

# Opasraportti

## FMed - Dentistry (2016 - 2017)

### Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

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 091511A: Cariology I, 2 op  
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 090507A: Clinical Pharmacology, 1,5 op  
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 090603A-06: Clinical Training, DC 6, 6 - 8 op  
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 090603A-08: Clinical Training, DC 8, 6 - 14 op  
 090603A-09: Clinical Training, DC 9, 6 - 9 op  
 090510A: Community Dentistry, 6 - 7 op  
 091534A: Complete Dentures, 3,4 op  
 091584S: Controlling Oral Diseases among Populations; Evidence-based Dentistry, 1 op  
 091585S: Current Topics in Community Dentistry, 3 op  
 091533A: Dental Materials, 1,5 op  
 090506A: Dental Radiology, 7 - 7,3 op  
 091523A: Dental and Maxillofacial Injuries - diagnostics and treatment, 2,9 op  
 091572S: Dental and orofacial development, 2,3 op  
 091535A: Denture repair, 0,5 op  
 090301A: Dermatology and Venereology, 0,4 - 0,6 op  
 091591A: Diseases of Oral Mucosa, 3,1 op  
 091514A: Endodontics I, 1,6 - 2 op  
 091514S: Endodontics II, 2 - 2,1 op  
 091529S: Facial Pain Conditions, 1 op  
 090502A-11: Final exam, Oral and maxillofacial surgery, 0 - 7,9 op  
 091531A: Fixed Prosthodontics, 4,7 op  
 090606A: Forensic Dentistry, 0,3 op  
 091557A: Geriatric Dentistry, 1,3 op  
 091501Y: Growing identity as a dentist Part 1, 1 op  
 091502Y: Growing identity as a dentist Part 2, 0,5 op  
 091528S: Implant Dentistry, 0,4 - 0,5 op  
 090303A: Internal Medicine for Dental Students, 0,8 op  
 090602Y: Introduction to Clinical Work, 1,5 op  
 091571A: 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  
 091575S: ORTHO-Seminars 1-5, 1,4 op  
 090603A-02: OSCE, 0 op  
 091554A: Occlusal Rehabilitation in Periodontal Therapy, 1 op  
 091523S: Odontogenic Infections, 0,6 op  
 090601A: Oral Development and Orthodontics, 10 - 12 op  
 090302A: Oral Pathology, 6,6 - 9,8 op  
 091522A: Oral Surgery, 3,9 op  
 091526S: Oral Surgery and General Health, 3,4 op  
 091524S: Oral and Maxillofacial Rehabilitation, 0,8 op  
 090502A-07: Oral and Maxillofacial Rehabilitation II, 0,2 - 0,3 op  
 090502A: Oral and Maxillofacial Surgery, 12,5 - 23 op  
 091592A: Oral pathology, 4 op  
 091592S: Oral pathology, 2,6 op  
 091581A: Organization and Providers of Oral Health Care Services, 0,5 op  
 090508A: Otorhinolaryngology, 0,5 op  
 090202A: Paediatrics, 0,5 - 1,8 op  
 091574S: Pathology in occlusal development and adult orthodontics, 0,4 - 0,5 op  
 090603Y: Patient seminar, 0 op  
 090603Y-01: Patient seminars, 0 op  
 090603Y-02: Patient seminars; preparation and presentation, 0 - 2 op  
 091525A: Pediatric oral and maxillofacial surgery, 0,5 op  
 091516A: Pedodontics, 2,5 - 2,7 op  
 091558S: Periodontal Diseases and General Health, 4,1 op  
 091555S: Periodontal Surgery, 2,2 op  
 091556S: Periodontal diseases in children, 0,3 - 0,5 op  
 090502A-00: Preliminary examination, Oral and Maxillofacial Surgery, 0 op  
 080206A: Prescriptions, 0,5 op  
 090501A: Preventive Dentistry and Cariology, 14,9 - 17,9 op  
 091561A: Principles of Dental Radiology, 3,8 op  
 091521A: Principles of Oral and Maxillofacial Surgery, 4,7 op  
 090203A: Propedeutic Course on Surgery, 1,5 op  
 090503A: Prosthetic Dentistry, 12,3 - 16 op  
 091536S: Prosthetic Management for Advanced Cases, 0,8 op  
 090404A: Psychiatry, 0,4 - 0,5 op  
 091506A: Radiation Safety, Part 1, 1,5 op  
 091506S: Radiation Safety, Part 2, 0,5 - 0,6 op  
 091532A: Removable Partial Dentures, 2,5 op  
 090602A: Research methods, 1 op  
 090605A-02: Research seminars, participation, 0 - 3 op  
 091563S: Roentgenographic Picture of Osteomyelitis. Roentgenographic Features of the Benign and Malignant Tumors, 1 op  
 091562S: Roentgenographic Studies for Surgical Purposes, 1,4 op  
 091553S: Special Topics in Nonsurgical Periodontal Therapy, 1,5 op  
 090504A: Stomatognathic Physiology, 3 - 7,5 op  
 091541A: Stomatognathic Physiology I (orthofunction), 2,8 op  
 091542A: Stomatognathic Physiology II (pathofunction), 4,2 op  
 091543S: Stomatognathic Physiology III, 0,5 op  
 090602S-01: Study plan, 4 op  
 090602S: Thesis, 20 op  
 090201A: Tooth Morphology, 1,6 - 2 op

## Opintojaksojen kuvaukset

## Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

### 090603S: Advanced Practical Training DC11, 30 op

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Practical training

**Vastuuyksikkö:** Dentistry

**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:**

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**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.

## 090403A: Anaesthesiology, 1 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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 anesthetic 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

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed.

Mosby 2008. Chapter 2

Kurssikirjojen saatavuuden voi tarkistaa [tästä linkistä](#) .

