Opasraportti


1. INSTITUTE OF DENTISTRY

1.1. General description of the Institute of Dentistry

The Institute of Dentistry at Oulu University is one of the four Dental Schools in Finland giving both under and post-graduate dental education. Our specific mission is to educate scientifically thinking, clinically competent professional dentists, dental specialists and doctors of dental science. The website of the Institute can be found at http://www.oulu.fi/hamm/eng1.html

Head

Pertti Pirttiniemi, DDS, PhD, Professor of Oral development and Orthodontics,
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Programme director

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1.2. Research areas

The Institute of Dentistry is divided into seven subjects. All subjects are headed by full professors who are in charge of the research, theoretical studies and training in respective areas. Research is also carried out in co-ordination with several subjects both within and outside the University of Oulu. For details of research projects see links to Subjects:

- Community Dentistry (Professor Jorma Virtanen)
- Diagnostics and Oral Medicine (Professor Tuula Salo)
- Oral development and Orthodontics (Professor Pertti Pirttiniemi)
- Oral and Maxillofacial Surgery (Professor Kyösti Oikarinen)
- Pedodontics, Cariology and Endodontology (Professor Leo Tjäderhane)
- Periodontology and Geriatric Dentistry (Professor Tellervo Tervonen)
- Prosthetic Dentistry (Professor Aune Raustia)

2. Information on Degree Programme

2.1. General description

The degree of Licentiate of Dentistry is 330 ECTS credits. An academic year consists of 60 credits. The studies are pre-scheduled and the average time required to complete the degree is five and a half years.

In Finland, the National Supervisory Authority for Welfare and Health is responsible for awarding legal status to dentists and for overseeing the profession. After having the dental degree, the graduate applicant can apply for
Studies in dentistry consist of preclinical and clinical phases including theoretical studies, phantom courses and clinical work with patients. Students have their first contacts with patients already at the preclinical phase of the curriculum. In order to arrange teaching to cover more comprehensive themes certain subjects from different subjects in Dentistry have been integrated and taught together in so called strands.

The theoretical studies during the first two preclinical years consist of cell biology; anatomy, physiology, biochemistry and public health. After this stage the studies continue mainly at the facilities of the Institute of Dentistry for a three year period. Clinical phase comprises of theoretical studies in Dentistry and Medicine, practice in phantom laboratory, clinical demonstrations, group work and actual clinical practice in the Teaching health center, City of Oulu and the Clinic of dental and oral diseases, University hospital of Oulu. The work with the patients gives the students the necessary skills in clinical diagnostics and treatment procedures.

2.2. Qualification awarded
Licentiate of Dentistry, (Equivalent to D.D.S. degree in Anglo-American countries)

2.3. Admission requirements
The admission requirements for studies in dentistry comprise the Matriculation Examination Certificate and an entrance examination. All applicants have to participate in the national entrance examination, which is usually arranged in May. The entrance examination is based on Finnish or Swedish textbooks used in the curriculum of the High Schools and their obligatory and specialization courses in biology, physics and chemistry and the material offered in the entrance examination. The language of the entrance examination is Finnish or Swedish.

2.4. Educational and professional goals
The education is based on competence areas that include thorough knowledge on general medicine, oral biology, materials, society and management; good diagnostic, practical and interaction skills; ability in acquiring and assessing information as well as humanity. The competences follow the seven domains that are described by Association for Dental Education in Europe (ADEE). These have been identified to represent the broad categories of professional activity and concerns that occur in the general practice of dentistry.

I Professionalism
II Interpersonal, Communication and Social Skills
III Knowledge Base, Information and Information literacy
IV Clinical Information Gathering
V Diagnosis and Treatment Planning
VI Therapy: Establishing and Maintaining Oral Health
VII Prevention and Health Promotion

2.4. Access to further studies
Specialization
Institutes of Dentistry are also responsible for specialist training in Finland. Before entering post-graduate training, which takes from three to six years, the trainee must have worked two years in general practice. The aim of specialist training is to provide the dentists with advanced, comprehensive theoretical and practical skills which are defined as clinical dentistry, orthodontics, oral and maxillofacial surgery and health care. A national examination is arranged and must be passed by each trainee.

Doctor of Dental Science (Equivalent to Ph.D. degree in Anglo-American countries)
Dental graduates may continue their studies to Doctor of Dental Science. This includes preparing a dissertation and completing other doctorate studies. In order to obtain the degree, a doctoral candidate must participate in theoretical research training, the extent of which is 20 ECTS credits. The training includes prescribed courses in general postgraduate training (5 credits) and special training (15 credits) according to the topic. The candidate must also conduct research, write and publish a doctoral dissertation and defend it in a public debate. Generally the minimum time needed to obtain a doctorate corresponds to 3 to 4 years of full-time work.

2.5. Course structure diagram (with ECTS credits)

Structure of the Degree Programme

The degree programme is divided into six sections:
General studies (G) 14,5 ECTS
Language studies (L) 6 ECTS
Basic- (B), Subject- (S) and Advanced studies (A) 239,5 ECTS
Practical training (T) 40 + 30 ECTS

<table>
<thead>
<tr>
<th></th>
<th>Year 3 (1st Clinical year)</th>
<th>Year 4 (2nd Clinical year)</th>
<th>Year 5 (3rd Clinical year)</th>
<th>Year 6 (4th Clinical year)</th>
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<td>ECTS credits</td>
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<td>63,9</td>
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The preclinical phase lasts for two years and mostly consists of basic and biomedical studies and subject studies. The completion of clinical phase takes three years.

2.6. Final examination

To obtain the degree final examination has to be completed in following courses:

- 090302A Oral Pathology
- 090501A Pedodontics, Cariology and Endodontics
- 090502A Oral Surgery
- 090503A Prosthetic Dentistry
- 090504A Stomatognathic Physiology
In advanced studies the student concentrates on some specific topic, which has scientific relevance in the work of dentist. Advanced studies include thesis work (20 ECTS credits).

2.7. Examination and Assessment Regulations

Assessment is based on examinations, exercises, essays, field work, clinical work, reports or any other method determined pedagogically appropriate for the particular course. All the exams can be retaken. Additional information is given from the organizing subject. Clinical work is assessed biannually.

Grades used for assessment of the courses are: 5 (excellent; ECTS A), 4 (very good; ECTS B), 3 (good; ECTS C), 2 (satisfactory; ECTS D), 1 (sufficient; ECTS E); fail.

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

090601A-04: Adult Orthodontics, 0,4 op
090603S: Advanced Practical Training DC11, 30 op
090403A: Anaesthesiology, 1 op
090510A-05: Basic Competence in Working on Public Oral Health Care Services, 1,1 op
090510A-04: Basic Competence on Ethics, Legislation and Dentist-Patients Relationship, 1,1 op
090601A-01: Basic Orthodontic Skills, 2 - 6,7 op
090505A-01: Basics in Periodontology and Periodontal Treatment, 1,5 - 5,2 op
090501A-01: Basics in operative dentistry, 1,8 - 5,1 op
090501A-06: Cariology and general health, 0,3 - 1,6 op
090507A: Clinical Pharmacology, 1,5 op
090603A: Clinical Training, 34 - 40 op
090603A-10: Clinical Training, DC 10, 4 - 6 op
090603A-05: Clinical Training, DC 5, 1 op
090603A-06: Clinical Training, DC 6, 6 - 8 op
090603A-07: Clinical Training, DC 7, 7 - 9 op
090603A-08: Clinical Training, DC 8, 6 - 14 op
090603A-09: Clinical Training, DC 9, 6 - 9 op
090510A: Community Dentistry, 6 - 7 op
090503A-02: Complete Dentures, 3,4 - 3,9 op
090510A-08: Controlling Oral Diseases among Populations; Evidence-based Dentistry, 0,8 - 1 op
090510A-07: Current Topics in Community Dentistry, 2,3 - 3 op
090503A-04: Dental Materials, 1 - 1,5 op
090506A: Dental Radiology, 7 - 7,3 op
090502A-03: Dental and Maxillofacial Injuries - diagnostics and treatment, 1,4 - 3,4 op
090502A-02: Dentoalveolar Surgery, 2,4 - 3,9 op
090503A-07: Denture repair, 0,5 - 0,9 op
090301A: Dermatology and Venereology, 0,4 - 0,6 op
090302A-02: Diseases of Oral Mucosa, 2,7 - 3,1 op
090505A-14: Endo-perio problems, 0,2 op
090501A-03: Endodontics I, 1,6 op
090501A-05: Endodontics II, 2,1 op
090502A-09: Facial Pain Conditions, 1,1 op
090510A-00: Final Exam, Community Dentistry, 0 op
090506A-00: Final exam, Dental radiology, 0 op
090502A-11: Final exam, Oral and maxillofacial surgery, 0 - 7,9 op
090601A-00: Final exam, Oral development and orthodontics, 0 op
090505A-15: Final exam, Periodontology and geriatric dentistry, 0 op
090501A-00: Final exam, Preventive dentistry and cariology, 0 op
090503A-00: Final exam, Prosthetic dentistry and stomatognathic physiology, 0 op
090503A-01: Fixed Prosthodontics, 4,5 - 4,7 op
090606A: Forensic Dentistry, 0,3 op
090505A-05: Geriatric Dentistry, 1,3 op
040014Y: Growing Identity as a Dentist, 2 - 11,5 op
040014Y-01: Growing identity as a dentist Part 1: Introduction to the studies in Dentistry, 0,5 - 5 op
040014Y-02: Growing identity as a dentist Part 2: Teacher tutorials, 0,5 - 4,5 op
090601A-02: Growth and Development of Craniofacial Structures and Occlusion and Oral-facial genetics, 0,6 - 3 op
090503A-06: Immediate dentures, 0,3 op
090502A-08: Implant Dentistry, 0,4 - 0,6 op
090506A-04: Injuries of the Teeth, Jaws and Face, 0,7 op
090303A: Internal Medicine for Dental Students, 0,8 op
090602Y: Introduction to Clinical Work, 1,5 op
090601A-08: Introduction to Development of Occlusion and Orthodontics, 0,5 op
040300A: Maturity exam (native language), 0 op
040011Y-01: Medical informatics, module 1, information and Communication Technology, 0,5 op
040011Y-02: Medical informatics, module 2, literature retrieval, 1 op
092201A: Microbiology/Infections, 2 - 2,1 op
090205A: Neurology, 0,4 - 0,5 op
090601A-09: ORTHO-Seminars 1-5, 1,4 op
090603A-02: OSCE, 0 op
090505A-08: Occlusal Rehabilitation in Periodontal Therapy, 1 op
090502A-04: Odontogenic Infections, 0,6 - 1,3 op
090501A-02: Operative Dentistry, 5,1 op
090601A-03: Oral Development and Orthodontics, 10 - 12 op
090302A-01: Oral pathology, 5,2 - 6 op
090502A-04: Oral Pathology, microscopy course, 0,6 op
090502A-05: Oral Surgery and General Health, 0,5 - 3,8 op
090502A-06: Oral and Maxillofacial Rehabilitation I, 0,3 - 0,9 op
090502A-07: Oral and Maxillofacial Rehabilitation II, 0,2 - 0,3 op
090502A: Oral and Maxillofacial Surgery, 12,5 - 23 op
090302A-01: Oral pathology, 5,2 - 6 op
090510A-11: Organization and Providers of Oral Health Care Services, 0,4 op
090508A: Otorhinolaryngology, 0,5 op
090202A: Paediatrics, 0,5 - 1,8 op
090603Y: Patient seminar, 0 op
090603Y-01: Patient seminars, 0 op
090603Y-02: Patient seminars; preparation and presentation, 0 - 2 op
090502A-12: Pediatric oral and maxillofacial surgery, 0,4 - 0,5 op
090501A-07: Pedodontics, 1,2 - 2,5 op
090505A-06: Periodontal Diseases and General Health, 2,1 - 3,9 op
090505A-03: Periodontal Surgery, 2,2 - 2,7 op
090505A-13: Periodontal diseases in children, 0,3 - 0,5 op
090505A: Periodontology and Geriatric Dentistry, 12 - 17,4 op
090502A-00: Preliminary examination, Oral and Maxillofacial Surgery, 0 op
090501A-001: Preliminary examination, cariology, 0 op
090505A-00: Preliminary examination, periodontology, 0 op
080206A: Prescriptions, 0,5 op
090501A: Preventive Dentistry and Cariology, 14,9 - 17,9 op
090506A-01: Principles of Dental Radiology, 1,9 - 3,8 op
090502A-01: Principles of Oral and Maxillofacial Surgery, 3,2 - 4,7 op
090203A: Propedeutic Course on Surgery, 1,5 op
090503A: Prosthetic Dentistry, 12,3 - 16 op

Compulsory
090503A-10: Prosthetic Management for Advanced Cases, 0,8 - 1,1 op
090404A: Psychiatry, 0,4 - 0,5 op
090304A: Radiation Safety, 2,1 op
090304A-01: Radiation Safety, Part 1, 1,5 op
Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

090601A-04: Adult Orthodontics, 0,4 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Heikkinen, Tuomo Pekka Tapani
Opintokohteen kielet: Finnish

ECTS Credits: 0.4 ECTS credits
Language of instruction: Finnish
Timing: 3rd year, Spring term

Learning outcomes:
To be able to make diagnosis of malocclusions in adult patients, to send the case to the orthodontist, to be familiar with the risks of treatment and nontreatment.

Contents:
Basic items of adult orthodontics

Mode of delivery:
Lectures

Learning activities and teaching methods:
Lectures 4 hours

Target group:
All 3rd year dental students

Prerequisites and co-requisites:
Earlier courses in orthodontics and terminology

Recommended optional programme components:
Oral rehabilitation
090601A Oral Development and Orthodontics
Recommended or required reading:

Assessment methods and criteria:
Oral rehabilitation exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Senior Lecturer Tuomo Heikkinen

Working life cooperation:
No

Other information:

090603S: Advanced Practical Training DC11, 30 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Advanced Studies
Laji: Practical training
Arvostelu: 1 - 5, pass, fail
Opettajat: Raija Lähdesmäki
Opintokohteen kielet: Finnish

ECTS Credits:
30 ECTS credits
Language of instruction:
Finnish
Timing:
6th year, Autumn term

Learning outcomes:
After practical training the student identifies and manages the field of a dentist in a basic health care. After the training the student knows the Health Center as an operational environment including specialist medical care and expertise in dentistry as well as different sectors offering basic health care in Finland.

Contents:
Student in Dentistry makes an application for employment to Health Center that has a valid agreement with the University. The Finnish Dental Association keeps a national register of the valid Health Centers. Student writes down the target for the clinical training with the tutors of the Institute of Dentistry and the Dental Training Clinic before starting the practice in the training plan. Student familiarizes with the Finnish Health care systems and Dentistry in Health Centers. Student treats patients in need of oral and dental care. During the clinical training student evaluates how the target is becoming true with the mentor(s) in the Health Center. At the end of the clinical training student writes down the final report that is signed by the main mentor in Health Center and student and gives the report to the Institute of Dentistry to get the acceptance of the clinical training. Student gives written feedback of the clinical training in Health Center, how the target has been achieved and the possible further measures.

Mode of delivery:
Face-to-face teaching

Learning activities and teaching methods:
Student treats patients in dentistry in basic health care in co-operation with other dental personnel. Health Center organizes the mentoring and overall circumstances so that the plan for the clinical training can be reached according to the plan. Health Center names the main mentor who has been working at least two years as a full-time dentist and deputies and other mentors if needed. Health Center is committed to give at least four working days for the student to take part to the studies in Dentistry in the University, when the training is full-time job. The studies in Dentistry are documented beforehand in the training plan. The maximum for the absence, because of the studies in Dentistry, during the clinical training as full-time job is 14 calendar days.

Target group:
Dental students

Prerequisites and co-requisites:
The Institute of Dentistry assigns the permission to start the advanced practical training. The prerequisite for the permission is that the student has passed the clinical phase of the studies (40 ECTS credits). In addition, theoretical studies have to be done except for two final exams and the thesis (20 ECTS credits) has to be written and under revising and oral speech has been done.

**Recommended optional programme components:**

- **Recommended or required reading:**
  Materials in the studies of Dentistry, materials from the Health Center

**Assessment methods and criteria:**
Six month period of full-time job in a Health Center including a preliminary plan, final report and assessment of the practical training.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
pass/fail

**Person responsible:**
Programme director/Raija Lähdesmäki, Assistant professor

**Working life cooperation:**
Practical training is carried out by working as a dentist in a Health Center.

**Other information:**
Accepted practical training is carried out according to the signed preliminary plan in a Health Center that has a valid agreement between the University and Health Center.

