Exodontia: 1.4 HE credits

After the course, the student should

- practically be able to plan and carry out uncomplicated extractions independently
- be able to account for and carry out the handling of complications of extractions
- have theoretical knowledge of dentoalveolar surgery.

## Part 4:

## Prosthodontics 2, Fixed prosthodontics: 3.8 HE credits

On completion of the course, the student should be able

- to analyse and assess cariological, periodontal, endodontic and occlusal physiological disease based on a prosthetic perspective.
- understand prosthetic treatment planning.
- know indications of fixed as well as removable prosthodontics and be able to offer the patient alternative treatment suggestions.
- under supervision be able to carry out prosthetic treatment planning concerning fixed as well as removable prosthodontics.
- be able to make an estimate of costs and correctly via order form be able to establish adequate communication with dental technicians.
- under supervision be able to prepare teeth intended to be included either in a fixed or a removable prosthesis, be able to make temporary substitutes, be able to expose preparation margins before impressing and be able to take impressions for fixed as well as removable prosthodontics.
- under supervision and together with the patient choose colour and form of prosthetic substitutes.
- be able to test and assess the quality and function of both fixed and removable prostheses, and, where necessary, be able to adjust them.
- understand the principles of an adequate occlusion and be able to carry out occlusal adjustment of fixed and removable prostheses.
- be able to carry out adequate hygien instructions to patients with fixed and/or removable constructions.
- be able to choose correct cement for temporary as well as permanent cementation.

## Part 5:

## Implant Dentistry 1: 1.9 HE credits

On completion of the course, the student should have theoretical awareness of

- osseointegration/bone biology/implant surfaces
- successful frequency and long-term prognosis for various types of implant treatment
- indications/contraindications of different load concepts (immediate-early-late load).
- functional aspects of implant rehabilitation
- treatment planning
- implant surgery
- treatment procedure for implant retained constructions
- management/treatment when complications occur
- different forms of pneumatised bone surgery, technique, prognosis, complication risk
- scientific documentation of various implant systems and long-term follow-up.

## Part 6:

## Implant Dentistry 2: 1 HE credits

On completion of the course, the student should be able to

- carry out fixture installation to a model and apply healing distance/permanent distance.
- choose adequate impression stop and take impressions
- mount/dismount a complete prosthetic construction

**Part 7:**

Integrated Comprehensive Dentistry, 4: 0.5 HE credits

After the course, the student should

- show good judgement and careful treatment of assigned patients.
- be able to make a general treatment proposal for patients including disease-oriented as well as rehabilitating treatment.
- understand the importance of a holistic view on the patient's treatment needs.
- be able to prioritise, and plan different treatments.
- show some skills and abilities in clinical dental care.
- achieved clinical maturity, equivalent to four terms of clinical exercise.
- be able to show clinical maturity by
  - \* possessing knowledge and skills to treat patients without causing injury or risk of injury in connection with examination or treatment
  - \* possess the judgement of not risking the patient's safety due to self-indulgent action or refusal to follow hygiene or safety precautions
  - \* adopt such an approach that the patient or the relatives do not feel threatened or offended
- be able to present on-going and planned treatment on one's own patients.

## Content

**Part 1:**

Cariology 4: 1.4 HE credits

Lectures and seminars bring up the theoretical knowledge basis concerning salivary glands and salivary secretion, as well as cariological treatment planning. Interdisciplinary therapy seminars are carried out based on own patient cases. Clinical proficiency training in the Comprehensive Clinic.

**Part 2:**

Endodontics 3: 0.5 HE credit

The lectures comprise theoretical information to be able to make an assessment of the conditions in tooth and increase the understanding of endodontic status, endodontic microbiology, disinfection, cleaning problems and complications of treatment. Clinical proficiency training in the Comprehensive Clinic.

**Part 3:**

Oral Surgery 2, Principals of Exodontia: 1.4 HE credits

Clinical proficiency training including about 4 half-days in internally referred patients or the students' own patients.

Continuation of the clinical duty in oral surgery in term 6.

**Part 4:**

Prosthodontics 2: 3.8 HE credits

- Lectures including theory in fixed and removable prosthodontics
- Treatment plannings
- Clinical demonstrations of removable prosthodontics
- Patient treatment of removable prosthodontics may be started on completion of the compulsory demonstration course.
- IT-based study materials concerning fixed and removable prosthodontics
- Clinical proficiency training in the adults clinic including preparations, exposure, impressing, adjustment, delivery, hygien instructions and follow-up.

**Part 5:**

Implant Dentistry 1: 1.9 HE credits

Lectures, including the theoretical basis in bone biology and osseointegration, general treatment principles/treatment planning, implant surgery and long-term prognosis, and success frequency of different types of treatment.