**Assessment methods and criteria:**

presence

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

**Grading:**

approved/disapproved

**Person responsible:**

Prof. Seppo Alahuhta

**Working life cooperation:**

-

**Other information:**

-

## 091582S: Basic Competence in Working on Public Oral Health Care Services, 1,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Niskanen, Leena Marita, Jorma Virtanen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1,5 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

**091582A: Basic Competence on Ethics, Legislation and Dentist-Patients Relationship, 1 - 1,1 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Jorma Virtanen, Niskanen, Leena Marita

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

090510A-04 Basic Competence on Ethics, Legislation and Dentist-Patients Relationship 1.1 op

**ECTS Credits:**

1,0 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

## 091575A: Basic Orthodontic Skills, 1,2 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**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. 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 is able to consider the function in orthodontic treatment need evaluation. 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:**

Orthodontic equipment and materials will be introduced. Practical exercises in pairs and teaching videos will instruct the basics of patient care in Orthodontics.

Part 1:

The basic concepts in orthodontics and documentation for the orthodontic treatment planning; 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. 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.

Part 2:

Treatment possibilities of all kind of occlusal problems especially in the mixed dentition. The mechanics of expanding appliances and how to make orthodontic ring, extraoral traction, early cross-bite treatment and interceptive slicing in crowding.

Part 3:

Biomechanics and reactions in bone and teeth due to moving teeth in Orthodontics. How to make Orthodontic appliances will be introduced e.g., brackets, arch wire and how to fix them, remove fixed appliances and how to make retention appliances and fix them. The student learns to bend an ideal orthodontic arch wire and retention wire. Oral hygiene and first aid in Orthodontics. 3D-imaging in Orthodontics and technical steps in making the retention plate (demo).

**Mode of delivery:**

Lectures, seminars, hand-on course, demonstrations

**Learning activities and teaching methods:**

Part 1 (3.6 ECTS credits): lectures 23 h / demo, video, practicals independent/in pairs 24 h / self-learning 14 h / assessment (multiple choice/essay) 2 h

Part 2 (1.9 ECTS credits): lectures 16 h / demo, video, independent practicals 12 h / assessment (assey) 2 h

Part 3 (1.2 ECTS credits): lectures 6 h / demo, video, practicals independent/in pairs 14.5 h

**Target group:**

3rd year dental students

**Prerequisites and co-requisites:**

All DC1-DC4 studies, all obligatory studies

**Recommended optional programme components:**

Oral Development and Orthodontics

**Recommended or required reading:**

Part 1: Orthodontic examination carbon copy, basic mechanics in Orthodontics I and II, cephalometrics I and II, lecture hand-outs, photography in patient documentation (video) (all in Finnish). L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 1-3, 5-7

Part 2: lecture hand-outs, videos how to fix orthodontic ring, extraoral traction (all in Finnish).

L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 8-14, 19.

Pediatric Dentistry. A clinical approach. 2<sup>nd</sup> ed. by G. Koch, S. Poulsen, 2009, chapter 16 (Occlusal development, preventive, and interceptive orthodontics)

**Part 3:** lecture hand-outs, videos how to make fixed and retention appliances

L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 15-18, 23

Extra reading: Richardson A: Interceptiv Orthodontics, 4th edition, Suffolk, UK

**Assessment methods and criteria:**

Part 1: Mandatory attending in lectures, hand-on course, group works and passing of multiple choice/essay examination

Part 2: Mandatory attending in lectures, hand-on course, group works and passing of essay examination

**Part 3:** Mandatory attending in lectures, hand-on course, group works and active participation in demos

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, part 1 is term of admission to start work in Orthodontics (orthodontic documentation, treatment plan).

Parts 2 and 3 have to be passed before taking care of other orthodontic patients and participation in orthodontic clinic.

The course is included in the final examination of oral development and orthodontics.

**091573A: Basic Orthodontic Skills Part 1, 3,6 op**

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

3,6 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. 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 is able to consider the function in orthodontic treatment need evaluation. 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:**

Orthodontic equipment and materials will be introduced. Practical exercises in pairs and teaching videos will instruct the basics of patient care in Orthodontics.

**Part 1:**

The basic concepts in orthodontics and documentation for the orthodontic treatment planning; 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. 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.

**Part 2:**

Treatment possibilities of all kind of occlusal problems especially in the mixed dentition. The mechanics of expanding appliances and how to make orthodontic ring, extraoral traction, early cross-bite treatment and interceptive slicing in crowding.

**Part 3:**

Biomechanics and reactions in bone and teeth due to moving teeth in Orthodontics. How to make Orthodontic appliances will be introduced e.g., brackets, arch wire and how to fix them, remove fixed appliances and how to make retention appliances and fix them. The student learns to bend an ideal orthodontic arch wire and retention wire. Oral hygiene and first aid in Orthodontics. 3D-imaging in Orthodontics and technical steps in making the retention plate (demo).

**Mode of delivery:**

Lectures, seminars, hand-on course, demonstrations

**Learning activities and teaching methods:**

**Part 1** (3.6 ECTS credits): lectures 23 h / demo, video, practicals independent/in pairs 24 h / self-learning 14 h / assessment (multiple choice/essay) 2 h

**Part 2** (1.9 ECTS credits): lectures 16 h / demo, video, independent practicals 12 h / assessment (assey) 2 h

**Part 3** (1.2 ECTS credits): lectures 6 h / demo, video, practicals independent/in pairs 14.5 h

**Target group:**

3rd year dental students

**Prerequisites and co-requisites:**

All DC1-DC4 studies, all obligatory studies

**Recommended optional programme components:**

Oral Development and Orthodontics

**Recommended or required reading:**

**Part 1:** Orthodontic examination carbon copy, basic mechanics in Orthodontics I and II, cephalometrics I and II, lecture hand-outs, photography in patient documentation (video) (all in Finnish). L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 1-3, 5-7

**Part 2:** lecture hand-outs, videos how to fix orthodontic ring, extraoral traction (all in Finnish).

L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 8-14, 19.