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### 090403A: Anaesthesiology, 1 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
1 ECTS credit

**Language of instruction:**
Finnish

**Timing:**
DC8

**Learning outcomes:**
The aim is to get understanding in different types of anesthesia and handling of emergency situations

**Contents:**
different modes of anesthesia emergency situations, cannulation

**Mode of delivery:**
lectures, practical exercises

**Learning activities and teaching methods:**
lectures and practical exercises (12 h)

**Target group:**
4th year dental students

**Prerequisites and co-requisites:**
- **Recommended optional programme components:**
  No

**Recommended or required reading:**
Lecture materials

**Assessment methods and criteria:**
presence

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
approved/disapproved

**Person responsible:**
Prof. Seppo Alahuhta
090510A-05: Basic Competence in Working on Public Oral Health Care Services, 1,1 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Niskanen, Leena Marita
Opintokohteen kielet: Finnish

ECTS Credits:
1,1 ECTS credits
Language of instruction:
Finnish
Timing:
4th year, Spring term, Advanced studies
Learning outcomes:
Student understands the role of the oral diseases and oral health care system in welfare society. Student applies dental ergonomics in patient work. Student knows how to obtain and critically evaluate scientific knowledge and up-date his/her knowledge.
Contents:
See objective of the course
Mode of delivery:
Face-to-face teaching, independent study
Learning activities and teaching methods:
lectures, group works, independent study
Target group:
4th year dental students
Prerequisites and co-requisites:
No prerequisites or co-requisites
Recommended optional programme components:
-
Recommended or required reading:
materials delivered in the course
Assessment methods and criteria:
learning assignment
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes verbal grading scale pass/fail.
Person responsible:
Professor Jorma Virtanen
Working life cooperation:
No
Other information:
Basic Skills in Dentistry Strand

090510A-04: Basic Competence on Ethics, Legislation and Dentist-Patients Relationship, 1,1 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Niskanen, Leena Marita
Opintokohteen kielet: Finnish
ECTS Credits: 1.1 ECTS credits
Language of instruction: Finnish
Timing: 3rd study year, Autumn term, Subject studies
Learning outcomes: Student has basic competence in dental ergonomics, patient documentation and in developing a good dentist-patient relationship. Student is acquainted with basic concepts on ethics and most important legislation in oral health care.
Contents: See objective of the course
Mode of delivery: Face-to-face teaching
Learning activities and teaching methods: lectures, practical exercises, group work, individual studies
Target group: 3rd year dental students
Prerequisites and co-requisites: No
Recommended optional programme components: -
Recommended or required reading: recent scientific and other relevant articles provided in the beginning of the course
Assessment methods and criteria: learning assignment
Read more about assessment criteria at the University of Oulu webpage.
Grading: The course unit utilizes verbal grading scale pass/fail.
Person responsible: Professor Jorma Virtanen
Working life cooperation: No
Other information: Basic Skills in Dentistry Strand

090601A-01: Basic Orthodontic Skills, 2 - 6.7 op
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Pirttiniemi, Pertti Mikael
Opintokohteen kielet: Finnish

ECTS Credits: 6.7 ECTS credits
Language of instruction: Finnish
Timing: 3rd study year, Autumn - Spring term. The preclinical studies have to be passed before the course.
Learning outcomes: The student is able to estimate the incidence and implication of abnormal occlusion and consider the function in orthodontic treatment need evaluation. He is able to make a diagnosis on most common occlusal abnormalities and is able to define the degree of difficulty and the demand of treatment. The student knows the protocol and methods of orthodontic examination and uses radiology in diagnosis. He understands the options for treatment methods and the importance of timing in treatment. The student is able to make most common orthodontic appliances and understands the overall care and advice for the patient. He knows the orthodontic first aid.
Contents:
The basic concepts in orthodontics and documentation in the examination of occlusion; understand the possibilities of treatment methods in different stages of the developing dentition; treatment methods, appliances and mechanics in preference to growth guidance; basic knowledge to make the diagnosis, treatment planning and timing in orthodontic treatment. Patient information to clarify home care in Orthodontics. First aid in Orthodontics. Orthodontic equipment and materials will be introduced, Orthodontic examination including anamnesis, occlusal status, biologic developmental stage of the dentition, occlusal function, cephalometric analysis, photography of the face and dentition and making dental casts including alginate copy and wax index of the dentition. How to make Orthodontic appliances will be introduced e.g. orthodontic ring, brackets, arch wire and how to fix them., remove fixed appliances and how to make retention appliances and fix them., the mechanics of expanding appliance, how to make extraoral traction and early cross-bite treatment. The student learns to bend an ideal orthodontic arch wire, retention wire and the wire for extraoral traction. Practical exercises in pairs and teaching videos will instruct the basics of patient care in Orthodontics.

Mode of delivery:
Lectures, seminars, hand-on course, demonstrations

Learning activities and teaching methods:
Lectures, seminars, hand-on course, demonstrations 6,7 ECTS credits

Target group:
3rd year dental students

Prerequisites and co-requisites:
All DC1-DC4 studies, all obligatory studies

Recommended optional programme components:
090601A Oral Development and Orthodontics

Recommended or required reading:
Orthodontic examination carbon copy, basic mechanics in Orthodontics I and II, lecture hand-outs (in Finnish)
Extra reading: Richardson A: Interceptive Orthodontics, 4th edition, Suffolk, UK

Assessment methods and criteria:
Mandatory attending in hand-on course, all group works, passing of essay examination
The course is included in the final examination of oral development and orthodontics (090601A-00)
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Pass/fail in hands-on course, Essay examination 1-5

Person responsible:
Professor Pertti Pirttiniemi

Working life cooperation:
Yes

Other information:
Basic Skills in Orthodontics-course is term of admission to start work in Orthodontics.

090505A-01: Basics in Periodontology and Periodontal Treatment, 1,5 - 5,2 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
5,2 ECTS credits
Language of instruction:
Finnish
Timing:
3rd study year, Autumn term
Learning outcomes:
To reach basic knowledge and skills to give periodontal therapy
Contents:
Anatomy and physiology of periodontium, aetiology and basic pathology of gingivitis and chronic periodontitis and their diagnostics and nonsurgical therapy
Mode of delivery:
lectures, practical exercises, individual studies
Learning activities and teaching methods:
Target group:
3rd year dental students

Prerequisites and co-requisites:
To pass the entrance examination

Recommended optional programme components:

Recommended or required reading:
Carranza's Clinical Periodontology

Assessment methods and criteria:
written course examination
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Tellervo Tervonen and Senior Lecturer Hilkka Pernu

Working life cooperation:

Other information:

090501A-01: Basics in operative dentistry, 1,8 - 5,1 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Vuokko Anttonen
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
5 ECTS credits

Language of instruction:
Finnish

Timing:
2nd study year Spring term, 3rd study year Autumn term, Subject studies

Learning outcomes:
Upon completion the student should be able to understand the basics of the factors affecting the pathobiology, initiation and progression of dental caries, and the role of these factors in caries prevention.

Contents:
Dental tissues: enamel, dentin, pulp tissue; pathobiology and histopathology of caries; caries microbiology, saliva and caries, caries tests; diet and caries; caries indexes, epidemiology; caries preventive factors: oral hygiene, fluoride, xylitol, antiseptic substances.

Mode of delivery:
Face-to-face: lectures, group assignments

Learning activities and teaching methods:
Lectures 34 h representing 68 h of learning
Literature representing 20 h of learning

Target group:
2nd and 3rd year dental students. Compulsory to all dental students.

Prerequisites and co-requisites:
090501A-001 Preliminary examination, cariology

Recommended optional programme components:
No alternative course units. Part of the course (1,5 credits) will be given in Preclinical strand and the rest (1,8 credits) in Basic Practical Skills

Recommended or required reading:

Assessment methods and criteria:
Midterm exam in the beginning of the 2nd part of the course covers the topics of the 1st part of the course and is a prerequisite to the participation to Operative Dentistry course (090501A-02). Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Leo Tjäderhane

Working life cooperation:
Yes. Clinical phase practice integrated into the Dental Training Clinic, City of Oulu.

Other information:
090501A Preventive Dentistry and Cariology
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.

After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02. Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam. Final grade will be based on the a) the results of the midterm and final exams; b) score achievement in continuous clinical performance evaluation (given by clinical supervisors), and ; c) performance in competence evaluation (given by clinical supervisors and assisting staff).

090501A-06: Cariology and general health, 0,3 - 1,6 op

Opiskelumuoto: Intermediate Studies

Laji: Partial credit

Arvostelu: 1 - 5, pass, fail

Opettajat: Leo Tjäderhane

Opintokohteen kielet: Finnish

ECTS Credits: 1,6 ECTS credits

Language of instruction: Finnish

Timing: 5th year, Autumn term, Advanced studies

Learning outcomes:
Upon completion the student should be able to recognize and diagnose the conditions and systemic diseases (other than caries) that cause dental tissue loss.

Contents:
Loss of dental tissues due to attrition, abrasion and erosion. Hereditary and other developmental dental abnormalities.

Mode of delivery:
Face-to-face: lectures

Learning activities and teaching methods:
Lectures 16 h representing 32 h of learning, literature representing 14 h learning

Target group:
5th year dental students. Compulsory to all dental students.

Recommended optional programme components:
No alternative course units. Dental and Oral Diseases and General Health Strand

Recommended or required reading:
Luentomoniste;luentojen yhteydessä jaettava oheismateriaali
Fejerskov O, Kidd E. Dental Caries. The Disease and its Management. 2nd Ed. - Part III Dental caries in a biological context
o Chapter 13 Erosion of the teeth, ss. 234-246 (13 s.)
Kurssikirjojen saatavuuden voi tarkistaa tästä linkistä .

Assessment methods and criteria:
written exam

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.
**Person responsible:**
Professor Leo Tjäderhane

**Working life cooperation:**
Yes. Clinical phase practice integrated into the Dental Training Clinic, City of Oulu.

**Other information:**

**090501A Preventive Dentistry and Cariology**
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.

After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02. Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam.

Final grade will be based on the a) the results of the midterm and final exams; b) score achievement in continuous clinical performance evaluation (given by clinical supervisors), and; c) performance in competence evaluation (given by clinical supervisors and assisting staff).

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**090507A: Clinical Pharmacology, 1,5 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Miia Turpeinen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
1,5 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
The course unit is held in the autumn semester. It is recommended to complete the course during the 5th year of the studies (DC9).

**Learning outcomes:**
After passing the course the student should understand the basis for drug therapy from the point of view of dentist. The student should have ability to safe, efficient and cost effective drug therapy.

**Contents:**
Factors affecting drug selection, dosage and therapy will be discussed applying knowledge of basic pharmacology. Individualized therapy, major classes of drugs used by dentist and special treatment situations will also be discussed.

**Mode of delivery:**
The tuition will be implemented as face-to-face teaching.

**Learning activities and teaching methods:**
Thematic seminars 8h, preparation of patient cases and patient case seminars.

**Target group:**
5th year dental students

**Prerequisites and co-requisites:**
The required prerequisite is the completion of Pharmacology and Toxicology course (040106A).

**Recommended optional programme components:**
Oral Diseases and Health Strand

**Recommended or required reading:**
Materials of thematic seminars. Applicable parts of textbook "Kliininen farmakologian ja lääkehoito (Kandidaatikustannus 2011)".

**Assessment methods and criteria:**
Participation in thematic and patient case seminars.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
Pass/fail

**Working life cooperation:**
No
Clinical Training, 34 - 40 op

Opiskelumuoto: Intermediate Studies
Laji: Practical training
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
- students who have started in 2011: 40.0 credits
- students who have started in 2010: 38.5 credits
- students who have started in 2009: 36.5 credits
- students who have started in 2008: 36.5 credits
- students who have started in 2007: 36.5 credits

Language of instruction: Finnish

Timing:
3rd-5th study year (DC5-DC10)

Learning outcomes:
Look at "Contents"; clinical assessment -> Kliinisen arviinnin kriteerit (kliininen lukukausikohtainen arviointi, kliininen tilannekohtainen arviointi, kliiniset oppimistavoitteet oppialoittain).

Contents:
Clinical training
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved.

The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry.

Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.

Mode of delivery:
Look at "Contents"

Learning activities and teaching methods:
Look at "Contents"

Target group:
3rd-5th year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
-

Assessment methods and criteria:
Look at "Contents"; clinical assessment
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior researcher Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)

Working life cooperation:
Yes. Look at "Contents"; clinical assessment -> Kliinisen arviinnin kriteerit (kliininen lukukausikohtainen arviointi, kliininen tilannekohtainen arviointi, kliiniset oppimistavoitteet oppialoittain).

Other information:
-

Clinical Training, DC 10, 4 - 6 op
Opiskelumuoto: Intermediate Studies
Laji: Practical training
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
6 ECTS credits
Language of instruction:
Finnish
Timing:
5th year, Spring term
Learning outcomes:
Look at "Contents"; clinical assessment
Contents:
Clinical training
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved.
The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry.
Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.
Mode of delivery:
Look at "Contents"
Learning activities and teaching methods:
Look at "Contents"
Target group:
5th year dental students
Prerequisites and co-requisites:
Clinical training DC5-DC9
Recommended optional programme components:
-
Recommended or required reading:
-
Assessment methods and criteria:
Look at "Contents"; clinical assessment
Read more about assessment criteria at the University of Oulu webpage.
Grading:
Look at "Contents"; clinical assessment
The course unit utilizes verbal grading scale pass/fail.
Person responsible:
Senior researhcer Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)
Working life cooperation:
Yes. Look at "Contents".
Other information:
-

090603A-05: Clinical Training, DC 5, 1 op
Opiskelumuoto: Intermediate Studies
Laji: Practical training
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS credit

**Language of instruction:**
Finnish

**Timing:**
3rd study year, Autumn term (DC5)

**Learning outcomes:**
Look at "Contents"; clinical assessment

**Contents:**

**Clinical training**
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved.

The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry.

Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.

**Mode of delivery:**
Look at "Contents"

**Learning activities and teaching methods:**
Look at "Contents"

**Target group:**
3rd year dental students

**Prerequisites and co-requisites:**
Theoretical preclinical studies (1st and 2nd year studies) and the courses of fifth semester (3rd year, Autumn term)

**Recommended optional programme components:**
-

**Recommended or required reading:**
-

**Assessment methods and criteria:**
Look at "Contents"; clinical assessment
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
Look at "Contents"; clinical assessment
The course unit utilizes verbal grading scale pass/fail.

**Person responsible:**
Senior researcher Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)

**Working life cooperation:**
Yes. Look at "Contents".

**Other information:**
-

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**090603A-06: Clinical Training, DC 6, 6 - 8 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Practical training

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
6 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
3rd study year, Spring term

**Learning outcomes:**
Look at "Contents"; clinical assessment
Contents:

Clinical training
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved. The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry. Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.

Mode of delivery:
Look at "Contents"

Learning activities and teaching methods:
Look at "Contents"

Target group:
3rd year dental students

Prerequisites and co-requisites:
Theoretical preclinical studies (1st and 2nd year studies) and courses of the 5th semester

Recommended optional programme components:

Recommended or required reading:

Assessment methods and criteria:
Look at "Contents"; clinical assessment
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Look at "Contents"; clinical assessment
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior researcher Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)

Working life cooperation:
Yes. Look at "Contents".

Other information:

090603A-07: Clinical Training, DC 7, 7 - 9 op

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
8 ECTS credits

Language of instruction:
Finnish

Timing:
4th study year, Autumn term

Learning outcomes:
Look at "Contents"; clinical assessment

Contents:
Clinical training
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved.
The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry. Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.

Mode of delivery:
Look at "Contents".

Learning activities and teaching methods:
Look at "Contents".

Target group:
4th year dental students

Prerequisites and co-requisites:
Look at "Contents".

Recommended optional programme components:
-

Recommended or required reading:
-

Assessment methods and criteria:
Look at "Contents"; clinical assessment
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Look at "Contents"; clinical assessment. The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior researcher Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)

Working life cooperation:
Yes. Look at "Contents".

Other information:
-

090603A-08: Clinical Training, DC 8, 6 - 14 op

Opiskelumuoto: Intermediate Studies
Laji: Practical training
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
11 ECTS credits
Language of instruction:
Finnish
Timing:
4th year, Spring term
Learning outcomes:
Look at "Contents"; clinical assessment

Contents:
Clinical training
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved.
The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry. Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.
Mode of delivery:
Look at "Contents"

Learning activities and teaching methods:
Look at "Contents"

Target group:
4th year dental students

Prerequisites and co-requisites:
Clinical training DC5-DC7

Recommended optional programme components:

Recommended or required reading:

Assessment methods and criteria:
Look at "Contents"; clinical assessment
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Look at "Contents"; clinical assessment.
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior researcher Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)

Working life cooperation:
Yes. Look at "Contents".