**Part 6:**

Implant Dentistry 2: 1 HE credits

Hands-on-exercise and fixture installation to a model. Selection and application of prosthetic work components in implant anchored prosthetic rehabilitation. Mounting and dismounting a completed implant construction. Radiological fixture control to a model.

Part 7:

Integrated Comprehensive Dentistry, 4: 0.5 HE credits

- Seminars and patient presentations.
- Clinical proficiency training in the Comprehensive Clinic.

## **Cariology 4, 1.4 hp**

Grading scale: GU

## **Endodontics, 0.5 hp**

Grading scale: GU

## **Oral surgery 2, principals of exodontia, 1.4 hp**

Grading scale: GU

## **Prosthodontics 2, 3.8 hp**

Grading scale: GU

## **Implant dentistry 1, 1.9 hp**

Grading scale: GU

## **Implant dentistry 2, 1.0 hp**

Grading scale: GU

## **Integrated comprehensive dentistry, 0.5 hp**

Grading scale: GU

## **Teaching methods**

Part 1:

Cariology 4: 1.4 HE credits

Lectures, seminars and demonstrations.

Clinical proficiency training in the Comprehensive Clinic.

Part 2:

Endodontics 3: 0.5 HE credit

Lectures

Clinical proficiency training in the adults clinic

Part 3:

Oral Surgery 2, Principals of Exodontia: 1.4 HE credits

- Clinical proficiency training in the Comprehensive Clinic.

Part 4:

Prosthodontics 2: 3.8 HE credits

Lectures and compulsory clinical demonstrations.

Compulsory clinical proficiency training in the adults clinic.

**Part 5:**

Implant Dentistry 1: 1.9 HE credits

Lectures.

**Part 6:**

Implant Dentistry 2: 1 HE credits

Hands-on-exercise fixture installation/fixture surgery to a model. In a teacher-supervised group, selection and application of prosthetic work components are also practiced. Mounting and dismounting a completed implant construction. Radiological fixture control to a model.

**Part 7:**

Integrated Comprehensive Dentistry, 4: 0.5 HE credits

- Presentation of on-going and planned patient treatment
- Seminars with treatment planning exercise in a web database, a so-called Web-SP
- Clinical proficiency training in the Comprehensive Clinic.

## Examination

**Part 1:**

Cariology 4: 1.4 HE credits

Patient care (clinical proficiency training) is examined, when the treatment is carried out and through for each individual patient completed, by a teacher approved, written medical records including epicrisis and oral case presentation and clinical overview of completed work so called clinical examination. Practical examination is also arranged in OSCE (Objective Structured Clinical Examination) in term 9.

**Part 2:**

Endodontics 3: 0.5 HE credit

The clinical treatment parts are assessed based on the quality requirements listed in the compendium Treatment instructions. In order to be given credit for completed treatment, a clinical examination should be made after each completed endodontic treatment. Practical examination is also arranged in OSCE (Objective Structured Clinical Examination) in term 9.

**Part 3:**

Oral Surgery 2, Principals of Exodontia: 1.4 HE credits

A Pass grade in the course requires

- passed clinical proficiency training. Missed sessions in clinic-based service should be compensated by a make-up assignment from the course provider, alternatively an extra clinic-based session. Practical examination is also arranged in OSCE (Objective Structured Clinical Examination) in term 9.

**Part 4:**

Prosthodontics 2: 3.8 HE credits

- Attendance is required at compulsory course parts, see above. Missed examinations should be compensated by a make-up assignment from the course provider.
- Written examination of removable prosthodontics
- Patient care (clinical proficiency training) is examined, when the treatment is carried out and through for each individual patient completed written medical records, including epicrisis and oral case presentation and clinical overview of completed work so called clinical examination.
- Practical examination is also arranged in term 9 in OSCE (Objective Structured Clinical Examination).

**Part 5:**

Implant Dentistry 1: 1.9 HE credits

Written examination.

**Part 6:**

Implant Dentistry 2: 1 HE credits

Compulsory attendance at group exercises/seminars.

Missed examinations should be compensated by a make-up assignment from the course provider.

**Part 7:**

Integrated Comprehensive Dentistry, 4: 0.5 HE credits

Examination takes place through oral and written presentation of implemented patient treatments in the so called clinical examination. Written examination term 8.

Practical examination is also arranged in OSCE (Objective Structured Clinical Examination) in term 9.

Limited number of examinations or practical training sessions

If the student's examination has not passed, the student gets 2 more examination opportunities. After that, the student is recommended to retake the course and is given 3 more examination opportunities. If the student has not passed after 6 trials, he/she has no more admission to the course. (HF chapter 6, section 11 a).

Interrupt the clinical proficiency training

The examiner may with immediate effect interrupt a student's clinical proficiency training if the student demonstrates such serious deficiencies in knowledge, skills or attitudes that patient safety or patient confidence in healthcare is at risk. When the clinical proficiency training is interrupted like this, it implies that the student fails in the clinical part of the course.