Pediatric Dentistry. A clinical approach. 2<sup>nd</sup> ed. by G. Koch, S. Poulsen, 2009, chapter 16 (Occlusal development, preventive, and interceptive orthodontics)



Part 3: lecture hand-outs, videos how to make fixed and retention appliances  
L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 15-18, 23

Extra reading: Richardson A: Interceptive Orthodontics, 4th edition, Suffolk, UK

**Assessment methods and criteria:**

**Part 1:** Mandatory attending in lectures, hand-on course, group works and passing of multiple choice/essay examination

Part 2: Mandatory attending in lectures, hand-on course, group works and passing of essay examination

Part 3: Mandatory attending in lectures, hand-on course, group works and active participation in demos

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, part 1 is term of admission to start work in Orthodontics (orthodontic documentation, treatment plan).

Parts 2 and 3 have to be passed before taking care of other orthodontic patients and participation in orthodontic clinic.

The course is included in the final examination of oral development and orthodontics.

## 091574A: Basic Orthodontic Skills Part 2, 1,9 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1,9 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. 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 is able to consider the function in orthodontic treatment need evaluation. 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:**

Orthodontic equipment and materials will be introduced. Practical exercises in pairs and teaching videos will instruct the basics of patient care in Orthodontics.

Part 1:

The basic concepts in orthodontics and documentation for the orthodontic treatment planning; 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. 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.

**Part 2:**

Treatment possibilities of all kind of occlusal problems especially in the mixed dentition. The mechanics of expanding appliances and how to make orthodontic ring, extraoral traction, early cross-bite treatment and interceptive slicing in crowding.

**Part 3:**

Biomechanics and reactions in bone and teeth due to moving teeth in Orthodontics. How to make Orthodontic appliances will be introduced e.g., brackets, arch wire and how to fix them, remove fixed appliances and how to make retention appliances and fix them. The student learns to bend an ideal orthodontic arch wire and retention wire. Oral hygiene and first aid in Orthodontics. 3D-imaging in Orthodontics and technical steps in making the retention plate (demo).

**Mode of delivery:**

Lectures, seminars, hand-on course, demonstrations

**Learning activities and teaching methods:**

Part 1 (3.6 ECTS credits): lectures 23 h / demo, video, practicals independent/in pairs 24 h / self-learning 14 h / assessment (multiple choice/essay) 2 h

**Part 2** (1.9 ECTS credits): lectures 16 h / demo, video, independent practicals 12 h / assessment (essay) 2 h

Part 3 (1.2 ECTS credits): lectures 6 h / demo, video, practicals independent/in pairs 14.5 h

**Target group:**

3rd year dental students

**Prerequisites and co-requisites:**

All DC1-DC4 studies, all obligatory studies

**Recommended optional programme components:**

Oral Development and Orthodontics

**Recommended or required reading:**

Part 1: Orthodontic examination carbon copy, basic mechanics in Orthodontics I and II, cephalometrics I and II, lecture hand-outs, photography in patient documentation (video) (all in Finnish). L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 1-3, 5-7

**Part 2:** lecture hand-outs, videos how to fix orthodontic ring, extraoral traction (all in Finnish).

L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 8-14, 19.

Pediatric Dentistry. A clinical approach. 2<sup>nd</sup> ed. by G. Koch, S. Poulsen, 2009, chapter 16 (Occlusal development, preventive, and interceptive orthodontics)

Part 3: lecture hand-outs, videos how to make fixed and retention appliances

L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford. Chapters 15-18, 23

Extra reading: Richardson A: Interceptive Orthodontics, 4th edition, Suffolk, UK

**Assessment methods and criteria:**

Part 1: Mandatory attending in lectures, hand-on course, group works and passing of multiple choice/essay examination

**Part 2:** Mandatory attending in lectures, hand-on course, group works and passing of essay examination

Part 3: Mandatory attending in lectures, hand-on course, group works and active participation in demos

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, part 1 is term of admission to start work in Orthodontics (orthodontic documentation, treatment plan).

Parts 2 and 3 have to be passed before taking care of other orthodontic patients and participation in orthodontic clinic.

The course is included in the final examination of oral development and orthodontics.

**091551A: Basics in Periodontology and Periodontal Treatment Part 1, 2,5 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Tellervo Tervonen

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

2,5 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:**

lectures, practical exercises, individual studies

**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 Hilikka Pernu

**Working life cooperation:**

-

**Other information:**

-

**091552A: Basics in Periodontology and Periodontal Treatment Part 2, 2,7 op**

Voimassaolo: 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Pernu, Hilikka Elina**Opintokohteen kielet:** Finnish**ECTS Credits:**

2,7 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:**

lectures, practical exercises, individual studies

**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 Hilikka Pernu

**Working life cooperation:**

-

**Other information:**

-

**091511A: Cariology I, 2 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Vuokko Anttonen, Leo Tjäderhane

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

2 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

2nd study year Spring 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

**Learning activities and teaching methods:**

Lectures 20 h representing 40 h of learning

Literature representing 20 h of learning

**Target group:**

2nd 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.

**Recommended or required reading:**

Nanci A (ed.). Ten Cate's Oral Histology: Development, Structure, and Function. Edited by Antonio Nanci. Seventh edition; ss. 141-238. St. Louis, Mosby Elsevier.

Dental Caries. The Disease and its Clinical Management. Edited by Ole Fejerskov and Edwina Kidd. Second Edition. Oxford, Blackwell Munksgaard.

TAI

Vaihtoehtona: Meyer-Lueckel H, Paris S, Ekstrand K. Caries management – Science and Clinical Practice. 2013 Georg Thieme Verlag KG. Stuttgart, Saksa.

Kurssikirjojen saatavuuden voi tarkistaa [tästä linkistä](#).

**Oppikirjat; DC 4** (vaaditaan sisäänpääsykuulustelussa DC5:n alussa)

Ten Cate's Oral Histology. Development, Structure, and Function. 7nd Ed. Antonio Nanci, editor. Ss. 141-238 (98 s.)