Other information:

090603A-09: Clinical Training, DC 9, 6 - 9 op

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
8 ECTS credits

Language of instruction:
Finnish

Timing:
5th year, Autumn term

Learning outcomes:
Look at "Contents"; clinical assessment

Contents:

Clinical training
The clinical training comprises work at the City of Oulu / Dental Training Clinic in collaboration with the University Hospital of Oulu. The clinical training is part of the studies beginning the end of the fifth semester and continuing to the end of the tenth semester until the credit points are full and the practical training will be approved. Before the clinical training the theoretical preclinical studies, course of internal medicine and the courses of the fifth semester have to be approved.
The clinical training consists of comprehensive patient care under supervision of the clinical teachers in different subjects of dentistry such as clinical radiology and diagnostics, treatment planning, oral and jaw surgery, orthodontics, cariology, endodontics, pedodontics, periodontology and prosthetic dentistry. The clinical training includes also on-duty service in different fields of dentistry.
Clinical training includes practice in preventive dentistry and team work in Health Centers. During the sixth semester students go to the primary schools to work for health prevention in groups. During the fourth semester students participate in oral inspections for pre-school children performed by dental hygienists.

Mode of delivery:
Look at "Contents"

Learning activities and teaching methods:
Look at "Contents"

Target group:
5th year dental students

Prerequisites and co-requisites:
Clinical training DC5-DC8

Recommended optional programme components:
- 

Recommended or required reading:
- 

Assessment methods and criteria:
Look at "Contents"; clinical assessment
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Look at "Contents"; clinical assessment
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior researcher Raija Lähdesmäki (Raija.Lahdesmaki at oulu.fi), Päivi Harju (Paivi.B.Harju at ouka.fi)

Working life cooperation:
Yes. Look at "Contents"

Other information:
- 

090510A: Community Dentistry, 6 - 7 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Jorma Virtanen

Opintokohteen kielet: Finnish

ECTS Credits:
7 ECTS credits

Language of instruction:
Finnish

Timing:
1st study year - 5th study year

Contents:
090510A-11 Organization and Providers of Oral Health Care Services
090510A-04 Basic Competence on Ethics, Legislation and Dentist-Patients Relationship
090510A-05 Basic Competence in Working on Public Oral Health Care Services
090510A-06 Rehabilitation of Occlusion among Groups of Population
090510A-08 Controlling Oral Diseases among Child Populations; Evidence-based Dentistry
090510A-07 Current Topics in Community Dentistry
090510A-00 Final Exam, Community Dentistry
090510A-09 Providing Oral Health Care Services in Private Sector

Target group:
Dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.

Person responsible:
Professor Jorma Virtanen

Working life cooperation:
- 

090503A-02: Complete Dentures, 3,4 - 3,9 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
ECTS Credits:
3.4 ECTS credits

Language of instruction:
Finnish

Timing:
4th year, Autumn term

Learning outcomes:
To give theoretical basic knowledge and clinical skills which are needed for the treatment of edentulous patient by conventional methods, including laboratory training.

Contents:
Introduction to complete dentures, changes in masticatory system caused by tooth extractions, pre-prosthetic preparation of the mouth, impressions, relationship of edentate jaws, shape of the dentures - retentive, phonetic and hygienic aspects, occlusion in complete dentures, controls and recall procedures, immediate dentures

Mode of delivery:
lectures, demonstrations, practical exercises, patient demonstrations (video), laboratory training, self-access learning

Learning activities and teaching methods:
lectures, demonstrations, practical exercises, patient demonstrations (video), laboratory training, self-access learning

Target group:
4th year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
lecture handout material

Assessment methods and criteria:
written exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
scale 0-5

Person responsible:
Senior Lecturer Erkki Hujanen

Working life cooperation:
-

Other information:
-

090510A-08: Controlling Oral Diseases among Populations; Evidence-based Dentistry, 0,8 - 1 op

Opiskelumuoto: Intermediate Studies

Laji: Partial credit

Arvostelu: 1 - 5, pass, fail

Opettajat: Jorma Virtanen

Opintokohteen kielet: Finnish
4th year Autumn/Spring term, Subject studies

Learning outcomes:
Student is acquainted with prevention strategies and their effectiveness at individual and population level. Student is able to work as a public health dentist. Student works ethically and socially responsibly with patients.

Contents:
See learning outcomes of the course

Mode of delivery:
Face-to-face teaching

Learning activities and teaching methods:
lectures, group work, individual studies

Target group:
4th year dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
-

Recommended or required reading:
materials delivered in the course

Assessment methods and criteria:
learning assignment

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Professor Jorma Virtanen

Working life cooperation:
No

090510A-07: Current Topics in Community Dentistry, 2,3 - 3 op

Opiskelumuoto: Intermediate Studies

Laji: Partial credit

Arvostelu: 1 - 5, pass, fail

Opettajat: Jorma Virtanen

Opintokohteen kielet: Finnish

ECTS Credits:
3 ECTS credits

Language of instruction:
Finnish

Timing:
5th year Autumn/Spring term, Advanced studies

Learning outcomes:
Student understands the role of health promotion as a fundamental aim of oral health care. Student knows the possibilities of working in private sector. Student can manage demanding dentist-patient relationships. Student can act as a superior and as subordinate in oral health care and can develop dental practice. Student understands current topics of health care such as health policy, health care economics or insurance medicine.

Contents:
See learning outcomes of the course

Mode of delivery:
Face-to-face teaching

Learning activities and teaching methods:
lectures, group works, individual studies

Target group:
5th year dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
-

Recommended or required reading:
Järvinen P. Menestyvän työyhteisön pelisäännöt. WSOYpro, 2008, recent scientific and other relevant articles and legislation provided in the beginning of the course.

**Assessment methods and criteria:**
material based written (final) exam

Read more about **assessment criteria** at the University of Oulu webpage.

**Grading:**
The course unit utilizes verbal grading scale pass/fail, final exam on scale 1-5.

**Person responsible:**
Professor Jorma Virtanen

**Working life cooperation:**
No

**Other information:**
Basic Scientific Skills Strand

090503A-04: Dental Materials, 1 - 1.5 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Ritva Näpänkangas

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
1.5 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
3rd year, Spring term

**Learning outcomes:**
After the course the student knows the properties and manipulation the basic materials used in prosthodontics.

**Contents:**
Gypsum products, Waxes, Polymers and polymerization, Impression materials, Dental cements, Structure and properties metals and alloys

**Mode of delivery:**
lectures, demonstrations, individual studies

**Learning activities and teaching methods:**
lectures, demonstrations, individual studies

**Target group:**
3rd year dental students

**Prerequisites and co-requisites:**
-

**Recommended optional programme components:**
-

**Recommended or required reading:**
Lecture handout material,

**Assessment methods and criteria:**
written exam

Read more about **assessment criteria** at the University of Oulu webpage.

**Grading:**
scale 0-5

**Person responsible:**
Senior Lecturer Ritva Näpänkangas (at) oulu.fi

**Working life cooperation:**
-

**Other information:**
-

090506A: Dental Radiology, 7 - 7.3 op
Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Language of instruction:
Finnish
Timing:
1st - 5th study year
Target group:
1st - 5th year dental students
Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course units of Dental Radiology utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Other information:

090502A-03: Dental and Maxillofacial Injuries - diagnostics and treatment, 1,4 - 3,4 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Leena Ylikontiola
Opintokohteen kielet: Finnish

ECTS Credits:
1,4 ECTS credits
Language of instruction:
Finnish
Timing:
4th year Spring term, Subject studies
Learning outcomes:
At the completion of this course the student must be familiar with the first aid and treatment principles of dental traumas and maxillofacial traumas. The student must be able to perform dental splinting of traumatized teeth.
Contents:
- dental trauma
- maxillofacial trauma
- maxillofacial pain
Mode of delivery:
lectures, practical studies
Learning activities and teaching methods:
lectures, practical studies
Target group:
4th year dental students
Prerequisites and co-requisites:

Recommended optional programme components:
090502A Oral and Maxillofacial Surgery
090506A-04 Injuries of the Teeth, Jaws and Face
Recommended or required reading:
Assessment methods and criteria:
written exam together with course 090506A-04 Injuries of the Teeth, Jaws and Face
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
090502A-02: Dentoalveolar Surgery, 2.4 - 3.9 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Antti Raunio
Opintokohteen kielet: Finnish

ECTS Credits: 2.4 ECTS credits
Language of instruction: Finnish
Timing: 4th study year Autumn term, Subject studies

Learning outcomes:
After completion of this course the student knows the basics principles of dentoalveolar surgery and has skills to perform the most common surgical procedures in dental practise.

Contents:
- wound healing
- incisions and flap technique
- operative extractions
- transplantation of the teeth
- deliberation of the teeth
- biopsies
- surgery of the benign oral tumors

Mode of delivery:
Luennot. Harjoittelu dissekoidulla sianpäällä yhdessä parodontologian opetuksen kanssa.

Learning activities and teaching methods:
Luennot. Harjoittelu dissekoidulla sianpäällä yhdessä parodontologian opetuksen kanssa.

Target group:
4th year dental students

Prerequisites and co-requisites:
Accepted course in principles of oral and maxillofacial surgery (090502A-01) is a prerequisite for this course.

Recommended optional programme components:
090502A Oral and Maxillofacial Surgery
Written exam together with courses
090505A-03 Periodontal Surgery and
090506A-03 Roentgenographic Studies for Surgical Purposes

Recommended or required reading:
Kurssikirjojen saatavuuden voi tarkistaa tästä linkistä.

Assessment methods and criteria:
Written exam together with courses
090505A-03 Periodontal Surgery and
090506A-03 Roentgenographic Studies for Surgical Purposes
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Senior Lecturer Antti Raunio

Working life cooperation:
Work placement period is performed as a part of clinical training and clinical teaching in clinical teaching units.

Other information:
090503A-07: Denture repair, 0,5 - 0,9 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Hujanen, Erkki Samuli
Opintokohteen kielet: Finnish

ECTS Credits: 0,5 ECTS credits
Language of instruction: Finnish
Timing: 4th year, Autumn term

Learning outcomes: To give theoretical and clinical knowledge about the modalities to repair various types of removable and fixed prostheses including clinical and laboratory procedures

Contents: repair of removable dentures and fixed prosthodontics, clinical procedures

Mode of delivery: lectures 6 hours

Learning activities and teaching methods: lectures 6 hours

Target group: 4th year dental students
Prerequisites and co-requisites: -

Recommended optional programme components: -

Recommended or required reading: lecture handout material

Assessment methods and criteria: full-time participation needed

Read more about assessment criteria at the University of Oulu webpage.

Grading: Pass/fail

Person responsible: Senior Lecturer Erkki Hujanen (at) oulu.fi, Senior Lecturer Ritva Näpänkangas (at) oulu.fi, Senior Lecturer Ritva Kuoppala (at) oulu.fi

Working life cooperation: -

Other information: -

090301A: Dermatology and Venereology, 0,4 - 0,6 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 0.4 ECTS credits
Language of instruction: Finnish
Timing: DC7, Intermediate studies
Learning outcomes:
After the course the student is able to recognize the most common dermatological and venereological diseases relating to oral and dental diseases. He is able to adapt his work and/or redirect the patient to appropriate care.

Contents:
recognize the most common dermatological and venereological diseases, diagnostic methods in allergology

Mode of delivery:
face-to-face teaching

Learning activities and teaching methods:
lectures (6 hours)

Target group:
4th year dental students

Prerequisites and co-requisites:
no

Recommended optional programme components:
Oral diseases and health strand

Recommended or required reading:
active participation in teaching and hand-out materials

Assessment methods and criteria:
written examination or obligation to 100% attendance in teaching
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Kaisa Tasanen-Määttä

Working life cooperation:
No

Other information:

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090302A-02: Diseases of Oral Mucosa, 2,7 - 3,1 op

Opiskelumuoto: Intermediate Studies

Laji: Partial credit

Arvostelu: 1 - 5, pass, fail

Opettajat: Arja Kullaa, Salo, Tuula Anneli

Opintokohteen kielet: Finnish

ECTS Credits:
3,1 ECTS credits

Language of instruction:
Lectures in Finnish; research projects also in English

Timing:
4th year, Autumn term, Subject studies

Learning outcomes:
As general requirements for all dentist is the basic knowledge about the anatomical and histological structures of oral mucosa. The student will know variations in the normal structures of the oral mucosa and is able to diagnose and treat the oral mucosal diseases.

Contents:
Anamnestic and clinical examination of patients with oral mucosal diseases including practise of biopsies. Aetiopathogenesis and relationship of oral mucosal diseases with general diseases (including e.g. dermatological and sexually transmitted diseases and HIV-infection). Treatment and follow-up of oral mucosal disease patient in health care. The clinical and pathological manifestations of the following conditions: oral mucosal vesiculo-bullous, ulcerative, white, red-blue, pigmented, verrucous and connective tissue lesions premalignant lesions and conditions and oral cancer. Special features related to burning mouth and Sjögren’s syndromes.

Mode of delivery:
lectures and seminars

Learning activities and teaching methods:
lectures and seminars

Target group:
4th year dental students

Prerequisites and co-requisites:
All preclinical dental studies are prerequisites for this course

**Recommended optional programme components:**
090302A Oral Pathology

**Recommended or required reading:**
Study material; selected portions:

**Assessment methods and criteria:**
written exam
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Tuula Salo

**Working life cooperation:**
Clinical work in the Department of Diagnostics and Oral Medicine

**Other information:**
To obtain clinical work in the Department of Diagnostics and Oral Medicine the course of Diseases of Oral Mucosa has to be completed.

090505A-14: Endo-perio problems, 0,2 op

**Voimassaolo:** 01.08.2007 -
**Opiskelumuoto:** Advanced Studies
**Laji:** Partial credit
**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
0,2 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
4th study year, Spring term

**Learning outcomes:**
Upon completion of the course the student knows how to diagnose and treat endo-perio infections.

**Contents:**

**Mode of delivery:**
Face to face teaching

**Learning activities and teaching methods:**
Lecture

**Target group:**
4th year dental students

**Recommended or required reading:**

**Assessment methods and criteria:**
OSCE-test
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course unit utilizes verbal grading scale pass/fail.

**Person responsible:**
Professor Tellervo Tervonen

**Working life cooperation:**
-

**Other information:**
-

090501A-03: Endodontics I, 1,6 op
ETCS Credits:
1.6 ECTS credits
Language of instruction:
Finnish
Timing:
3rd study year Spring term, Subject studies
Learning outcomes:
The student knows the basics of pulp diseases and is able to carry out root canal treatment.
Contents:
Histology and morphology of pulp and root canals; Diagnostics of pulp diseases; Principles of endodontic treatment; Root canal preparation and obturation.
Mode of delivery:
Face-to-face: lectures, practical exercises, individual studies
Learning activities and teaching methods:
Lectures and practical exercises 18 h, literature representing 15 h of learning
Target group:
3rd year dental students. Compulsory to all dental students.
Prerequisites and co-requisites:
All previous courses
090501A-001 Preliminary exam of cariology
090501A-01 Basics in operative dentistry
090501A-02 Operative dentistry
Recommended optional programme components:
No alternative courses. Part of the Basic Practical Skills Strand.
Recommended or required reading:
Haapasalo, Kotiranta, Siren, Haapasalo, Endal: Käytännön juurihoito.
Recommended reading: Manogue M, Patel S, Walker R: The Principles of Endodontics
Assessment methods and criteria:
Written exam
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes verbal grading scale pass/fail.
Person responsible:
Senior Research Fellow Liisa Seppä
Working life cooperation:
Yes. Clinical phase practice integrated into the Dental Training Clinic, City of Oulu
Other information:
090501A Preventive Dentistry and Cariology
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.
After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02. Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam. Final grade will be based on the a) the results of the midterm and final exams; b) score achievement in continuous clinical performance evaluation (given by clinical supervisors), and ; c) performance in competence evaluation (given by clinical supervisors and assisting staff).

090501A-05: Endodontics II, 2,1 op
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
ECTS Credits:  
2.1 ECTS credits

Language of instruction: Finnish

Timing:  
4th study year Spring term, Advanced studies

Learning outcomes:  
To understand the complex endodontic diagnostics and treatment; to master the ethiology, prevention, diagnostics and treatment of the most common endodontic complications; to master the use of rotary NiTi endodontic instruments.

Contents:  
Endodontic differential diagnostics; the reasons, prevention and treatment of perforations; theory and practice of rotary endodontic treatment.

Mode of delivery:  
Face-to-face: lectures, individual studies

Learning activities and teaching methods:  
Lectures 12 h representing 24 h of learning, practical exercises 4 h, literature representing 15 h learning.

Target group:  
4th year dental students. Compulsory to all dental students.

Recommended optional programme components:  
No alternative course units. Basic Practical Skills Strand

Recommended or required reading:  
- Resorptiot, ss. 24-37 (14 s.)
- Erotusdiagnostiikka, ss. 58-67 (10 s.)
- Hoitoresistentti apikaalinen parodontiitti, ss. 172-194 (23 s.)