In such cases, an individual action plan should be set up, where it comes clear which activities and examinations are required before the student is given the possibility to clinical proficiency training in this course.

Eligibility

Student who has failed the clinical proficiency training as a consequence of that the student has demonstrated so serious deficiencies in knowledge, skills or attitudes that patient safety or patient confidence in healthcare has been at risk, is qualified to resume the clinical proficiency training only when the individual action plan has been completed.

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In such cases, an individual action plan should be set up, where it comes clear which activities and examinations are required before the student is given the possibility to clinical proficiency training in this course.

Eligibility

Students who have failed the clinical proficiency training as a consequence of demonstrating deficiencies in knowledge, skills or attitudes so serious that patient safety or patient confidence in healthcare is at risk are qualified for resuming the clinical proficiency training only when the individual action plan has been completed.

## **Transitional provisions**

If the course is closed down or undergoes major changes, examination under a previous literature list and learning outcomes will be offered no more than one academic year after the implementation of the revision/close-down.

## **Other directives**

Other course evaluation is carried out in accordance with the guidelines established by the Board of Education.

## **Literature and other teaching aids**

**Dental caries : the disease and its clinical management**

*Fejerskov, Ole; Kidd, Edwina A. M.*

Oxford : Blackwell Munksgaard, 2003 - xviii, 350 s.

ISBN:1-4051-0718-9 LIBRIS-ID:8891697

[Library search](#)

*Lamont, Richard J.*

**Oral microbiology and immunology**

Washington, D.C. : ASM Press, c2006 - 458 p.

ISBN:1-55581-262-7 (pbk.) LIBRIS-ID:10243998

[Library search](#)

*Kidd, Edwina A. M*

**Essentials of dental caries: the disease and its management**

3. ed. : Oxford : Oxford University Press, 2005

ISBN:0-19-852978-3

[Library search](#)

*Mjör, Ivar Andreas*

**Pulp-dentin biology in restorative dentistry**

Chicago : Quintessence Pub., cop. 2002. - x, 152 s.

ISBN:0-86715-412-8 (softcover) LIBRIS-ID:8678137

[Library search](#)

**Contemporary oral and maxillofacial surgery**

*Hupp, James R.; Tucker, Myron R.; Ellis, Edward*

6th ed. : St. Louis, Mo. : Elsevier Health Sciences, c2014 - 703 p.

ISBN:9780323091770 (hbk.) LIBRIS-ID:13888536

[Library search](#)

*Jepson, Nicholas J. A.*

**Removable partial dentures**

London : Quintessence, 2004

ISBN:1-85097-075-0

[Library search](#)

**Partiell plattprotetik**

*Bergman, Bo; Stenman, Evert*

Solna : LIC : b Invest-odont, 1994 - 75 s.

ISBN:91-7584-295-5 LIBRIS-ID:7649487

[Library search](#)

*Rosenstiel, Stephen F.; Land, Martin F.; Fujimoto, Junhei,*

**Contemporary fixed prosthodontics,**

4. ed., : St. Louis, : Mosby, 2006

ISBN:0-323-02874-8

[Library search](#)

*Allen, P. Finbarr; McCarthy, Sean*

**Complete dentures: from planning to problem solving**

London : Quintessence, 2003

ISBN:1-85097-064-5

[Library search](#)

**A textbook of fixed prosthodontics : the Scandinavian approach**

*Karlsson, Stig; Nilner, Krister; Dahl, Bjørn L.*

Stockholm : Gothia, 2000 - 360 s.

ISBN:91-7205-280-5 (inb.) LIBRIS-ID:7623058

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*Rosenstiel, Stephen F.; Land, Martin F.; Fujimoto, Junhei,*

**Contemporary fixed prosthodontics,**

4. ed., : St. Louis, : Mosby, 2006

ISBN:0-323-02874-8

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**Clinical periodontology and implant dentistry**

*Lindhe, Jan; Karring, Thorkild; Lang, Niklaus P.*

4. ed. : Oxford : Blackwell Munksgaard, 2003 - 1044 s.

ISBN:1-4051-0236-5 LIBRIS-ID:8900580

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*Rosenstiel, Stephen F.; Land, Martin F.; Fujimoto, Junhei,*

**Contemporary fixed prosthodontics,**

4. ed., : St. Louis, : Mosby, 2006

ISBN:0-323-02874-8

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**Clinical periodontology and implant dentistry**

*Lindhe, Jan; Karring, Thorkild; Lang, Niklaus P.*

4. ed. : Oxford : Blackwell Munksgaard, 2003 - 1044 s.

ISBN:1-4051-0236-5 LIBRIS-ID:8900580

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