Fejerskov O, Kidd E. Dental Caries. The Disease and its Management. 2nd Ed.

- Part I The disease and its diagnosis

o Chapter 1 Defining the disease: an introduction, ss. 4-6 (3 s.)

- Part III Dental caries in a biological context

o Chapter 10 The oral microflora and biofilms on teeth, ss. 164-185 (22 s.)

o Chapter 11 The role of saliva, ss. 190-207 (18 s.)

o Chapter 12 Chemical interactions between the tooth and oral fluids, ss. 217-230 (14 s.) - seuraavat alakappaleet:

"Demineralization and remineralization of the dental hard tissues";

"Dentin caries";

"Fluoride reactions in the oral environment"

- Part IV Non-operative therapy

o Chapter 14 The control of disease progression: non-operative treatment, ss. 252-254 (3 s.)

o Chapter 15 Role of oral hygiene, ss. 258-263 (6 s.)

o Chapter 16 Antimicrobials in caries control, ss. 266-276 (11 s.)

o Chapter 19 The role of dietary control, ss. 330-349 (20 s.)

Vaihtoehtona: Meyer-Lueckel H, Paris S, Ekstrand K. Caries management – Science and Clinical Practice. 2013 Georg Thieme Verlag KG. Stuttgart, Saksa.

- The disease; chapters 1-4, pages 10-60

**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 (091512A).

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 Vuokko Anttonen

**Working life cooperation:**

Yes. Clinical phase practice integrated into the Dental Trainig 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).

**091512A: Cariology II, 3 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Vuokko Anttonen, Leo Tjäderhane

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

8 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

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 40 h of learning

**Target group:**

3rd year dental students. Compulsory to all dental students.

**Prerequisites and co-requisites:**

091511A Cariology I, including the Preliminary examination of Cariology

**Recommended optional programme components:**

No alternative course units.

**Recommended or required reading:**

Nanci A (ed.). Ten Cate's Oral Histology: Development, Structure, and Function. Edited by Antonio Nanci. Seventh edition; ss. 141-238. St. Louis, Mosby Elsevier.

Dental Caries. The Disease and its Clinical Management. Edited by Ole Fejerskov and Edwina Kidd. Second Edition. Oxford, Blackwell Munksgaard.

Vaihtoehtona: Meyer-Lueckel H, Paris S, Ekstrand K. Caries management – Science and Clinical Practice. 2013 Georg Thieme Verlag KG. Stuttgart, Saksa.

Kurssikirjojen saatavuuden voi tarkistaa [tästä linkistä](#).

**Oppikirja; DC 5**

*Fejerskov O, Kidd E. Dental Caries. The Disease and its Management. 2nd Ed.*

- Part I The disease and its diagnosis

o Chapter 2 Clinical appearances of caries lesions, ss.8-17 (10 s.)

o Chapter 3 Pathology of dental caries, ss. 20-47 (28 s.)

o Chapter 4 Visual-tactile caries diagnosis, ss. 50-66 (17 s.)

o Chapter 5 Radiography for caries diagnosis, ss. 70-87 (18 s.)

o Chapter 6 Additional diagnostic measures, ss. 90-99 (10 s.)

- Part II Clinical caries epidemiology

o Chapter 8 The epidemiology of dental caries, ss. 124-141 (18 s.)

o Chapter 9 The impact of diagnostic criteria on estimates of prevalence, extent and severity of dental caries, ss. 148-154 (7 s.) - seuraavat alakappaleet:

"Introduction";

"Diagnostic criteria for dental caries...";

"Caries diagnostics thresholds..."

- Part IV Non-operative therapy

o Chapter 18 Fluorides in caries control, ss. 288-323 (36 s.)

- Part V Operative intervention

o Chapter 20 The role of operative treatment in caries control, ss. 356-364 (9 s.)

o Chapter 21 Caries removal and the pulpo-dentinal complex, ss. 368-382 (16 s.)

o Chapter 22 Restoring the tooth: 'the seal is the deal', ss. 386-422 (37 s.)

o Chapter 23 The atraumatic restorative treatment approach, ss. 428-440 (13 s.)

TAI

Meyer-Lueckel H, Paris S, Ekstrand K. Caries management – Science and Clinical Practice. 2013

- Diagnostics and epidemiology; chapters 5- 9, pages 76-144 (68)
- Noninvasive therapy; chapters 10-13, pages 155-204 (49)
- Adhesion; chapter14, pages 216-221 (5)
- (Microinvasive therapy; chapter 15-17, pages 231-255; these issues will be gone through thoroughly in paediatric dentistry)
- Invasive therapy; chapters 18-19; pages 264-282 (18)
- Treatment decision; chapter 20, pages 293-299 (6)



Oheislukemisto:

Broome J., Ferracane J, Hilton T. Summitt's fundamentals of operative dentistry: a contemporary approach. 2013  
4. Painos, International Quintessence publishing group, Hannover Park, USA <http://web.a.ebscohost.com/ehost/detail/detail?sid=2175c7bc-e29f-4b11-87b3-8187aacece92%40sessionmgr4002&vid=0&hid=4109&bdata=JnNpdGU9ZWlhvc3QtbGl2ZQ%3d%3d#AN=784581&db=nlebk>

**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 Vuokko Anttonen

**Working life cooperation:**

Yes. Clinical phase practice integrated into the Dental Trainig 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).

## 091515S: Cariology III, 1,6 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Leo Tjäderhane

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1,6 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

4th year, Spring 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:**

4th 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:**

Luentomateriaali ja 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.)

TAI vaihtoehtoisesti

Meyer-Lueckel H, Paris S, Ekstrand K. Caries management – Science and Clinical Practice. 2013 Georg Thieme Verlag KG. Stuttgart, Saksa.

- Diagnostics, treatment decision and documentation AND Minimal interventional treatment of caries in the permanent dentition: clinical cases; Chapters 24-25, pages 333-371.