Assessment methods and criteria:  
Read more about assessment criteria at the University of Oulu webpage.

Grading:  
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:  
Professor Leo Tjäderhane

Other information:  
090501A Preventive Dentistry and Cariology  
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.

After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02. Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam.

Final grade will be based on the a) the results of the midterm and final exams; b) score achievement in continuous clinical performance evaluation (given by clinical supervisors), and ; c) performance in competence evaluation (given by clinical supervisors and assisting staff).

090502A-09: Facial Pain Conditions, 1,1 op

Opiskelumuoto: Intermediate Studies

Laji: Partial credit

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
1.1 ECTS credits
Language of instruction: Finnish
Timing: 4th year Autumn term/5th year Autumn term

Learning outcomes:
At the completion of the course the student is familiar with examination and treatment principles of a patient with facial pain.

Contents:
Acute pain conditions: dental pain, oral mucosal pain, pain connected with orthodontic treatment, parodontal pain, postoperative pain. Chronic pain conditions: pain related to temporomandibular disorders, headache and neurological pain, otolaryngological pain, atypical/chronic facial pains, psychiatric aspects in pain, encountering the pain patient, pain and fear.

Mode of delivery:
Lectures

Learning activities and teaching methods:
Lectures

Target group:
4th/5th year dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
No

Recommended or required reading:
-

Assessment methods and criteria:
Attendance at lectures is compulsory
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior Lecturer Leena Ylikontiola

Working life cooperation:
No

Other information:
-

090510A-00: Final Exam, Community Dentistry, 0 op

Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Jorma Virtanen
Opintokohteen kielet: Finnish

ECTS Credits:
0 ECTS credits
Language of instruction: Finnish
Timing: 5th study year Spring term

Learning outcomes:
See course 090510A-07 Current Topics in Community Dentistry

Contents:
See course 090510A-07 Current Topics in Community Dentistry

Learning activities and teaching methods:
Final Exam (3 hours)

Target group:
5th year dental students
Prerequisites and co-requisites:
-
Recommended optional programme components:

- Assessment methods and criteria:
  Final Exam (3 hours)
  Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Jorma Virtanen

Working life cooperation:

Other information:
See course 090510A-07 Current Topics in Community Dentistry

090506A-00: Final exam, Dental radiology, 0 op

Voimassaolo: 01.12.2004 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
0 ECTS credits
Language of instruction:
Finnish
Timing:
5th study year, Advanced studies
Target group:
5th year dental students
Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

090502A-11: Final exam, Oral and maxillofacial surgery, 0 - 7,9 op

Voimassaolo: 19.11.2004 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Oikarinen, Kyösti Sakari
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
7,8 ECTS credits
Language of instruction:
Finnish
Timing:
5th year Autumn/Spring term
Learning outcomes:
Exam is aimed to test the knowledge of student regarding oral and maxillofacial surgery as is necessary for independent working as a general dentist.
Contents:
Required textbooks are listed separately. Exam requires also participation and good knowledge of lectures and practicalities.
Mode of delivery:
Final exam will last for 4 hours and is composed of 5-6 written questions. The questions cover the main topics of oral and maxillofacial surgery.

Learning activities and teaching methods:
Final Exam

Target group:
5th year dental students

Prerequisites and co-requisites:
In order to be eligible to participate in final exam of OMFS the student must have passed other exams of OMFS and must participated in practicalities.

Recommended optional programme components:
No

Recommended or required reading:
Therapia Odontologica: hammaslääketieteen käsikirja. Helsinki, Academica

Assessment methods and criteria:
Written exam, 5-6 questions
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Kyösti Oikarinen

Working life cooperation:
No

Other information:
-

090601A-00: Final exam, Oral development and orthodontics, 0 op

Voimassaolo: 01.08.2006 -
Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Pirttiniemi, Pertti Mikael
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
0 ECTS credits

Language of instruction:
Finnish

Timing:
5th year Autumn/Spring term

Learning outcomes:
Upon completion of the final examination module, the student masters the basic knowledge of Oral development and Orthodontics. The student knows the development of normal and abnormal occlusion and the core contents of the methods in clinical diagnostics and treatment modalities in orthodontics.

Contents:
All the learning contents in Oral Development and Orthodontics, including the textbook and other printed or distributed material.
090601A-08 Introduction to Development of Occlusion and Orthodontics
090601A-01 Basic Orthodontic Skills
090601A-02 Growth and Development of Craniofacial Structures and Occlusion and Oral-facial Genetics
090601A-04 Adult Orthodontics
090601A-09 ORTHO-seminars

Mode of delivery:
Written final exam (4 hours)

Learning activities and teaching methods:
Written final exam (4 hours)
**Target group:**
5th year dental students

**Prerequisites and co-requisites:**
All the learning contents in Oral Development and Orthodontics, including the textbook and other printed or distributed material.

- 090601A-08 Introduction to Development of Occlusion and Orthodontics
- 090601A-01 Basic Orthodontic Skills
- 090601A-02 Growth and Development of Graniofacial Structures and Occlusion and Oral-facial Genetics
- 090601A-04 Adult Orthodontics
- 090601A-09 ORTHO-seminars

**Recommended optional programme components:**
-

**Recommended or required reading:**
Lecture hand-outs

**Assessment methods and criteria:**
Written final exam (4 hours)
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Pertti Pirttiniemi

**Working life cooperation:**
-

**Other information:**
-

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**090505A-15: Final exam, Periodontology and geriatric dentistry, 0 op**

Voimassaolo: 01.08.2007 -
Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Tellervo Tervonen
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

**ECTS Credits:**
0 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
5th study year, Spring term

**Target group:**
5th year dental students

**Prerequisites and co-requisites:**
090505A-01 Basics in Periodontology and Periodontal Treatment
090505A-02 Special Topics in Nonsurgical Periodontal Therapy
090505A-03 Periodontal Surgery
090505A-04 Seminars of Periodontology
090505A-05 Geriatric Dentistry
090505A-06 Periodontal Diseases and General Health
090505A-08 Occlusal Rehabilitation in Periodontal Therapy
090505A-00 Preliminary examination, periodontology
090505A-13 Periodontal diseases in children
090505A-14 Endo-perio problems
Recommended or required reading:
Carranza's Clinical Periodontology, See the reading of separate courses

Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Tellervo Tervonen

Working life cooperation:
No

090501A-00: Final exam, Preventive dentistry and cariology, 0 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Leo Tjäderhane
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti?: Kyllä

ECTS Credits:
0 ECTS credits
Language of instruction:
Finnish
Timing:
5th study year, Spring term

Learning outcomes:
See the course units of Preventive Dentistry and Cariology:
090501A-001 Preliminary examination, cariology
090501A-00 Final exam, Preventive dentistry and cariology
090501A-01 Basics in operative dentistry
090501A-02 Operative dentistry
090501A-03 Endodontics I
090501A-05 Endodontics II
090501A-07 Pedodontics

Contents:
See the course units of Preventive Dentistry and Cariology:
090501A-001 Preliminary examination, cariology
090501A-00 Final exam, Preventive dentistry and cariology
090501A-01 Basics in operative dentistry
090501A-02 Operative dentistry
090501A-03 Endodontics I
090501A-05 Endodontics II
090501A-07 Pedodontics

Mode of delivery:
Final exam 4 hours

Learning activities and teaching methods:
Final exam 4 hours

Target group:
5th year dental students. Compulsory to all dental students.

Prerequisites and co-requisites:
See the course units of Preventive Dentistry and Cariology:
090501A-001 Preliminary examination, cariology
090501A-00 Final exam, Preventive dentistry and cariology
090501A-01 Basics in operative dentistry
090501A-02 Operative dentistry
090501A-03 Endodontics I
090501A-05 Endodontics II
090501A-07 Pedodontics

Recommended optional programme components:
See the course units of Preventive Dentistry and Cariology:
Recommended or required reading:
See the course units of Preventive Dentistry and Cariology:
090501A-001 Preliminary examination, cariology
090501A-00 Final exam, Preventive dentistry and cariology
090501A-01 Basics in operative dentistry
090501A-02 Operative dentistry
090501A-03 Endodontics I
090501A-05 Endodontics II
090501A-07 Pedodontics

Assessment methods and criteria:
Final exam 4 hours
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Person responsible:
Professor Leo Tjäderhane
Working life cooperation:
No
Other information:
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.

090503A-00: Final exam, Prosthetic dentistry and stomatognathic physiology, 0 op

090503A-01: Fixed Prosthodontics, 4,5 - 4,7 op
treatment plan concerning fixed prostheses and perform the clinical phases of the treatment. Student knows the importance of the maintenance phase in success of the treatment.

Contents:
Indications/contraindications, Treatment planning, Principles of preparation, Metal crowns, Porcelain fused to metal, All ceramic crowns/ fixed partial dentures, Resin-bonded fixed partial dentures, Gold and ceramic inlays-onlays, Impressions, Temporary crowns/bridges, Cementing, Complications/prognosis

Mode of delivery:
lectures, demonstrations, phantom laboratory exercises, individual studies

Learning activities and teaching methods:
lectures, demonstrations, phantom laboratory exercises, individual studies

Target group:
3rd-4th study year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
lecture handout material,

Assessment methods and criteria:
full-time participation (in certain lectures), phantom laboratory exercises, written exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
scale 0-5

Person responsible:
Ritva Näpänkangas, Ritva Kuoppala

Working life cooperation:
-

Other information:
-

090606A: Forensic Dentistry, 0,3 op

Voimassaolo: 01.08.2007 -
Opiskelumuoto: Advanced Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Arja Kullaa
Opintokohteen kielet: Finnish

ECTS Credits:
0,3 ECTS credits

Language of instruction:
Finnish

Timing:
5th study year Autumn term (DC9)

Learning outcomes:
The student gets acquainted with forensic dentistry.

Contents:
Forensic dentistry

Mode of delivery:
Lectures

Learning activities and teaching methods:
Lectures

Target group:
Dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
No

Recommended or required reading:
Assessment methods and criteria:
Participation in the lectures
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Assistant professor, docent Arja Kullaa (at) oulu.fi

Working life cooperation:
No

Other information:

090505A-05: Geriatric Dentistry, 1,3 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Syrjälä, Anna-Maija Hannele
Opintokohteen kielet: Finnish

ECTS Credits:
1,3 ECTS credits

Language of instruction:
Finnish

Timing:
4th year Spring term - 5th year Autumn term, Subject studies

Learning outcomes:
Upon completion of the course the student knows general traits related to aging and special features of dental diseases and dental treatment among the elderly people. The student is able to notice oral changes related to aging, to diagnose oral diseases of the elderly people, to take account the functional ability and frailty of the elderly people in planning and performing dental care and to take account the effect of aging on the medical treatment of the elderly people.

Contents:
Lectures (Department of Periodontology and Geriatric Dentistry):
  - Theories of aging
  - Demography
  - Factors related to biological aging
  - Use of drugs in old age
  - Diseases in old age
  - Changes in healing and immunological response
  - Oral changes in old age
  - Epidemiology of oral diseases in old age
  - Problems in oral health in old age
  - Prevention of oral diseases
  - Dental care of disabled people
  - Specific traits in dental care in aged people
  - Geriatric pharmacology in dentistry
  - Some aspects of nutrition in old age
  - Theme day of lectures:
    - Restorative treatment and prevention of dental caries among elderly patients
      (Department of Pedodontics, Cariology and Endodontics)
    - Prosthodontic treatment of elderly patients
      (Department of Prosthetic Dentistry and Stomatognathic Physiology)
    - Periodontal treatment of elderly patients
      (Department of Periodontology and Geriatric Dentistry)
    - Radiographic features among elderly patients
      (Department of Diagnostics and Oral Medicine)
    - Quality of life related to oral health among elderly people
      (Department of Community Dentistry)
    - Surgical treatment of elderly patient (Department of Oral Surgery)
Mode of delivery:
The tuition will be implemented as face-to-face teaching and web-based teaching. The tuition includes also visits to sheltered home and nursing home, where dental students make oral clinical examinations to elderly people.

Group working is made in web-site Optima. A log book is kept about the lectures.

Learning activities and teaching methods:
Face-to-face teaching, web-based teaching, group working is made on web-site, study-group working to prepare learning diary, visits to sheltered home and nursing home,
Lectures 15 hours / study-group working to prepare learning diary and group working as web-site discussion 20 hours: in common 35 hours

Target group:
4th and 5th year dental students

Prerequisites and co-requisites:
It is recommended to complete course units 090505A-01, 090505A-02, 090505A-03, 090505A-08 and 090505A-14

Recommended optional programme components:
There are no parallel courses to be performed

Recommended or required reading:
The literature used in the course unit consists of handouts of lectures and databases of Terveysportti. In website Optima there is also a folder including references for literature.

Assessment methods and criteria:
The course unit is completed by participation in the lecture concerning treatment plan, medical treatment of elderly people, participation in lectures in the theme day of geriatric dentistry, visiting the sheltered home and nursing home, where dental students make oral clinical examinations to elderly people, participating on web-discussion in Optima as group-working and making a learning-diary. Learning-diary is usually made as a study-group-working.

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading pass/fail

Person responsible:
University researcher Anna-Maija Syrjälä

Working life cooperation:
Yes, training in sheltered home and nursing home

Other information:

040014Y: Growing Identity as a Dentist, 2 - 11.5 op

Opiskelumuoto: General Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Raija Lähdesmäki
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Language of instruction:
Finnish

Timing:
1st - 6th study year (DC1-DC11)

Learning outcomes:
040014Y-01 Part 1: The student has knowledge of the structure and the aim of the dental undergraduate studies. The student get acquainted with the University of Oulu and the Faculty of Medicine as an educational and scientific society.
040014Y-02 Part 2: The student is able to plan progressive learning and sketch professional identity and expertize

Contents:
The structure and aim of the education in dentistry (DDS); personal study plan; the University of Oulu and the Medical Faculty as as study and research community; the social network during the studies; growing as a dentist. To get familiar with the practice in the Dental training clinic by assisting a clinical student during the preclinical studies.

Mode of delivery:
Face-to-face teaching. Assisting a clinical student in the Dental training clinic.
Learning activities and teaching methods:
Lectures, infos, tutorial meetings, individual guiding

Target group:
1st-6th year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
The curriculum in Dentistry and Medical studies and general tutor of the University of Oulu

Assessment methods and criteria:
Active participation in tutorials and up to date personal curriculum. A prior engagement to go by and assist a clinical student during dental practice up till 10 hours (4 x 2.5 hours).
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Nominated teachers in dentistry/tutorial

Working life cooperation:
Yes. See 'Assessment methods and criteria'.

Other information:
Dentistry Guild coordinates to get know a clinical student.

040014Y-01: Growing identity as a dentist Part 1: Introduction to the studies in Dentistry, 0.5 - 5 op

Voimassaolo: 01.08.2009 -
Opiskelumuoto: General Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
1.5 ECTS credits

Language of instruction:
Finnish

Timing:
DC1-DC4

Learning outcomes:
The student has knowledge of the structure and the aim of the dental undergraduate studies. The student get acquainted with the University of Oulu and the Faculty of Medicine as an educational and scientific society.

Contents:
The structure and aim of the education in dentistry (DDS); personal study plan; the University of Oulu and the Faculty of Medicine as a study and research community; the social network during the studies; growing as a dentist

Mode of delivery:
Face-to-face teaching

Learning activities and teaching methods:
Lectures, infos, tutorial meetings, individual guiding

Target group:
1st and 2nd year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
The curriculum in Dentistry and Medical studies and general tutor of the University of Oulu

Assessment methods and criteria:
Active participation in tutorials and personal curriculum
Read more about assessment criteria at the University of Oulu webpage.
040014Y-02: Growing identity as a dentist Part 2: Teacher tutorials, 0.5 - 4.5 op

Voimassaolo: 01.08.2009 -
Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintojen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
4.5 ECTS credits

Language of instruction:
Finnish

Timing:
DC2-DC10

Learning outcomes:
A student is able to make a roadmap of his studies and realize the identity as a dentist and growing expertise.

Contents:
The University of Oulu and Faculty of Medicine as a study and research community; The social network during the studies; Growing as a dentist

Mode of delivery:
face-to-face teaching

Learning activities and teaching methods:
Infos, tutorial meetings

Target group:
1st-6th year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
Dentistry study plan, personal study plan

Assessment methods and criteria:
Active participation in teacher tutorials and regular assessment of the personal curriculum. Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Tutors in Dentistry

Working life cooperation:
No

Other information:
See 040014Y System of higher education and studying at the university

090601A-02: Growth and Development of Craniofacial Structures and Occlusion and Oral-facial genetics, 0.6 - 3 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
2,4 ECTS credits

Language of instruction:
Finnish

Timing:
1st, 2nd and 4th study year

Learning outcomes:
After passing the course, the student understands the concepts the normal growth of the craniofacial region and expands the understanding towards growth deviations. The student understand how the tooth develops and erupts and the occlusion is formed. Furthermore the student is aware of the possibilities and limitations in modifying occlusal development. A part of the education takes place during pre-clinical years and it is described earlier.

Contents:
Normal and abnormal development in craniofacial region.
Normal dental and occlusal development (see Anatomy C1).
The pathogenesis of malocclusions and the most usual orthodontic treatment of them is brought up especially from the viewpoint of growth.
The retention of orthodontic treatment and growth.
Screening in orthodontics.
The course includes the pathogenesis of the most frequent syndromes and developmental aberrations in the orofacial area and the orthodontics in cleft children.
In dental genetics the subjects are: tooth size and morphology and the characteristics od dental pulp, occlusion and oral characteristics and special features in chromosomally aberrant subjects: autosomal and sex-chromosome related aberrations.

Mode of delivery:
Lectures, group learning

Learning activities and teaching methods:
Lectures, group learning

Target group:
Dental students

Prerequisites and co-requisites:
All mandatory studies DC7-8
090601A-01 Basic Skills in Orthodontics

Recommended optional programme components:
090601A Oral Development and Orthodontics

Recommended or required reading:
Lecture hand-outs

Assessment methods and criteria:
Passing of essay examination

The course is included in the final examination of oral development and orthodontics (090601A-00)

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Pertti Pirttiniemi

Working life cooperation:
Yes

Other information:
The course is included in the final examination. (090601A-00)

090503A-06: Immediate dentures, 0,3 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0.3 ECTS credits
Language of instruction:
Finnish
Timing:
4th year, Autumn term
Learning outcomes:
When finishing the course, a student is able to
- accomplish the clinical examination of the patient eligible for immediate denture treatment in order to replace one or more teeth with immediate appliance
- to assess the need for preprosthetic preparation of the mouth entitled for immediate denture treatment
- accomplish all clinical steps in immediate denture treatment, especially in recording of jaw relationships
- assess patient’s individual treatment needs in future
Contents:
Immediate prosthetic rehabilitation of the mouth at the time of tooth/teeth extraction
Mode of delivery:
Face-to-face teaching
Learning activities and teaching methods:
lectures 4 hours
Target group:
4th year dental students
Prerequisites and co-requisites:
preclinical studies
Recommended or required reading:
lecture handout material
Assessment methods and criteria:
full-time participation needed
Read more about assessment criteria at the University of Oulu webpage.
Grading:
Pass/fail
Person responsible:
Senior Lecturer Erkki Hujanen
Working life cooperation:
No
Other information:
Oral Rehabilitation Strand

090502A-08: Implant Dentistry, 0.4 - 0.6 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0.2 ECTS credits
Language of instruction:
Finnish
Timing:
4th/5th study year
Learning outcomes:
To give the student the basics of implant treatment
Contents:
Surgical basics of implant treatment, bone transplants, radiology in implantology, prosthodontics in implantology, periodontological considerations in implantology
Mode of delivery:
Lectures
Learning activities and teaching methods:
Lectures
Target group:
4th/5th year dental students
Prerequisites and co-requisites:
No
Recommended optional programme components:
No
Recommended or required reading:
-
Assessment methods and criteria:
Attendance at lectures is compulsory
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes verbal grading scale pass/fail.
Person responsible:
Department of Prosthetic Dentistry and Stomatognathic Physiology (Senior lecturer)
Department of Oral and Maxillofacial Surgery (Professor/Senior lecturer)
Working life cooperation:
No
Other information:
-

090506A-04: Injuries of the Teeth, Jaws and Face, 0,7 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0,7 ECTS credits
Language of instruction:
Finnish
Timing:
4th study year Spring term, Advanced studies
Learning activities and teaching methods:
lectures
Target group:
4th year dental students
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
(Goaz & White: Oral Radiology), lecture hand out material
Assessment methods and criteria:
written exam
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Working life cooperation:
-

090303A: Internal Medicine for Dental Students, 0,8 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
ECTS Credits: 0,8 ECTS credits
Language of instruction: Finnish
Timing: 5th year Autumn term
Target group: 5th year dental students
Recommended optional programme components: -
Assessment methods and criteria: Read more about assessment criteria at the University of Oulu webpage.
Grading: The course unit utilizes verbal grading scale pass/fail.
Working life cooperation: No
Other information: -

090602Y: Introduction to Clinical Work, 1,5 op
Opiskelumuoto: General Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Pernu, Hilkka Elina
Opintokohteen kielet: Finnish
Assessment methods and criteria: Read more about assessment criteria at the University of Oulu webpage.

090601A-08: Introduction to Development of Occlusion and Orthodontics, 0,5 op
Voimassaolo: 01.08.2008 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Pirttiniemi, Perti Mikael
Opintokohteen kielet: Finnish

ECTS Credits: 0,5 ECTS credits
Language of instruction: Finnish
Timing: 1st study year, Autumn semester. It is recommended to complete the course at the beginning of studies.
Learning outcomes: Student can observe normal craniofacial growth and development. Student can consider different factors affecting the development of the occlusion.
Contents: The basic contents of orthodontics and the treatment of orthodontic problems.
Mode of delivery: Face-to-face teaching
Learning activities and teaching methods: Lectures, group work, discussion. 10 hours
Target group: 1st year dental students
Prerequisites and co-requisites:
No required studies beforehand.

**Recommended optional programme components:**
040201A Anatomy

**Recommended or required reading:**
handouts of the lectures

**Assessment methods and criteria:**
Participating the lectures

The course is included in the final examination of oral development and orthodontics (090601A-00)

Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course unit utilizes verbal grading scale pass/fail.

**Person responsible:**
Professor Pertti Pirttiniemi

**Working life cooperation:**
No

**Other information:**
- 

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**040300A: Maturity exam (native language), 0 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuysikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Outi Mikkola

**Opintokohteen kielet:** Finnish

**Contents:**
Student writes an essay in his/her native language about the topic of the thesis to show a good command of the language and the content of the thesis. If the student's native language is another than Finnish or Swedish the Faculty will define separately the requirements for the language test.

**Learning activities and teaching methods:**
Writing an essay.

**Assessment methods and criteria:**
The essay is examined first by the supervisor of the thesis and then by the language teacher.

**Grading:**
Pass / fail

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**040011Y-01: Medical informatics, module 1, information and Communication Technology, 0,5 op**

**Opiskelumuoto:** General Studies

**Laji:** Partial credit

**Vastuuysikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Paadar, Matti Reino Isak

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
0,5 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
C1

**Learning outcomes:**
By the end of the course the student will have practiced the following skills:
- using information and communication technology resources in the University of Oulu,
- using workstations available in the Medical Faculty,
- applying basic software necessary in the studies

**Contents:**
Workstations, information security and confidentiality, networks, office software

**Mode of delivery:**
Blended teaching.

**Learning activities and teaching methods:**
Lectures 2 h, group work in computer class-room 6-8 h and completion of a practical project 4 h. Group works include practical work with the university network, web-learning environment and software installed in the workstations.

**Target group:**
First year medical, dental and medical wellness technology students

**Prerequisites and co-requisites:**
None

**Recommended optional programme components:**
This course is a part of the studies in research skills

**Assessment methods and criteria:**
Regular and active participation in the small group lessons and completion of a practical project.

**Grading:**
Pass/Fail

**Person responsible:**
Docent Pentti Nieminen

**Working life cooperation:**
No

**Other information:**
This course is a part of the studies in research skills.

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040011Y-02: Medical informatics, module 2, literature retrieval, 1 op

**Opiskelumuoto:** General Studies

**Laji:** Partial credit

**Vastuuysikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Pentti Nieminen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
1 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
C2

**Learning outcomes:**
By the end of the course the student will have practiced the following skills:
- search research articles using basic literature retrieval methods
- use bibliographic databases available at the Medical Faculty

**Contents:**

**Mode of delivery:**
Blended teaching.

**Learning activities and teaching methods:**
Lectures 4 h, group lessons in computer class-room 9 h and completion of practical projects 10 h.

**Target group:**
First year medical, dental and medical wellness technology students

**Prerequisites and co-requisites:**
None
Recommended optional programme components:
This course is a part of the studies in research skills.

Assessment methods and criteria:
Regular and active participation in the small group lessons and completion of practical projects.

Grading:
Pass/Fail

Person responsible:
Docent Pentti Nieminen

Working life cooperation:
No

Other information:
This course is a part of the studies in research skills.

092201A: Microbiology/Infections, 2 - 2,1 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Ritva Näpänkangas
Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits
Language of instruction:
Finnish
Timing:
5th study year, Autumn term

Learning outcomes:
After the course the student knows the basics of most usual infection diseases and the principles of the diagnostics and treatment of infection diseases.

Contents:
Most usual infection diseases, diagnostics and treatment modalities

Mode of delivery:
Lectures

Learning activities and teaching methods:
Lectures, learning diary

Target group:
5th year dental students

Prerequisites and co-requisites:
Microbiology and immunology

Recommended optional programme components:
-

Recommended or required reading:
Hand-outs, articles

Assessment methods and criteria:
learning diary
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Raija Lähdesmäki

Working life cooperation:
No

Other information:
-

090205A: Neurology, 0,4 - 0,5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0.4 ECTS cr

Language of instruction:
Finnish

Timing:
DC9, Intermediate studies

Learning outcomes:
After the course the student has knowledge on the background and more brief examination need for the neurological symptoms of the cranial nerves and head. Student is able to consult neurologist and take into account special features with the neurological patients in dentistry.

Contents:
Examination of the neurological patient, neurological patient in dental office, headache, sleep disorders and most common neurological diseases

Mode of delivery:
face-to-face teaching

Learning activities and teaching methods:
lectures (6 hours)

Target group:
5th year dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
Oral diseases and health strand

Recommended or required reading:
Active participation in teaching and hand-out materials

Assessment methods and criteria:
obligation to 100% attendance in teaching (substitutive written essay)
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail

Person responsible:
Clinical teacher Mikko Kärppä

Working life cooperation:
No

Other information:
-

090601A-09: ORTHO-Seminars 1-5, 1,4 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Raija Lähdesmäki
Opintokohteen kielet: Finnish

ECTS Credits:
1.4 ECTS credits / 37 hours of work

Language of instruction:
Finnish

Timing:
The course unit is held in five half day seminars.
Seminar 1 is held in the autumn semester, fourth year.
Seminar 2 and 3 are held in the spring semester, fourth year.
Seminar 4 is held in the autumn semester, fifth year.
Seminar 5 is held in the spring semester, fifth year.

Learning outcomes:
After the seminar student can assess the meaning of the variation of the occlusion and the screening of the treatment need. He is also able to assess between different treatment options and in that the timing of treatment. Student is able to look for new knowledge and assess it critically.

Contents:
Tutorial teaching deepens the knowledge on the variation and treatment options of abnormal occlusion by student's seminar presentations of the treatment goals, procedures and result with their orthodontic patients (DC7-1, DC8-3, DC10-5). In a theoretical seminar student makes presentations of given methods and timing on the treatment of abnormal occlusion (DC8-2, DC9-4). After each seminar (1-5) student gives a structured reflection of the learning experience in OPTIMA-learning environment and gets written tutorial feed-back and the score.

Mode of delivery:
The delivery for the course unit is blended teaching (independent learning + face-to-face teaching + web-based teaching)

Learning activities and teaching methods:
Independently prepared presentation (software e.g. Power Point) to the Seminar 1-5 (á 3 hours), patient and theoretical seminar presentations in the given group (1-5, á 4 hours) and given reflection in OPTIMA learning environment after the seminar (1-5, á 0.4 hours).

Target group:
4th and 5th study year (DC7-DC10), to deepen the knowledge in Orthodontic treatment

Prerequisites and co-requisites:
You should have passed 090601A-01 Basic Orthodontic Skills before entering yourself for the course.

Recommended optional programme components:
It is recommended that the course 090601A-02 Growth and Development of Craniofacial Structures and Occlusion and Oral-facial genetics is passed before the Seminars 4-5.

Recommended or required reading:
The documentation of the orthodontic patients in clinical teaching. Independent work with references from Medline and PubMed to make a presentation for the theoretical seminars at an appointed title.

Assessment methods and criteria:
Self-made presentation in seminar (1-5) and activity in discussions. After the seminar structured reflection in OPTIMA learning environment. The teacher gives written comments and the score for each seminar (1-5). Each seminar is separate entity, the order is advisory.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. All the seminars 1-5 will be assessed numerically and the final score is the mean in the scale 1-5. Each seminar 1-5 has to be passed independently.

Person responsible:
Assistant professor Raija Lähdesmäki

Working life cooperation:
The course unit does not have a work placement period.

Other information:
The strand of the Basic Skills in Dentistry.
Credits of this course are included in the final degree in Orthodontics.

090603A-02: OSCE, 0 op

Opiskelumuoto: Intermediate Studies
Laji: Practical training
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0 ECTS credits

Language of instruction:
Finnish

Timing:
Fourth year, Spring term

Learning outcomes:
The exam has to be passed before going to work outside the Institute of Dentistry after four year studies (www.valvira.fi/en/)

Contents:
Studies during the first four years
Mode of delivery:
Multiple-choice questions and tasks dealing with clinical problems

Learning activities and teaching methods:
Multiple-choice questions and tasks dealing with clinical problems

Target group:
4th year dental students

Prerequisites and co-requisites:
Studies during the first four years

Recommended optional programme components:
-

Recommended or required reading:
-

Assessment methods and criteria:
Multiple-choice questions and tasks dealing with clinical problems
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Pass/fail

Person responsible:
Ritva Näpänkangas

Working life cooperation:
-

Other information:
The exam has to be passed before going to work outside the Institute of Dentistry after four year studies (www.valvira.fi/en/)

090505A-08: Occlusal Rehabilitation in Periodontal Therapy, 1 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 ECTS credit

Language of instruction:
Finnish

Timing:
3rd year, Spring term

Contents:
Occlusal aspects in diagnostics and treatment of periodontally destructed dentition

Learning activities and teaching methods:
lectures, demonstrations, individual studies

Target group:
3rd year dental students

Recommended optional programme components:
Oral Rehabilitation Strand

Recommended or required reading:
Carranza's Clinical Periodontology

Assessment methods and criteria:
written exam (together with courses 090503A-03 Removable partial dentures, 090503A-04 Dental materials and 090601A-04 Adult orthodontics)
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Senior Lecturer Hilkka Pernu

Other information:
-

090502A-04: Odontogenic Infections, 0,6 - 1,3 op
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Leena Ylikontiola
Opintokohteen kielet: Finnish

ECTS Credits:
0.6 ECTS credits

Language of instruction:
Finnish

Timing:
4th year Spring term

Learning outcomes:
Opintojakson jälkeen opiskelija osaa odontogeenisten infektioiden diagnostikan ja hoitoperiaatteet, osaa inkisoida ja dreeneerata hammasperäisen abscessin, ymmärtää osteomyelitiin diagnostiikkaan ja hoitoon liittyvät erityispiirteet nimenomaan suu- ja leukakirurgisen hoidon näkökulmasta.

Contents:
Odontogeeniset infektiot, aktinomykoosi ja osteomyeliti, absessit (5KORV)

Mode of delivery:
Lectures, individual studies

Learning activities and teaching methods:
Lectures, individual studies

Target group:
4th year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
090502A Oral and Maxillofacial Surgery
090506A-02 Roentgenographic Picture of Osteomyelitis, Roentgenographic Features of the Benign and Malignant Tumors

Recommended or required reading:

Assessment methods and criteria:
Written exam together with course 090506A-02 Roentgenographic Picture of Osteomyelitis, Roentgenographic Features of the Benign and Malignant Tumors

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Senior Lecturer Leena Ylikontiola

Working life cooperation:
Work placement is part of clinical training and clinical teaching

Other information:
-

090501A-02: Operative Dentistry, 5,1 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Vuokko Anttonen
Opintokohteen kielet: Finnish

ECTS Credits:
5,1 ECTS credits

Language of instruction:
Finnish

Timing:
Learning outcomes:
The student knows the basics of caries diagnostics and is able to restore teeth damaged by caries using contemporary filling materials and techniques.

Contents:
Operative dentistry: signs and symptoms of caries; clinical and radiographical diagnostics; treatment planning; cavity preparation; filling techniques and materials; fissure sealants.

Mode of delivery:
Face-to-face: lectures, individual studies, practical exercises

Learning activities and teaching methods:
Practical Fantom-exercise including integrated lectures 108 h
Practical exercise examination 6 h
Literature 20 h

Target group:
3rd year dental students. Compulsory to all dental students.

Prerequisites and co-requisites:
All these courses/examinations:
090501A-001 Preliminary examination, cariology
090501A-01 Basics in operative dentistry

Recommended optional programme components:
No alternative course units. Practical Skills Strand

Recommended or required reading:
Material provided during the course

Assessment methods and criteria:
Exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior Research Fellow Liisa Seppä

Working life cooperation:
Yes. Clinical phase practice integrated into the Dental Training Clinic, City of Oulu.