Oheislukemistoa:

Sreebny L, Vissink A. Dry mouth, the malevolent symptom a clinical guide. 2010, Wiley-Blackwell, USA  
<https://www.dawsonera.com/abstract/9780813820972>

Lussi A, Ganss C. Erosive tooth wear - from diagnosis to therapy. 2014 Monographs in oral science vol. 25. Karger publishers, Saksa.

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 Vuokko Anttonen

**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).

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

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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 (Kandidaattikustannus 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

**090603A: Clinical Training, 34 - 40 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Practical training

**Vastuuyksikkö:** Dentistry

**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 arvioinnin kriteerit](#) (kliininen lukukausikohtainen arviointi, kliininen tilannekohtainen arviointi, **kliiniset oppimistavoitteet oppialoitain**).

**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.

Look at "Contents"; clinical assessment

**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 arvioinnin kriteerit](#) (kliininen lukukausikohtainen arviointi, kliininen tilannekohtainen arviointi, **kliiniset oppimistavoitteet oppialoitain**).

**Other information:**

-

## 090603A-10: Clinical Training, DC 10, 4 - 6 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Practical training

**Vastuuyksikkö:** Dentistry

**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 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-05: Clinical Training, DC 5, 1 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Practical training

**Vastuuyksikkö:** Dentistry

**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:**

-

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

**Opiskelumuoto:** Intermediate Studies

**Laji:** Practical training

**Vastuuyksikkö:** Dentistry

**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**Vastuuyksikkö:** Dentistry**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

**Vastuuyksikkö:** Dentistry

**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

**Vastuuyksikkö:** Dentistry

**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**Vastuuyksikkö:** Dentistry**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:**

-

**091534A: Complete Dentures, 3,4 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Hujanen, Erkki Samuli

**Opintokohteen kielet:** Finnish

**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



Molin Thorén Margareta, Gunne Johan (eds.) Textbook of removable prosthodontics - the Scandinavian approach. Munksgaard Danmark 2012, pages 19-168, 225-236  
 RM Basker and JC Davenport: Prosthetic Treatment of the Edentulous Patient. Blackwell Munksgaard, 2002  
 Fourth Edition

**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:**

-

## 091584S: Controlling Oral Diseases among Populations; Evidence-based Dentistry, 1 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Jorma Virtanen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1 ECTS credit

**Language of instruction:**

Finnish

**Timing:**

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

## 091585S: Current Topics in Community Dentistry, 3 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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

## 091533A: Dental Materials, 1,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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,

O'Brien WJ. Dental materials and their selection. 4<sup>th</sup> ed. Quintessence Publishing Co 2008. ss 1-24**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**Vastuuyksikkö:** Dentistry**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:**

-

**091523A: Dental and Maxillofacial Injuries - diagnostics and treatment, 2,9 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

Andreasen Jens O. et al. Traumatic dental injuries. A manual. Munksgaard, latest edition

**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.

**Person responsible:**

Professor Kyösti Oikarinen

**Working life cooperation:**

work placement is performed as an integrated part of clinical teaching.

**Other information:**

-

## **091572S: Dental and orofacial development, 2,3 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

2,3 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

4th study year (Fall semester)

**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.

**Contents:**

Normal and abnormal development in craniofacial region. Normal dental and occlusal development.

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.

The developmental history in dental anthropology and genetics are dealt with as well as dental morphology in different species and human populations. In addition, dental features of some groups of individuals with developmental abnormalities are discussed.

**Mode of delivery:**

Lectures 27 hours, group learning 2 hours

**Learning activities and teaching methods:**

Lectures 27 hours, group learning 2 hours

**Target group:**

4th year Dental students

**Prerequisites and co-requisites:**

**091573A Basic Skills in Orthodontics**

**Recommended optional programme components:**

Oral Development and Orthodontics

**Recommended or required reading:**

Lecture hand-outs

L. Mitchell: An Introduction to Orthodontics, 3rd Edition, Oxford

A. Nanci: Ten Cate's Oral Histology. Development, Structure, and Function. 2008 chapters 3,5,6,10,13

Additional: H. Sariola: Solusta yksilöksi. Kehitysbiologia. Duodecim, Jyväskylä 2003, Aula, Kääriäinen, Leisti: Perinnöllisyys-lääketiede. 2. ed. Duodecim, Jyväskylä 2002.

**Assessment methods and criteria:**

Passing of essay examination

The course is included in the final examination of oral development and 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:**

Professor Pertti Pirttiniemi

**Working life cooperation:**

No

**Other information:**

The course is included in the final examination.

**091535A: Denture repair, 0,5 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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

**Vastuuyksikkö:** Dentistry

**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:**

-

## 091591A: Diseases of Oral Mucosa, 3,1 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** 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:

Regezi JA, Sciubba J, Jordan RCK. Textbook: *Oral & Maxillofacial Pathology: Clinical-Pathologic Correlations. 5th edition.* [WB Saunders Co.](#), Philadelphia, PA, 2008

**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.

**091514A: Endodontics I, 1,6 - 2 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Kristiina Oikarinen-Juusola

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

2 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

3rd study year, 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

**Target group:**

3rd year dental students. Compulsory to all dental students.

**Prerequisites and co-requisites:**

All previous courses:

Preliminary exam of Cariology

091511A Cariology I

091512A Cariology II

**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:**

Professor Vuokko Anttonen

**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).

## 091514S: Endodontics II, 2 - 2,1 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Kristiina Oikarinen-Juusola, Leo Tjäderhane

**Opintokohteen kielet:** Finnish

### ECTS Credits:

2 ECTS credits

### Language of instruction:

Finnish

### Timing:

5th study year, Advanced studies

### Learning outcomes:

To understand the complex endodontic diagnostics and treatment; to master the etiology, 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:

5th year dental students. Compulsory to all dental students.

### Recommended optional programme components:

No alternative course units. Basic Practical Skills Strand

### Recommended or required reading:

Luentomateriaali;

Oppikirja: Haapasalo M, Kotiranta A, Sirén E, Haapasalo H, Endal U. Käytännön juurihoito. 2. Painos, 2009. Savion Kirjapaino, 2009.

- Resorptiot, ss. 24-37 (14 s.)

- Erotusdiagnostiikka, ss. 58-67 (10 s.)

- Hoitoresistentti apikaalinen parodontiitti, ss. 172-194 (23 s.)

Kurssikirjojen saatavuuden voi tarkistaa [tästä linkistä](#) .

### 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 Vuokko Anttonen

### 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).

## 091529S: Facial Pain Conditions, 1 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1 ECTS credit

**Language of instruction:**

Finnish

**Timing:**

4th/5th year

**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:**

Leena Ylikontiola, Ritva Kuoppala

**Working life cooperation:**

No

**Other information:**

-

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

**Voimassaolo:** 19.11.2004 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Dentistry

**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

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

Adreasen JO ym. Traumatic dental injuries - a manual. Munksgaard, latest edition

**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:**

-

## 091531A: Fixed Prosthodontics, 4,7 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Ritva Näpänkangas

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

4,7 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

3rd - 4th study year, Subject studies

**Learning outcomes:**

After the course student has skills to examine the patient for prosthetic treatment with inlays/onlays, crowns and fixed partial dentures and knows the indications and contraindications for fixed prostheses. Student can make the 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,

Shillingburg HT et al. Fundamentals of fixed prosthodontics. 4<sup>th</sup> ed. Quintessence Publishing Co 2012.**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

Vastuuyksikkö: Dentistry

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:**

No

**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:**

-

**091557A: Geriatric Dentistry, 1,3 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Intermediate Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**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)
- Oral mucosal diseases of the elderly people (Department of Diagnostics and Oral Medicine)

**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 - 5th year dental students

**Prerequisites and co-requisites:**

It is recommended to complete course units 091551A, 091553S, 091554A, 091555S and 091556S.

**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.

Carranza's Clinical Periodontology, 12th edition, pages 40-44, 420-436, 447-450.

**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 reseacher Anna-Maija Syrjälä

**Working life cooperation:**

Yes, training in sheltered home and nursing home

**Other information:**

-

## 091501Y: Growing identity as a dentist Part 1, 1 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** General Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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.

**Grading:**

The course unit utilizes verbal grading scale pass/fail.

**Person responsible:**

Nominated teachers in dentistry/tutorial

**Working life cooperation:**

No

**Other information:**

Look at 040014Y

**091502Y: Growing identity as a dentist Part 2, 0,5 op**

Voimassaolo: 01.08.2015 -

Opiskelumuoto: General Studies

Laji: Course

Vastuuyksikkö: Dentistry

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.

**Grading:**

The course unit utilizes verbal grading scale pass/fail.

**Person responsible:**

Nominated teachers in dentistry/tutorial

**Working life cooperation:**

No

**Other information:**

Look at 040014Y

### 091528S: Implant Dentistry, 0,4 - 0,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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**Vastuuyksikkö:** Dentistry**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Pernu, Hilikka Elina**Opintokohteen kielet:** Finnish**Assessment methods and criteria:**Read more about [assessment criteria](#) at the University of Oulu webpage.**091571A: Introduction to Development of Occlusion and Orthodontics, 0,5 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Intermediate Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**Arvostelu:** 1 - 5, pass, fail**Opintokohteen kielet:** Finnish**ECTS Credits:**

0,5 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

1st study year. 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 effecting the development of the occlusion.

**Contents:**

Introduction to Orthodontics

**Mode of delivery:**

Face-to-face teaching

**Learning activities and teaching methods:**

Lectures, group work, discussion. 8 hours

**Target group:**

1st year dental students

**Prerequisites and co-requisites:**

No required studies beforehand.

**Recommended optional programme components:**

-

**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.

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:**

-

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

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** 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

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

**Opiskelumuoto:** General Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

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

**Opettajat:** Paadar, Matti Reino Isak

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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

**Opiskelumuoto:** General Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

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

**Opettajat:** Pentti Nieminen

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

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

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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**Vastuuyksikkö:** Dentistry**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:**

-

## 091575S: ORTHO-Seminars 1-5, 1,4 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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.

Seminars 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 Basic Orthodontic Skills parts 1-3 before entering yourself for the course.

**Recommended optional programme components:**

It is recommended that the course 091572S 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.

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. 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

**Vastuuyksikkö:** Dentistry

**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/](http://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/](http://www.valvira.fi/en/) )

## 091554A: Occlusal Rehabilitation in Periodontal Therapy, 1 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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 Hilikka Pernu

**Other information:**

-

## 091523S: Odontogenic Infections, 0,6 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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 dreneerata hammasperäisen abscessin, ymmärtää osteomyeliitin diagnostiikkaan ja hoitoon liittyvät erityispiirteet nimenomaan suu- ja leukakirurgisen hoidon näkökulmasta.

**Contents:**

Odontogeeniset infektiot, aktinomykoosi ja osteomyeliitti, 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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

**Assessment methods and criteria:**

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

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 Leena Ylikontiola

**Working life cooperation:**

Work placement is part of clinical training and clinical teaching

**Other information:**

-

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

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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

**Vastuuyksikkö:** Dentistry

**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.

Oral Pathology contains the courses 090302A-01 Oral pathology, 090302A-02 Diseases of oral mucosa, 090302A-04 Oral pathology, microscopy course and clinical work.

**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:**

-

## 091522A: Oral Surgery, 3,9 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry



**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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

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:**

-

## 091526S: Oral Surgery and General Health, 3,4 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

**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

**091524S: Oral and Maxillofacial Rehabilitation, 0,8 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Advanced Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**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:**

090502A Oral and Maxillofacial Surgery

**Recommended or required reading:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

**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**Vastuuyksikkö:** Dentistry**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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.

**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

**Vastuuyksikkö:** Dentistry

**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  
 Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. 5th ed. Mosby 2008.  
 Andreasen Jens O. Essentials of traumatic injuries to the teeth: a step-by-step treatment guide. 2. ed./uusin painos.