Other information:
090501A Preventive Dentistry and Cariology
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.
After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02.
Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam.
Final grade will be based on the a) the results of the midterm and final exams; b) score achievement in continuous clinical performance evaluation (given by clinical supervisors), and ; c) performance in competence evaluation (given by clinical supervisors and assisting staff).

090601A: Oral Development and Orthodontics, 10 - 12 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Pirttiniemi, Pertti Mikael
Opintokohteen kielet: Finnish

Language of instruction:
Finnish
Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.

090302A: Oral Pathology, 6,6 - 9,8 op
Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Salo, Tuula Anneli
Opintokohteen kielet: Finnish

Required proficiency level:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Language of instruction:
Finnish

Timing:
4th - 5th study year, Subject studies and Advanced studies

Learning outcomes:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Contents:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Mode of delivery:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Learning activities and teaching methods:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Target group:
4th-5th year dental students

Prerequisites and co-requisites:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Recommended optional programme components:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Recommended or required reading:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Assessment methods and criteria:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course of Oral Pathology utilizes a numerical grading scale 1-5.

Person responsible:
Professor Tuula Salo

Working life cooperation:
090302A-01 Oral pathology
090302A-02 Diseases of oral mucosa
090302A-04 Oral pathology, microscopy course

Other information:
090302A-04: Oral Pathology, microscopy course, 0,6 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Salo, Tuula Anneli
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
0,6 ECTS credits
Language of instruction:
Finnish
Timing:
5th year (Autumn term/Spring term)

Learning outcomes:
The student will know the variations in the normal structures of the oral cavity and knows the basic histopathological features of oral and maxillofacial diseases. The student knows the basic and special histological diagnostic methods and is able to understand the meanings behind the pathological statements.

Contents:
Microscopical findings of oral mucosal diseases, odontogenic, salivary gland, soft tissue and bone tumors, as well as in inflammatory and autoimmune conditions within oral cavity and jaw bones.

Mode of delivery:
Virtual microscopy demonstrations

Learning activities and teaching methods:
Virtual microscopy demonstrations

Target group:
5. vuoden hammaslääketieteen opiskelijat

Prerequisites and co-requisites:
All preclinical dental studies are prerequisites for this course

Recommended optional programme components:
090302A Oral Pathology

Recommended or required reading:
Study material; selected portions:
Handouts in Finnish

Assessment methods and criteria:
At least 80% of the demonstrations should be followed
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Professor Tuula Salo

Working life cooperation:
No

Other information:
The course is a part of the course of 090302A-01 Oral pathology

090502A-05: Oral Surgery and General Health, 0,5 - 3,8 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Oikarinen, Kyösti Sakari
Opintokohteen kielet: Finnish

ECTS Credits:
0,5 ECTS credits
Language of instruction: Finnish
Timing: 5th year Autumn term, Subject studies

Learning outcomes:
To deepen the student's understanding about general diseases, to give him/her the basics of treating oral cancer and sleep apnea, bring out the special features required in treating patients under radiation and chemotherapeutic treatment

Contents:
General diseases in regards of oral surgery, treatment of a patient under radiation therapy, treatment of a patient under chemotherapeutics, treatment of oral cancer, diagnosis and treatment of sleep apnea

Mode of delivery:
Lectures, individual studies

Learning activities and teaching methods:
Lectures, individual studies

Target group:
5th year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
090502A Oral and Maxillofacial Surgery

Recommended or required reading:

Assessment methods and criteria:
Attendance at lectures is compulsory
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior Lecturer Antti Raunio/Senior Lecturer Leena Ylikontiola

Working life cooperation:
Work placement takes place during clinical training and teaching

090502A-06: Oral and Maxillofacial Rehabilitation I, 0,3 - 0,9 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Antti Raunio
Opintokohteen kielet: Finnish

ECTS Credits:
0,3 ECTS credits

Language of instruction:
Finnish
Timing:
4th study year, Advanced studies

Learning outcomes:
To give the student understanding about the possibilities of the surgical treatment in occlusal rehabilitation

Contents:
Orthognathic surgery

Mode of delivery:
Lectures

Learning activities and teaching methods:
Lectures

Target group:
4th year dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
Recommended or required reading:

Assessment methods and criteria:
Attendance at lectures is compulsory
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior Lecturer Antti Raunio

Other information:

090502A-07: Oral and Maxillofacial Rehabilitation II, 0,2 - 0,3 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Antti Raunio
Opintokohteen kielet: Finnish

ECTS Credits:
0.2 ECTS credits

Language of instruction:
Finnish

Timing:
4th study year, Advanced studies

Learning outcomes:
To give further understanding about the surgical possibilities in occlusal rehabilitation

Contents:
Surgery of the temporomandibular joint (TMJ-surgery)

Mode of delivery:
lectures, individual studies

Learning activities and teaching methods:
lectures, individual studies

Target group:
4th year dental students

Prerequisites and co-requisites:
No

Recommended optional programme components:
090502A Oral and Maxillofacial Surgery

Recommended or required reading:

Assessment methods and criteria:
Attendance at lectures is compulsory
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Senior Lecturer Antti Raunio

Working life cooperation:
-

Other information:
-

090502A: Oral and Maxillofacial Surgery, 12,5 - 23 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Oikarinen, Kyösti Sakari
Opintokohteen kielet: Finnish

ECTS Credits:
18,4 ECTS credits

Language of instruction:
Finnish

Timing:
3rd-5th study year

Learning outcomes:
Detailed learning outcomes are described in connection with various courses.

Contents:
090502A-00 Preliminary examination, Oral and Maxillofacial Surgery
090502A-01 Principles of Oral and Maxillofacial Surgery
090502A-02 Dentoalveolar Surgery
090502A-03 Dental and Maxillofacial Injuries - diagnostics and treatment
090502A-04 Odontogenic Infections
090502A-05 Oral Surgery and General Health
090502A-06 Oral and Maxillofacial Rehabilitation I
090502A-07 Oral and Maxillofacial Rehabilitation II
090502A-08 Implant Dentistry
090502A-09 Facial Pain Conditions
090502A-12 Pediatric Oral and Maxillofacial Surgery
090502A-10 Syndromes in the Head and Maxillofacial Region (elective course)
090502A-11 Final Exam, Oral and Maxillofacial Surgery

Mode of delivery:
Detailed modes of delivery are described in connection with various courses.

Learning activities and teaching methods:
Detailed learning activities and teaching methods are described in connection with various courses.

Target group:
3rd - 5th year dental students

Prerequisites and co-requisites:
Detailed prerequisites and co-requisites are described in connection with various courses.

Recommended optional programme components:
Detailed recommended optional programme components are described in connection with various courses.

Recommended or required reading:
Therapia Odontologica: hammaslääketieteen käsikirja. Helsinki, Academica

Assessment methods and criteria:
Detailed assessment methods are described in connection with various courses.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The exams of Oral and Maxillofacial Surgery utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Degree in Oral and Maxillofacial Surgery is based on assessment of clinical skills, results of mid-term exams and result of the final exam.

Person responsible:
Professor Kyösti Oikarinen

Working life cooperation:
Work placements are described in connection with various courses.

Other information:

090302A-01: Oral pathology, 5,2 - 6 op
**ECTS Credits:**
6 ECTS credits

**Language of instruction:**
Lectures in Finnish; research projects also in English

**Timing:**
5th year Autumn term, Subject studies and Advanced studies

**Learning outcomes:**
As general requirements for all dentists is the basic knowledge about the anatomical and histological structures of oral cavity, teeth and jaw bones. The student will know the clinical and histological variations in the normal structures of the oral cavity and jaws and the diagnostic features, steps and evaluations related to the most common oral mucosal, soft and hard tissue diseases. Particularly the student knows the special features related to oral cancer diagnostics and treatment. In addition the basic knowledge related to scientific research is required in order to be able to follow critically and adapt new evidence based research in medical and dental field.

**Contents:**
Clinical and histopathological findings of oral mucosal diseases, odontogenic, salivary gland, soft tissue and bone tumors, as well as in inflammatory and autoimmune conditions within oral cavity and jaw bones. In addition, the challenges in diagnostics and treatment of oral cancer are covered.

**Mode of delivery:**
lectures and seminars

**Learning activities and teaching methods:**
lectures and seminars

**Target group:**
5th year dental students

**Prerequisites and co-requisites:**
All preclinical dental studies are prerequisites for this course

**Recommended optional programme components:**
All preclinical dental studies are prerequisites for this course

**Recommended or required reading:**
Study material; selected portions:

**Assessment methods and criteria:**
written exam

Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Tuula Salo and Arja Kullaa

**Working life cooperation:**
No

**Other information:**

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**090510A-11: Organization and Providers of Oral Health Care Services, 0,4 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
0,4 ECTS credits
Language of instruction:
Finnish
Timing:
1st study year, Autumn/Spring term, Subject studies
Learning outcomes:
Student knows oral health care personnel, organization and providers of oral health care services in Finland as well as the principles of health promotion.
Contents:
Part of the teaching is integrated at C1 with the teaching of Department of Public Health Science and General Practice.
Mode of delivery:
Face-to-face teaching
Learning activities and teaching methods:
lectures, site-visit to public health dentist
Target group:
1st year dental students
Prerequisites and co-requisites:
No
Recommended optional programme components:
-
Recommended or required reading:
materials delivered in the course
Assessment methods and criteria:
learning assignment
Read more about assessment criteria at the University of Oulu webpage.
Grading:
The course unit utilizes verbal grading scale pass/fail.
Person responsible:
Professor Jorma Virtanen
Working life cooperation:
-
Other information:
Basic Skills in Dentistry

090508A: Otorhinolaryngology, 0,5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Alho, Olli-Pekka
Opintokohteen kielet: Finnish

ECTS Credits:
0,5 ECTS cr (6 hours)
Language of instruction:
Finnish
Timing:
DC7-DC8, Intermediate studies
Learning outcomes:
After the course the student has basic knowledge on otorhinolaryngology in relation to oro-dental-diseases.
Contents:
Short description of the ear, nose, oral, pharynx, larynx and salivary gland diseases and diseases of the face and neck as well as their origin, epidemiology, diagnostics and treatment related to oro-dental diseases.
Mode of delivery:
blended teaching
Learning activities and teaching methods:
lectures (6 lectures) and learning diary
Target group:
4th year dental students
Prerequisites and co-requisites:
-
Recommended optional programme components:
Oral Diseases and Health Strand

Recommended or required reading:
literature giving during the lectures

Assessment methods and criteria:
obligation to 100% attendance in teaching and learning diary
Read more about assessment criteria at the University of Oulu webpage.

Grading:
pass/fail

Person responsible:
Professor Olli-Pekka Alho

Working life cooperation:
No

Other information:
-

090202A: Paediatrics, 0,5 - 1,8 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Kontiokari, Tero Tapani
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
0,5 ECTS credits
Language of instruction:
Finnish
Timing:
4th year Autumn term, Subject studies

Learning outcomes:
After special subject days students have knowledge about children's normal physical and psychic growth and development and the factors affecting them and about the most common acute and chronic diseases of children.

Contents:
The most common neurological diseases of children. The diagnostics of the syndromes of head. Children's diabetes, allergies and asthma.
Children's normal psychic development and the most common disturbances. Children's anxiety.

Learning activities and teaching methods:
Special subject days
Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Assessment methods and criteria:
Obligatory presence and prepare patient cases and present them in groups
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Pass/fail

Person responsible:
Professor Mikko Hallman (pediatrics) and professor Irma Moilanen (pediatric psychiatry)
Senior Lecturer Sari Koskinen (pedodontics)

Other information:
-

090603Y: Patient seminar, 0 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Intermediate Studies
090603Y-01: Patient seminars, 0 op

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**Language of instruction:**
Finnish

**Assessment methods and criteria:**
Read more about [assessment criteria](https://www.oulu.fi) at the University of Oulu webpage.

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090603Y-02: Patient seminars; preparation and presentation, 0 - 2 op

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Language of instruction:**
Finnish

**Assessment methods and criteria:**
Read more about [assessment criteria](https://www.oulu.fi) at the University of Oulu webpage.

**Other information:**
Obligatory for courses started 2007, 2008, 2009 and 2010

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090502A-12: Pediatric oral and maxillofacial surgery, 0,4 - 0,5 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Leena Ylikontiola

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
0,4 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
4th study year Autumn/Spring term

**Learning outcomes:**
In the end of the course the student knows the special features in surgery working with children and recognises developmental disturbances with oral and craniofacial changes

**Contents:**
Childrens' oral and maxillofacial treatment possibilities

Mode of delivery:
Lectures

Learning activities and teaching methods:
Lectures

Target group:
4th year dental students

Prerequisites and co-requisites:
no

Recommended optional programme components:
no

Recommended or required reading:
Kurssikirjojen saatavuuden voi tarkistaa [tästä linkistä].

Assessment methods and criteria:
Attendance at lectures is compulsory.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Pass/fail

Person responsible:
Department of Oral and Maxillofacial Surgery, Senior Lecturer

Working life cooperation:
No

Other information:
-

090501A-07: Pedodontics, 1,2 - 2,5 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Vuokko Anttonen
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
2,5 ECTS credits
Language of instruction:
Finnish
Timing:
4th study year Autumn term, Subject studies

Learning outcomes:
After course the student is capable of meeting children of different ages and their families in dental care. He/she knows simple methods used in treating fearful children. He/she has knowledge of the principles of noninvasive dentistry at individual level, and is able to identify risk factors of early caries development and the first signs of the disease and is capable of dealing with them. Student has knowledge about principles of both noninvasive and invasive treatment techniques and pulpal therapy in paedodontics. He/she is capable of acute dental care of children. He/she also knows the developmental disturbances of hard tissues of teeth as well as most common syndromes. He/she is familiar with the effects of chronic health conditions on oral health.

Contents:

Mode of delivery:
Lectures or a written task, simulation teaching

Learning activities and teaching methods:
Lectures 16h representing 32h learning

Target group:
4th year dental students. Compulsory to all dental students.

**Prerequisites and co-requisites:**
Previous studies according to the dental curriculum.

**Recommended optional programme components:**
No alternative studies. Development and Growth Strand

**Recommended or required reading:**
ISBN: 978-1-4051-6100-8
Kurssikirjojen saatavuuden voi tarkistaa tästä linkistä .

**Assessment methods and criteria:**
Compulsory attendance in lectures and fantom teaching, exam
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
1-5

**Person responsible:**
Senior Lecturer Vuokko Anttonen (vuokko.anttonen@oulu.fi)

**Working life cooperation:**
Clinical phase practice integrated into work in the Municipal Heath Centre of the City of Oulu Dental Teaching Unit; working according to the schedule in the paediatric units, following dental care of children under school-age, oral health promotion of school-aged children.

**Other information:**
090501A Preventive Dentistry and Cariology
After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02. Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam. Final grade will be based on a) the results of the midterm and final exams; b) score achievement in continuous clinical performance or performance in competence evaluation (given by clinical supervisors and assisting staff); c) additionally the master thesis if done on the department will be taken into consideration.

090505A-06: Periodontal Diseases and General Health, 2,1 - 3,9 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Tellervo Tervonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
3,9 ECTS credits (1.8.2014 -)

**Language of instruction:**
Finnish

**Timing:**
5th study year, Spring term

**Learning outcomes:**
Associations between periodontal diseases and systemic health and diseases. To give advanced knowledge of periodontal infections on tissue and cell level.

**Contents:**
Different systemic diseases and disorders as a risk for periodontal diseases; Periodontal medicine. Molecular biology of inflammation; Genetic aspects of periodontal diseases.

**Learning activities and teaching methods:**
lectures, individual studies

**Target group:**
5. year dental students

**Recommended or required reading:**
Carranza's Clinical Periodontology

**Assessment methods and criteria:**
written exam
090505A-03: Periodontal Surgery, 2.2 - 2.7 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1-5, pass, fail
Opettajat: Tellervo Tervonen
Opintokohteen kielet: Finnish

ECTS Credits:
2.7 ECTS credits

Language of instruction:
Finnish

Timing:
4th study year, Autumn term

Learning outcomes:
To understand wound healing and the most important techniques of periodontal surgery

Contents:
General principles of periodontal surgery, surgical anatomy and different techniques of periodontal surgery

Mode of delivery:
Lectures, fantom

Learning activities and teaching methods:
Lectures, seminars, practical exercises, individual studies

Target group:
4th year dental students

Recommended or required reading:
Carranza's Clinical Periodontology

Assessment methods and criteria:
Written exam (together with 090502A-02 Dentoalveolar Surgery and 090506A-03 Roentgenographic Studies for Surgical Purposes)

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professori Tellervo Tervonen

090505A-13: Periodontal diseases in children, 0.3 - 0.5 op

Voimassaolo: 01.08.2007 -
Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1-5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0.3 ECTS credits (1.8.2014 -)

Language of instruction:
Finnish

Timing:
4th year Autumn or Spring term

**Learning outcomes:**
To understand special features of periodontal structures of young and adolescents. To diagnose pathological conditions of periodontal tissues amongst young people.