### **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:**

-

**091592A: Oral pathology, 4 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Salo, Tuula Anneli

**Opintokohteen kielet:** Finnish

**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:

Regezi JA, Sciubba J, Jordan RCK. Textbook: *Oral & Maxillofacial Pathology: Clinical-Pathologic Correlations. 5th edition.* [WB Saunders Co.](#), Philadelphia, PA, 2008

**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:**

-

**091592S: Oral pathology, 2,6 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Advanced Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Salo, Tuula Anneli**Opintokohteen kielet:** Finnish**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:

Regezi JA, Sciubba J, Jordan RCK. Textbook: *Oral & Maxillofacial Pathology: Clinical-Pathologic Correlations. 5th edition.* [WB Saunders Co.](#), Philadelphia, PA, 2008**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:**

-

**091581A: Organization and Providers of Oral Health Care Services, 0,5 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Intermediate Studies**Laji:** Course**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Niskanen, Leena Marita

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

0,5 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

**Vastuuyksikkö:** Dentistry

**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

**Vastuuyksikkö:** Dentistry

**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

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

**Grading:**

Pass/fail

**Other information:**

-



## 091574S: Pathology in occlusal development and adult orthodontics, 0,4 - 0,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Heikkinen, Tuomo Pekka Tapani, Pirttiniemi, Pertti Mikael

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

090601A-04 Adult Orthodontics 0.4 op

**ECTS Credits:**

0,5 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

5th year, Autumn 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:**

Pathology in occlusal development and basic items of adult orthodontics

**Mode of delivery:**

Lectures 5 hours

**Learning activities and teaching methods:**

Lectures 5 hours

**Target group:**

All 5th year dental students

**Prerequisites and co-requisites:**

Earlier courses in orthodontics and terminology, before final exam in Orthodontics

**Recommended optional programme components:**

Oral rehabilitation

Oral Development and Orthodontics

**Recommended or required reading:**

Lecture hand-outs

L. Mitchell: An Introduction to Orthodontics, 2nd Edition, Oxford

**Assessment methods and criteria:**

Lectures

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

**Grading:**

Pass/failed

**Person responsible:**

Senior Lecturer Tuomo Heikkinen

**Working life cooperation:**

No

**Other information:**

-

## 090603Y: Patient seminar, 0 op

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.

### **090603Y-01: Patient seminars, 0 op**

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Dentistry

**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](#) at the University of Oulu webpage.

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

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**Language of instruction:**

Finnish

**Assessment methods and criteria:**

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

**Other information:**

Obligatory for courses started 2007, 2008, 2009 and 2010

### **091525A: Pediatric oral and maxillofacial surgery, 0,5 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. Mosby, latest edition

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:**

-

## 091516A: Pedodontics, 2,5 - 2,7 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Vuokko Anttonen

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

2,7 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:**

Child as a dental patient, interaction with children and their parents, dental fear and dealing with it. Early caries development and risk factors at personal level, controlling dental caries of children. Main principles in noninvasive

and invasive dental care of children, endodontic therapy in primary dentition and in immature permanent teeth. Developmental disorders of the dental hard tissues and their treatment. Dental care medically compromised and handicapped children. In simulation lab restoration, pulpotomy and adjusting a stainless steel-crown.

**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:**

Koch G & Poulsen S (eds.): Pediatric dentistry- A clinical approach. 2<sup>nd</sup> edition, May 2009, Wiley-Blackwell. ISBN: 978-1-4051-6100-8

Welbury, Duggal, Hosey. Paediatric Dentistry. Oxford University Press 2012

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:**

Professor Vuokko Anttonen

**Working life cooperation:**

Clinical phase practice integrated into work in the Municipal Health Centre of the City of Oulu Dental Teaching Unit; workin according to the schedule in the peadiatric 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.

## **091558S: Periodontal Diseases and General Health, 4,1 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Tellervo Tervonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

4,1 ECTS credits

**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

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

**Other information:**

-

## 091555S: Periodontal Surgery, 2,2 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Tellervo Tervonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

2,2 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

## 091556S: Periodontal diseases in children, 0,3 - 0,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

0,5 ECTS credits

**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:**

Available lecture books can be checked [tästä linkistä](#)

**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

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

**Voimassaolo:** 01.09.2002 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Oikarinen, Kyösti Sakari

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

0 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

3rd study year, Subject studies

**Contents:**

Entrance exam to get into the course 090502A-01 Principles of Oral and Maxillofacial Surgery

**Mode of delivery:**

Entrance 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:**

-

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

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

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

**Opettajat:** Miia Turpeinen

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

**090501A: Preventive Dentistry and Cariology, 14,9 - 17,9 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Vuokko Anttonen

**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.

## 091561A: Principles of Dental Radiology, 3,8 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Annina Sipola

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

3,8 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

3rd study year

**Learning outcomes:**

Tavoitteena on antaa opiskelijalle perusvalmiudet hammaslääkärin työn vaatimissa röntgentutkimuksissa ja -diagnostiikassa. Erityistä huomiota kiinnitetään säteilyn oikeaan ja turvalliseen käyttöön.

**Contents:**



Perehtyminen hampaiston kuvaamisen perusteisiin, teknisiin laitteisiin ja laitteiden toimintaperiaatteisiin. Yksittäisen hampaan, hampaiston osan ja koko hampaiston kuvaaminen. Leukanivelen ja poskionteloiden kuvaaminen ja diagnostiikka. Röntgensäteilyn käyttöön liittyvä lainsäädäntö ja lainsäädännön vaatimat toimenpiteet. Normaali anatomia, anomaliat, kariksen, parodontiumin ja tavallisimpien periapikaalisten löydösten röntgendiagnostiikka.