**Contents:**
Diagnostics and treatment of periodontal diseases of young and adolescents.

**Mode of delivery:**
Lectures

**Learning activities and teaching methods:**
Lectures and patient cases 3 hours, examination

**Target group:**
4th year dental students

**Prerequisites and co-requisites:**
Student must have passed earlier theoretical study modules in periodontology.

**Recommended optional programme components:**
This study module is part of combination of oral and cranial growth and development.

**Recommended or required reading:**

**Assessment methods and criteria:**
Examination

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Tellervo Tervonen

**Working life cooperation:**
No

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**090505A: Periodontology and Geriatric Dentistry, 12 - 17,4 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Tellervo Tervonen

**Opintokohteenv kielet:** Finnish

**Language of instruction:**
Finnish

**Timing:**
3rd - 5th study year

**Learning outcomes:**
Upon completion of the course the student will be able to prevent, diagnose and treat periodontal diseases and peri-implant infections. The student knows how to make a plan for periodontal maintenance therapy and is aware of the methods of periodontal surgery. Also, the student is able to diagnose and treat periodontal problems of children and adolescents and he/she knows the special features of dental treatment of geriatric patients. After the courses the student can explain the associations between periodontal and systemic health. The student is able to search for new information on periodontology and geriatric dentistry.

**Contents:**

**Mode of delivery:**
face to face teaching, distant teaching

**Learning activities and teaching methods:**
lectures, non-guided teaching, study groups, on-line teaching, fantom-teaching

**Target group:**
3rd - 5th year dental students

**Prerequisites and co-requisites:**
A prerequisite to participate in each course is that all previous courses have been completed. In order to be able to participate in the final examination all courses and clinical patient cases (as required) should be completed. In addition the student has to show that he/she is able to work in the dental team. The final grade is based on the grades in final and intermediate examinations and on clinical studies.

**Recommended or required reading:**
Textbook Carranza’s Clinical Periodontology, scientific papers

**Assessment methods and criteria:**
Written examinations, study-group exercises, on-line exercises

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
The course units of Periodontology and Geriatric Dentistry utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Tellervo Tervonen

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**090502A-00: Preliminary examination, Oral and Maxillofacial Surgery, 0 op**

**Voimassaolo:** 01.09.2002 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Oikarinen, Kyösti Sakari

**Opintokohteen kiele:** Finnish

**ECTS Credits:**
0 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
3rd study year, Subject studies

**Contents:**
Enterance exam to get into the course 090502A-01 Principles of Oral and Maxillofacial Surgery

**Mode of delivery:**
Enterance exam to get into the course 090502A-01 Principles of Oral and Maxillofacial Surgery

**Learning activities and teaching methods:**
Written entrance exam to get into the course 090502A-01 Principles of Oral and Maxillofacial Surgery

**Target group:**
3rd year dental students

**Recommended optional programme components:**
090502A Oral and Maxillofacial Surgery
090502A-01 Principles of Oral and Maxillofacial Surgery

**Recommended or required reading:**
Lectures on maxillofacial anatomy and patient examination

**Assessment methods and criteria:**
Written entrance exam to get into the course 090502A-01 Principles of Oral and Maxillofacial Surgery

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
The course unit utilizes verbal grading scale pass/fail.

**Person responsible:**
Professor Kyösti Oikarinen

**Working life cooperation:**
No

**Other information:**
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**090501A-001: Preliminary examination, cariology, 0 op**

**Opiskelumuoto:** Intermediate Studies
**090505A-00: Preliminary examination, periodontology, 0 op**

**Opiskelumuoto:** Intermediate Studies  
**Laji:** Partial credit  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

- **ECTS Credits:** 0 ECTS credits  
- **Language of instruction:** Finnish  
- **Timing:** 3rd study year, Autumn term  
- **Learning outcomes:** 
  Upon completion of the course the student will be able to explain the basic facts of the structure of periodontium, the microbial etiology and immunological pathways of periodontal infections.  
- **Contents:**  
  Structure of periodontium, microbial etiology of periodontal infections, immunology.  
- **Mode of delivery:** 
  Written exam (1.5 h)  
- **Learning activities and teaching methods:**  
  Itseopiskelu  
- **Target group:**  
  3rd year dental students  
- **Prerequisites and co-requisites:**  
  Carranza's Clinical Periodontology, 11th ed., pages:  
- **Recommended or required reading:**  
  The tooth supporting structures, pages 68-88 in 10th ed.  
- **Assessment methods and criteria:**  
  Written exam (1.5 h)  
  Read more about [assessment criteria](#) at the University of Oulu webpage.  
- **Grading:**  
  The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.  
- **Person responsible:**  
  Professor Tellervo Tervonen  
- **Working life cooperation:**  
  No

**080206A: Prescriptions, 0,5 op**

**Opiskelumuoto:** Intermediate Studies  
**Laji:** Course  
**Vastuuysikkö:** Medicine  
**Arvostelu:** 1 - 5, pass, fail  
**Opettajat:** Viitala, Pirkko Liisa  
**Opintokohteen kielet:** Finnish

- **ECTS Credits:** 1 ECTS credits /26,50 hours of work
Language of instruction: Finnish
Timing: The course is held in the autumn semester, during the third year of medical studies.
Learning outcomes: Upon completion of the course, the student will be able to understand an appropriate way to write prescriptions. The student knows authoritative regulations and restrictions concerning the prescription, delivery and reimbursements of pharmaceuticals. In addition the student knows the role of pharmacy in delivering the drugs.

Contents: The construction of a prescription. The information to be entered to the prescription. The different type and use of the prescription. The authoritative regulations concerning the prescription and delivery of pharmaceuticals. The reimbursability of medicines. The co-operation of a pharmacy, Kela (the social insurance institution of Finland) and a doctor/ a dentist to secure a safe and effective medication. The registration and marketing authorizations of the pharmaceuticals. Pharmaceutical forms. The quality control and storage of pharmaceuticals

Mode of delivery: The tuition will be arranged as face-to-face teaching.
Learning activities and teaching methods: Lectures 8h/ Group work 2h/ Self-study 16,5h.
Target group: Target groups are 3rd year medical and dentistry students.
Prerequisites and co-requisites: Prerequisite for participation to the course is the completion of preclinical studies.
Recommended optional programme components: No alternative courses.
Recommended or required reading: Books:
Ilari Paakkari: Käytännön reseptioppi (Kandidaattikustannus Oy 2006).
Pharmaca Fennica
Assessment methods and criteria: Exam assessment.
Grading: The course unit utilizes verbal grading scale: pass/ fail.
Person responsible: Pirkko Viitala, laboratory manager
Working life cooperation: No

090501A: Preventive Dentistry and Cariology, 14,9 - 17,9 op
Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Leo Tjäderhane
Opintokohteen kielet: Finnish

ECTS Credits: 16,5 - 17,9 ECTS credits
Language of instruction: Finnish
Timing: 2nd year Autumn term - 5th year Spring term
Learning outcomes: The student will learn the biological basis and clinical features of dental caries, and its control and prediction.
Contents: See
090501A-01 Basics of Operative Dentistry
090501A-02 Operative Dentistry
090501A-03 Endodontics I
090501A-05 Endodontics II
090501A-06 Cariology and General Health
090501A-07 Pedodontics

Mode of delivery:
Face-to-face

Learning activities and teaching methods:
Lectures 118 h
Fantom-practises 168 h
Group studies 17 h
Student's individual work 115 h
Examinations 15 h

Target group:
2nd - 5th year dental students. Compulsory to all dental students.

Prerequisites and co-requisites:
Courses must be passed as scheduled in the curriculum. See 'Assessment methods'.

Recommended optional programme components:
No alternative courses. Courses are part of the corresponding strands.

Recommended or required reading:
See different courses

Assessment methods and criteria:
After different course parts there will be midterm exams covering the topics dealt with in the course in question. In the beginning of DC 5, there will be the exam covering the lectures given in DC 4 and related chapters in textbook: passing this exam is required for the admittance to Restorative Dentistry course 090501A-02.
Passing the midterm exams is the prerequisite for attending the clinical studies and final exam. All the topics covered in different course parts, as well as related topics in textbooks, are required in the final exam.
Final grade will be based on the a) the results of the midterm and final exams; b) score achievement in continuous clinical performance evaluation (given by clinical supervisors), and ; c) performance in competence evaluation (given by clinical supervisors and assisting staff).
Read more about assessment criteria at the University of Oulu webpage.

Grading:
Numerical grading scale 1-5.

Person responsible:
Professor Leo Tjäderhane

Working life cooperation:
Yes. Clinical phase practice integrated into the Dental Training Clinic, City of Oulu.

Other information:
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.

090506A-01: Principles of Dental Radiology, 1,9 - 3,8 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
3,8 ECTS credits

Language of instruction:
Finnish

Timing:
3rd study year

Learning activities and teaching methods:
lectures

Target group:
3rd year dental students

Prerequisites and co-requisites:
Recommended optional programme components:

Recommended or required reading:
(Goaz & White: Oral Radiology)

Assessment methods and criteria:
written exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Working life cooperation:

090502A-01: Principles of Oral and Maxillofacial Surgery, 3,2 - 4,7 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Oikarinen, Kyösti Sakari
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
3,2 ECTS credits

Language of instruction:
Finnish

Timing:
3rd year Autumn/Spring term, Subject studies

Learning outcomes:
At the completion of this course the student should be able to perform anamnesis and examination of a surgical patient. He/she should be aware of the risks of general diseases and medication to surgical treatment. The student should perform independently conventional local anaesthetic measures and should be able to perform tooth extractions.

- To teach how to examine the oral surgical patient and do the anamnesis
- To study the essentials of general diseases and medication of the patients
- Theoretical and practical teaching - to learn to give local anesthetics
- To learn to do uncomplicated tooth extractions

Contents:
- Theoretical and practical teaching how to examine the patient
- Theoretical and practical teaching in local anesthetic
- Theoretical and practical teaching in aseptics
- Theoretical and practical teaching in tooth extractions
- Theoretical and practical teaching in suturing technique

Mode of delivery:
lectures, practical exercises, seminars/small groups, individual studies

Learning activities and teaching methods:
lectures, practical exercises, seminars/small groups, individual studies

Target group:
3rd year dental students

Prerequisites and co-requisites:
Written entrance exam to get into the course

Recommended optional programme components:
090502A Oral and Maxillofacial Surgery

Recommended or required reading:

Assessment methods and criteria:
Written exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
090203A: Propedeutic Course on Surgery, 1.5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Medicine

Arvostelu: 1 - 5, pass, fail

Opettajat: Juvonen, Tatu Sakari

Opintokohteen kielet: Finnish

ECTS Credits:
1.5 ECTS credits

Language of instruction:
Finnish

Timing:
3rd year Autumn term

Learning outcomes:
The student should get understanding about general basics of surgery and essential operations.

Contents:
Essentials of surgery and important operations.

Mode of delivery:
lectures

Learning activities and teaching methods:
lectures

Target group:
3rd year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
lecture materials

Assessment methods and criteria:
Web-exam

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Professor Tatu Juvonen

Working life cooperation:
No

090503A: Prosthetic Dentistry, 12.3 - 16 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opettajat: Raustia, Aune Maritta

Opintokohteen kielet: Finnish

Language of instruction:
Finnish

Timing:
3rd - 5th study year

Learning outcomes:
In graduation the student knows the anatomy and function of the stomatognathic system and can objectively assess the need for prosthetic rehabilitation.
The student can do the basic prosthetic treatment procedures and simple prosthetic repairs.
The student knows the properties of the materials used in prosthetic dentistry.
The student can diagnose and treat the most common temporomandibular disorders.

Contents:
090503A-01 Fixed prosthodontics, incl. 090503A-05 Resin bonded fixed partial dentures (Maryland bridges) and 090503A-08 Inlays and onlays
090503A-02 Complete dentures, incl. 090503A-06 Immediate dentures
090503A-03 Removable partial dentures
090503A-04 Dental materials
090503A-07 Denture repair

Mode of delivery:
Face-to-face teaching

Learning activities and teaching methods:
lectures, demonstrations, study groups, exercises

Target group:
3rd - 5th year dental students

Prerequisites and co-requisites:
preclinical studies

Recommended or required reading:
hand out lecture materials, textbooks

Assessment methods and criteria:
lectures and/or written exams

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course units of Prosthetic Dentistry utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Aune Raustia

Other information:
Oral Rehabilitation Strand

Compulsory

090503A-10: Prosthetic Management for Advanced Cases, 0,8 - 1,1 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Raustia, Aune Maritta
Opintokohteen kielet: Finnish

ECTS Credits:
0.8 ECTS credits

Language of instruction:
Finnish

Timing:
5th study year Autumn term

Learning outcomes:
• To recognize the most common congenital dental defects and know the principles of prosthetic treatment procedures and to diagnose and/or perform the conventional follow-up treatment.
• To know mainly the treatment methods used in the management of patients needing maxillofacial prosthodontics.
• After the lectures students know the basic prosthetic principles in treatment of worn dentition.

Contents:
• Oral rehabilitation of patient with temporomandibular disorders
• Prosthetic treatment of congenital dental defects
Prosthetic treatment of dental erosion
Maxillo-facial prosthodontics
Prosthetic rehabilitation of worn dentition
Precious attachements

Mode of delivery:
face-to-face teaching

Learning activities and teaching methods:
lectures

Target group:
5th year dental students

Prerequisites and co-requisites:
preclinical studies

Recommended optional programme components:
-

Recommended or required reading:
hand out lecture materials

Assessment methods and criteria:
lectures

Grading:
pass/fail

Person responsible:
Professor Aune Raustia (at) oulu.fi, Senior lecturer Ritva Näpänkangas (at) oulu.fi, Senior lecturer Ritva Kuoppala (at) oulu.fi

Working life cooperation:
none

Other information:
Oral rehabilitation strand

090404A: Psychiatry, 0,4 - 0,5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
0.4 ECTS cr

Language of instruction:
Finnish

Timing:
DC9, Intermediate studies

Learning outcomes:
Aim of the course is that a student knows special features of the psychiatric patients, young people and addicts. A student is able to find the proper approach and treatment decisions based on psychiatric patients, alcoholics and addicts. In addition, a student knows the psychological meaning of the oro-dental environment.

Contents:
Most common psychiatric diseases, treatment and medication and significance in dentistry. Also, facing a psychiatric patient and young people, alcoholics and addicts as a patient and the meaning of the oral environment to the psyche.

Mode of delivery:
face-to-face teaching

Learning activities and teaching methods:
lectures (6 hours)

Target group:
5th year dental students

**Prerequisites and co-requisites:**
no

**Recommended optional programme components:**
Oral diseases and health strand

**Recommended or required reading:**
Active participation in teaching and hand-out materials

**Assessment methods and criteria:**
eamination or obligation to 100% attendance in teaching

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
The course unit utilizes verbal grading scale pass/fail

**Person responsible:**
Professor Matti Isohanni

**Working life cooperation:**
no

**Other information:**
-

090304A: Radiation Safety, 2,1 op

**Voimassaolo:** 01.08.2012 -

**Opiskelumoto:** Intermediate Studies

**Laji:** Course

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Miika Nieminen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2,1 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
090304A-01 Radiation safety, part 1, 2nd study year Spring term
090304A-02 Radiation safety, part 2, 3rd study year Autumn term

**Learning outcomes:**
After the course the student can describe different forms of radiation and their application in medicine, explain the biological effects and mechanisms of radiation, define the decrees pertaining to the use of radiation and describe the radiation safety measures in the hospital working environment. The student can apply knowledge in practice and guide others to safe working practices. The student can take intraoral and panoramic radiographs in a radiation-safe manner. The student can perform quality assurance measurements for intraoral and panoramic imaging systems.

**Contents:**
Basics of radiation physics, basics of radiation biology, decree of radiation protection, radiation safety procedures in working environment, radiation use in medicine

**Mode of delivery:**
lectures, exam, mandatory face-to-face teaching, test

**Target group:**
Dental students

**Prerequisites and co-requisites:**
-

**Recommended optional programme components:**
-

**Assessment methods and criteria:**
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Miika Nieminen

**Working life cooperation:**
No
Other information:
The course is statutory radiation protection education in dentist training.

**090304A-01: Radiation Safety, Part 1, 1,5 op**

**Voimassaolo:** 01.08.2012 -
**Opiskelumuoto:** Intermediate Studies
**Laji:** Partial credit
**Arvostelu:** 1 - 5, pass, fail
**Opettajat:** Miika Nieminen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
1,5 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
2nd study year Spring term

**Learning outcomes:**
After the course the student can describe different forms of radiation and their application in medicine, explain the biological effects and mechanisms of radiation, define the decrees pertaining to the use of radiation and describe the radiation safety measures in the hospital working environment. The student can apply knowledge in practice and guide others to safe working practices. The student can take intraoral and panoramic radiographs in a radiation-safe manner. The student can perform quality assurance measurements for intraoral and panoramic imaging systems.

**Contents:**
Basics of radiation physics, basics of radiation biology, decree of radiation protection, radiation safety procedures in working environment, radiation use in medicine

**Mode of delivery:**
lectures, exam, mandatory face-to-face teaching, test

**Learning activities and teaching methods:**
lectures, mandatory face-to-face teaching

**Target group:**
2nd year dental students

**Prerequisites and co-requisites:**
-

**Recommended optional programme components:**
-

**Assessment methods and criteria:**
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Miika Nieminen

**Working life cooperation:**
No

**Other information:**
The course is statutory radiation protection education in dentist training.

**090304A-02: Radiation Safety, Part 2, 0,6 op**

**Voimassaolo:** 01.08.2012 -
**Opiskelumuoto:** Intermediate Studies
**Laji:** Partial credit
**Arvostelu:** 1 - 5, pass, fail
**Opettajat:** Miika Nieminen

**Opintokohteen kielet:** Finnish
ECTS Credits: 0.6 ECTS credits
Language of instruction: Finnish
Timing: 3rd study year Autumn term
Learning outcomes: After the course the student can describe different forms of radiation and their application in medicine, explain the biological effects and mechanisms of radiation, define the decrees pertaining to the use of radiation and describe the radiation safety measures in the hospital working environment. The student can apply knowledge in practice and guide others to safe working practices. The student can take intraoral and panoramic radiographs in a radiation-safe manner. The student can perform quality assurance measurements for intraoral and panoramic imaging systems.

Contents: Basics of radiation physics, basics of radiation biology, decree of radiation protection, radiation safety procedures in working environment, radiation use in medicine

Mode of delivery: lectures, mandatory face-to-face teaching
Learning activities and teaching methods: lectures, mandatory face-to-face teaching
Target group: 3rd year dental students
Assessment methods and criteria: lectures, exam, mandatory face-to-face teaching, test
Read more about assessment criteria at the University of Oulu webpage.

Grading: The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Person responsible: Professor Miika Nieminen

Working life cooperation: No
Other information: The course is statutory radiation protection education in dentist training.

090510A-06: Rehabilitation of Occlusion, 0.4 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Niskanen, Leena Marita
Opintokohteen kielet: Finnish

ECTS Credits: 0.4 ECTS credits
Language of instruction: Finnish
Timing: 4th year, Spring term, Subject studies
Learning outcomes: Student understands the role of health economics in public and private sector and cooperation between primary health care and specialised care as well as principles of prioritization.

Contents: See objective of the course
Mode of delivery: Face-to-face teaching, independent study
Learning activities and teaching methods: lectures, group works, individual studies
Target group: 4th year dental students
Prerequisites and co-requisites: No
Recommended optional programme components:

- 

Recommended or required reading:
material delivered in the course

Assessment methods and criteria:
learning assignment
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes verbal grading scale pass/fail.

Person responsible:
Professor Jorma Virtanen

Working life cooperation:
No

Other information:
Ora Rehabilitation Strand

090503A-03: Removable Partial Dentures, 2 - 2,5 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Ritva Kuoppala
Opintokohteen kielet: Finnish

ECTS Credits:
2,5 ECTS credits

Language of instruction:
Finnish

Timing:
3rd year Spring term - 4th year Autumn term

Learning outcomes:
To recognize and diagnose patients with partially edentulous jaws and to give theoretical and clinical skills for the treatment of patients with removable partial denture.

Contents:
Destruction of occlusion, indications of removable partial dentures, patient examination/treatment planning, pre-prosthetic treatment, components and design aspects of a partial denture, impressions, occlusion, complications /problems/prognosis

Mode of delivery:
lectures, demonstrations, treatment planning exercises

Learning activities and teaching methods:
lectures, demonstrations, treatment planning exercises

Target group:
3rd - 4th year dental students

Prerequisites and co-requisites:

- 

Recommended optional programme components:

- 

Recommended or required reading:
lecture handout material

Assessment methods and criteria:
written exam (together with 090505A-08 Oral Rehabilitation in Periodontal Therapy)
Read more about assessment criteria at the University of Oulu webpage.

Grading:
scale 0-5

Person responsible:
Senior Lecturer Ritva Kuoppala (at) oulu.fi, Senior Lecturer Erkki Hujanen (at) oulu.fi

Working life cooperation:
- 

Other information:
-
090602A: Research methods, 1 op

Opiskelumuoto: Advanced Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.

090605A-02: Research seminars, participation, 0 - 3 op

Voimassaolo: 01.01.2006 -
Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

090503A-05: Resin Bonded Bridges (Maryland Bridges), 0,2 - 0,3 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Ritva Kuoppala
Opintokohteen kielet: Finnish

ECTS Credits:
0,3 ECTS credits
Language of instruction:
Finnish
Timing:
3rd study year, Spring term
Learning outcomes:
To give theoretical and clinical knowledge about different types of resin-bonded fixed partial dentures including tooth preparation and clinical procedures
Contents:
indications, preparation and clinical procedures of resin-bonded fixed partial dentures
Mode of delivery:
lectures, demonstrations, individual studies
Learning activities and teaching methods:
lectures, demonstrations, individual studies
Target group:
3rd year dental students
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
lecture handout material
Assessment methods and criteria:
full-time participation needed
Read more about assessment criteria at the University of Oulu webpage.
Grading:
090506A-02: Roentgenographic Picture of Osteomyelitis. Roentgenographic Features of the Benign and Malignant Tumors, 0,3 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 0,3 ECTS credits
Language of instruction: Finnish
Timing: 4th study year Spring term, Advanced studies
Learning activities and teaching methods: lectures
Target group: 4th year dental students
Prerequisites and co-requisites: -
Recommended optional programme components: -
Recommended or required reading: lecture hand out material
Assessment methods and criteria: written exam
Read more about assessment criteria at the University of Oulu webpage.
Grading: The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Working life cooperation: -

090506A-03: Roentgenographic Studies for Surgical Purposes, 1,4 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 1,4 ECTS credits
Language of instruction: Finnish
Timing: 4th study year Autumn term, Advanced studies
Learning activities and teaching methods: lectures
Target group: 4th year dental students
Prerequisites and co-requisites: -
Recommended optional programme components:

- 

Recommended or required reading:
(Goaz & White. Oral Radiology), lectures

Assessment methods and criteria:
written exam

Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Working life cooperation:


090505A-02: Special Topics in Nonsurgical Periodontal Therapy, 1.1 - 1.5 op

Opiskelumuoto: Intermediate Studies

Laji: Partial credit

Arvostelu: 1 - 5, pass, fail

Opettajat: Pernu, Hilkka Elina

Opintokohteen kielet: Finnish

ECTS Credits: 1.5 ECTS credits

Language of instruction: Finnish

Timing:
3rd year, Spring term

Learning outcomes:
To give additional knowledge and skills for nonsurgical periodontal therapy

Contents:
Individual and population based preventive periodontal therapy; Anti-infective periodontal treatment; Gingival curettage and gingivoplasty; Furcation lesions; Epidemiology of periodontal diseases; Acute gingival and periodontal diseases

Mode of delivery:
lectures, seminars/small groups, individual studies

Learning activities and teaching methods:
lectures, seminars/small groups, individual studies

Target group:
3rd year dental students

Prerequisites and co-requisites:
Previous courses in periodontology

Recommended optional programme components:

- 

Recommended or required reading:
Carranza's Clinical Periodontology

Assessment methods and criteria:
Read more about assessment criteria at the University of Oulu webpage.

Grading:
scale 0-5 or pass/fail

Person responsible:
Hilkka Pernu (at) oulu.fi

Working life cooperation:

- 

Other information:

- 

090504A: Stomatognathic Physiology, 3 - 7.5 op

Opiskelumuoto: Intermediate Studies

Laji: Course
**Language of instruction:**
Finnish

**Timing:**
2nd - 4th study year

**Learning outcomes:**
See 090504A-01, 090504A-02, 090504A-03

**Contents:**
See 090504A-01, 090504A-02, 090504A-03

**Mode of delivery:**
See 090504A-01, 090504A-02, 090504A-03

**Learning activities and teaching methods:**
See 090504A-01, 090504A-02, 090504A-03

**Target group:**
2nd - 4th year dental students

**Prerequisites and co-requisites:**
See 090504A-01, 090504A-02, 090504A-03

**Recommended optional programme components:**
See 090504A-01, 090504A-02, 090504A-03

**Recommended or required reading:**
See 090504A-01, 090504A-02, 090504A-03

**Assessment methods and criteria:**
See 090504A-01, 090504A-02, 090504A-03
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
The course units of Stomatognathic Physiology utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**
Professor Aune Raustia

**Working life cooperation:**
See 090504A-01, 090504A-02, 090504A-03

**Other information:**
See 090504A-01, 090504A-02, 090504A-03

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**090504A-01: Stomatognathic Physiology I (orthofunction), 2,8 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Raustia, Aune Maritta

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2,8 ECTS credits

**Language of instruction:**
Finnish

**Timing:**
2nd year, Autumn/Spring term

**Contents:**
Bony structure of the masticatory system; macro- and microanatomy of temporomandibular joint; structure and function of the masticatory muscles, function of the mandible, registration of the occlusion, examination of a patient.

**Mode of delivery:**
lectures, self-access learning

**Learning activities and teaching methods:**
lectures, self-access learning

**Target group:**
2nd year dental students

Prerequisites and co-requisites:
- 

Recommended optional programme components:
- 

Recommended or required reading:
lecture handout material,
Okeson JP. Management of temporomandibular disorders and occlusion 7 ed. Elsevier Mosby 2013

Assessment methods and criteria:
written exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
scale 0-5

Person responsible:
Professor Aune Raustia, Senior Lecturer Ritva Näpänkangas

Working life cooperation:
-

Other information:
- 

090504A-02: Stomatognathic Physiology II (pathofunction), 3,1 - 4,2 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Raustia, Aune Maritta

Opintokohteen kielet: Finnish

ECTS Credits:
4,2 ECTS credits

Language of instruction:
Finnish

Timing:
3rd study year Autumn term

Contents:
The concept of pathofunction of the masticatory system; epidemiology, etiology, diagnosis and treatment of temporomandibular disorders (TMD); examination of a patient: radiological diagnosis, differential diagnosis and treatment procedures.

Mode of delivery:
lectures, seminars/small groups, demonstrations, self-access learning

Learning activities and teaching methods:
lectures, seminars/small groups, demonstrations, self-access learning

Target group:
3rd year dental students

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
lecture handout material,
Okeson JP. Management of temporomandibular disorders and occlusion 7 ed. Elsevier Mosby 2013

Assessment methods and criteria:
written exam
Read more about assessment criteria at the University of Oulu webpage.

Grading:
The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Professor Aune Raustia, Senior Lecturer Ritva Näpänkangas

Working life cooperation:
-

Other information:
090504A-03: Stomatognathic Physiology III, 0.5 op

Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opettajat: Raustia, Aune Maritta
Opintokohteen kielet: Finnish

ECTS Credits: 0.5 ECTS credits
Language of instruction: Finnish
Timing: 4th year, Autumn term
Learning outcomes:
To recognize and diagnose the signs and symptoms of temporomandibular disorders (TMD). To know and perform the conventional treatment methods used in management of TMD. Especially in cases without treatment outcome to diagnose the patients needing special care for differential diagnosis and treatment.
Mode of delivery: face-to-face teaching
Learning activities and teaching methods: lectures (4 hours) and group work (4 hours)
Target group: 4th year dental students
Prerequisites and co-requisites: -
Recommended optional programme components: -
Recommended or required reading: lecture hand out material
Assessment methods and criteria: Read more about assessment criteria at the University of Oulu webpage.
Grading: The course unit utilizes verbal grading scale pass/fail.
Person responsible: Professor Aune Raustia
Working life cooperation: No

090602S-01: Study plan, 4 op

Opiskelumuoto: Advanced Studies
Laji: Partial credit
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 4 ECTS credits
Learning outcomes:
The student can specify research problems to his/her research, choose the research method and formulate a blueprint for collecting, processing and reporting the matter, and the time scale for the research.
Contents:
The student formulates a research plan, in which he/she introduces context of his/her research, research problems, research method and the blueprint for collecting, processing and reporting the matter, and the time scale for the research.
Learning activities and teaching methods:
See 090602S Thesis

Assessment methods and criteria:
See 090602S Thesis

Read more about assessment criteria at the University of Oulu webpage.

Grading:
See 090602S Thesis

The teacher subscribes the research plan and the teaching agreement form. The accepted plan for research will be registered to completed courses in WebOodi.

Other information:
See 080705S Thesis


The agreement form "Tutkielman ohjaussopimus” is found in www.medicine.oulu.fi/peruskoulutus.

The research plan and teaching agreement form "tutkielman ohjaussopimus” has to be accepted before returning the thesis.

Department of Diagnostics and Oral Medicine (incl. Radiology)
Person responsible: Professor Tuula Salo (at) oulu.fi

Department of Prosthetic Dentistry
Person responsible: Professor Aune Raustia (at) oulu.fi

Department of Oral development and Orthodontics
Person responsible: Professor Pertti Pirttiniemi (at) oulu.fi

Department of Periodontology and Geriatric Dentistry
Person responsible: Professor Tellervo Tervonen (at) oulu.fi

Department of Pedodontics, Cariology and Endodontology
Person responsible: Professor Leo Tjäderhane (at) oulu.fi

Department of Community Dentistry
Person responsible: Associate professor Jorma Virtanen (at) oulu.fi

Department of Oral and Maxillofacial Surgery
Person responsible: Professor Kyösti Olkinainen (at) oulu.fi

090602S: Thesis, 20 op

Opiskelumuoto: Advanced Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
20 ECTS credits

Language of instruction:
Finnish, English

Learning outcomes:
See 080705S Thesis

The thesis in the degree Programmes of Medicine and Dentistry is a scientific work which shows the student's ability to scientific thinking and research. The student gets acquainted with scientific research and is able to evaluate research publications, the student is capable of independent and responsible work as part of a scientific community, develops his/her problem solving skills as well as critical and ethical thinking, and increases his/her readiness to scientific communication.

Contents:
See 080705S Thesis

Writing a study plan which includes the research plan. Supervised research and writing a thesis or scientific article (student as a first or second writer). Oral presentation of the research. Maturity exam.

Mode of delivery:
face-to-face teaching

Learning activities and teaching methods:
See 080705S Thesis

Formulation of research plan and independent research work under the supervision of the teacher. Writing a thesis and oral presentation.

Target group:
Dental students

Prerequisites and co-requisites:
Recommended optional programme components:

Recommended or required reading:

Assessment methods and criteria:
See 080705S Thesis
Accepted study and research plan, accepted thesis or scientific article, oral presentation.
Read more about assessment criteria at the University of Oulu webpage.

Grading:
See 080705S Thesis
Pass/fail

Person responsible:
See 'Other information'

Working life cooperation:

Other information:
See 080705S Thesis
The agreement form “Tutkielman ohjaussopimus” is found in www.medicine.oulu.fi/peruskoulutus.

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Person responsible: Professor Kyösti Olkilainen (at) oulu.fi

090201A: Tooth Morphology, 1,6 - 2 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits

Language of instruction:
Finnish

Timing:
1st year Spring term, Subject studies

Learning outcomes:
The anatomy and the morphology of the human dentition.

Contents:
Different kind of dentitions, teeth in the masticatory system, the anatomy and the morphology of human teeth.

Mode of delivery:
Face-to-face: lectures, practical exercises

Learning activities and teaching methods:
Lectures (9 h, representing 18 h of learning) integrated into practical exercises (16 h), 100 % presence
Self-studies 11 h
Examination 1 h

Target group:
1st year dental students. Compulsory to all dental students.

Prerequisites and co-requisites:
Previous studies according to dental curriculum

**Recommended optional programme components:**
No alternative course units
See 040201A Anatomy

**Recommended or required reading:**
Reference book:
Wheeler, R.C. An Atlas of Tooth Form. 4 painos. Ss. 1-15; 33-77; 131-163. (96 s.)
Check availability tästä linkistä.

**Assessment methods and criteria:**
written exam; tooth identification exam
Read more about assessment criteria at the University of Oulu webpage.

**Grading:**
Pass/fail

**Person responsible:**
Professor Leo Tjäderhane

**Working life cooperation:**
No

**Other information:**
Details of the activities and teaching methods and possible compulsory attendance will be agreed in the beginning of the respective courses.