**Learning activities and teaching methods:**

lectures

**Target group:**

3rd year dental students

**Prerequisites and co-requisites:**

-

**Recommended or required reading:**

(White, Pharoah; Oral Radiology: Principles and Interpretation)

**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:**

Annina Sipola

**Working life cooperation:**

-

## 091521A: Principles of Oral and Maxillofacial Surgery, 4,7 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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:**

Contemporary Oral and Maxillofacial Surgery/Editors: James R. Hupp, Edward Ellis, Myron R. Tucker. Mosby, latest edition

**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 Kyösti Oikarinen

**Working life cooperation:**

Includes supervised practical clinical training

**Other information:**

Accepted course is a prerequisite for clinical studies in Oral and Maxillofacial Surgery

## 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 / 40 hours of work

**Language of instruction:**

Finnish

**Timing:**

DC 5, Intermediate Studies

**Learning outcomes:**

Aim of this course is to introduce students to the surgical thinking and provide basic theoretical and practical information of major surgical diseases and treatment principles. After the course the student should understand the basics of infection control, the importance of hand hygiene in surgical units. Students will also learn the principles of surgical examination and diagnosis of the patient and the wound care.

**Contents:**

Lectures: Introductory session, lectures on surgical examination, writing the surgical medical history, surgical aseptic and hand hygiene, healthcare-associated infections of surgical patients, introduction to thoracic and vascular surgery, principles of wound care, principles of conservative and operative treatments of bone fractures, association between osteoporosis and low energy fractures.

**Mode of delivery:**

Lectures

**Learning activities and teaching methods:**

Lectures

**Target group:**

3rd year dental students

**Prerequisites and co-requisites:**

- Medical Biochemistry and Molecular Biology
- Pharmacology and toxicology
- Physiology
- Anatomy and medical cell and developmental biology
- Microbiology

**Recommended optional programme components:**

No

**Recommended or required reading:**

Lecture materials and parts of the textbook: Roberts, Alhava, Höckerstedt, Kivilaakso. 2010. Kirurgia. Kustannus Oy Duodecim. Helsinki. 2. uudistettu (tai uudempi) painos.

**Assessment methods and criteria:**

14 hours of lectures, 26 hours self-study work and a web exam with grading pass / fail.

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

**Grading:**

approved/disapproved

**Person responsible:**

Professor Tatu Juvonen

**Working life cooperation:**

No

**Other information:**

Successful completion of the course is a prerequisite for the initiation of clinical studies in dentistry.

## 090503A: Prosthetic Dentistry, 12,3 - 16 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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

**091536S: Prosthetic Management for Advanced Cases, 0,8 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Advanced Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**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 attachments

**Mode of delivery:**

face-to-face teaching

**Learning activities and teaching methods:**

lectures 10 h

**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**Vastuuyksikkö:** Dentistry**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:**

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:**

Professor Matti Isohanni

**Working life cooperation:**

no

**Other information:**

-

**091506A: Radiation Safety, Part 1, 1,5 op****Voimassaolo:** 01.08.2015 -**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Dentistry**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.

**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.**

## 091506S: Radiation Safety, Part 2, 0,5 - 0,6 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Annina Sipola

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

0,6 ECTS credits

**Language of instruction:**

Finnish

**Timing:**

4th 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, mandatory face-to-face teaching

**Learning activities and teaching methods:**

lectures, mandatory face-to-face teaching

**Target group:**

4th 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.

**Person responsible:**

Annina Sipola

**Working life cooperation:**

No

**Other information:**

The course is statutory radiation protection education in dentist training.

## 091532A: Removable Partial Dentures, 2,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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

**Vastuuyksikkö:** Dentistry

**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

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.

**091563S: Roentgenographic Picture of Osteomyelitis. Roentgenographic Features of the Benign and Malignant Tumors, 1 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Annina Sipola

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1 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

**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.

**Person responsible:**

Annina Sipola

**091562S: Roentgenographic Studies for Surgical Purposes, 1,4 op**



**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Annina Sipola

**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.

**Person responsible:**

Annina Sipola

**Working life cooperation:**

-

## **091553S: Special Topics in Nonsurgical Periodontal Therapy, 1,5 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Pernu, Hilkkä 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

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Raustia, Aune Maritta

**Opintokohteen kielet:** Finnish

**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

## 091541A: Stomatognathic Physiology I (orthofunction), 2,8 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Raustia, Aune Maritta

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

090504A-01 Stomatognathic Physiology I (orthofunction) 2.8 op

**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:**

-

## 091542A: Stomatognathic Physiology II (pathofunction), 4,2 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Raustia, Aune Maritta

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

090504A-02 Stomatognathic Physiology II (pathofunction) 3.1 op

**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:**

-

## 091543S: Stomatognathic Physiology III, 0,5 op

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opettajat:** Raustia, Aune Maritta

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**

090504A-03 Stomatognathic Physiology III 0.5 op

**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

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

4 ECTS credits

**Learning outcomes:**

See 090602S Thesis

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:**

See 090602S Thesis

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

More information <http://www.oulu.fi/hamm/research/index.html>

The agreement form "Tutkielman ohjaussopimus" is found in [www.medicine.oulu.fi/peruskoulutus](http://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: Professori 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 Oikarinen (at) oulu.fi

**090602S: Thesis, 20 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

**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](http://www.medicine oulu.fi/peruskoulutus).

More information <http://www oulu.fi/hamm/research/index.html>

**Department of Diagnostics and Oral Medicine (incl. Radiology)**

Person responsible: Professor Tuula Salo (at) oulu.fi

**Department of Prosthetic Dentistry**

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**Department of Community Dentistry**

Person responsible: Associate professor Jorma Virtanen (at) oulu.fi

**Department of Oral and Maxillofacial Surgery**

Person responsible: Professor Kyösti Oikarinen (at) oulu.fi

**090201A: Tooth Morphology, 1,6 - 2 op**

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Dentistry

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

1,6 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.)

Recommended: Berkovitz BKB, Holland GR, Moxham BJ. A color atlas & textbook of oral anatomy. Ss. 10-24.

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:**

Marja-Liisa Laitala

**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.