Course syllabus for

Oral Radiology 3, 3 credits

Oral radiologi 3, 3 hp

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

Please note that the course syllabus is available in the following versions:
Autumn2011 , Autumn2014 , Autumn2015 , Autumn2017 , Autumn2018 , Autumn2021

Course code	2TL035
Course name	Oral Radiology 3
Credits	3 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Odontology
Level	AV - Second cycle
Grading scale	Pass, Fail
Department	Department of Dental Medicine
Decided by	Programnämnd 10
Decision date	2011-07-06
Revised by	Board of Undergraduate Education, Department of Dental Medicine
Last revision	2015-04-28
Course syllabus valid from	Autumn 2015

Specific entry requirements

For admission to the course, passed results in the course Clinical dentistry 5 are required.

Students who fail a clinical placement (or equivalent) as a result of demonstrating such a serious lack of knowledge, skills or attitude that patient safety or the patients' confidence in medical care is at risk, will only be qualified for a new clinical placement once the individual action plan has been carried out.

Objectives

Knowledge and understanding
The student should:
-be able to, based on a patient's oral and general health status, make an overall assessment of the patient's need for radiography of the teeth and jaw.
-be able to, from scientific view, as well as best practice, assess the choice of an appropriate X-ray method in order to answer clinical radiological issues.
-be able to demonstrate an in depth knowledge of and ability to analyse the biological effects of X-ray radiation and evaluate and apply different methods to optimise X-ray dosage in the patient in intraoral

and panoramic X-ray imaging.
-be able to evaluate, apply different methods concerning radiation protection and to reduce X-ray dosage to patient, staff and attendants in intraoral and panoramic X-ray imaging.
be able to assess and evaluate image quality and reflect on its importance for diagnostic radiology.
be able to apply current regulations from Strålsäkerhetsmyndigheten (The Swedish Radiation Safety Authority) at a radiological examination of a patient, with responsibility for quality management.
- be able to demonstrate knowledge and an understanding of products and materials that are used in radiology in dental care and their impact on the environment.
- be familiar with the development of new imaging methods and their applications. be familiar with the indications for computed tomography (cone beam computed tomography-CBCT) technology and have knowledge of the bases of CBCT technology and what is seen in a three-dimensional image of teeth and jaws.

Skill and ability
The student should:
-be able to independently review and analyse normal anatomic structures and pathological changes in teeth, jaws and surrounding tissues in an intraoral X-ray image and panoramic x-rays, and in a written statement give relevant tentative diagnoses from the radiographic findings.
-be able to assess when a referral needs to be sent to a radiology specialist for an extended examination.
-perform X-ray imaging of teeth and alveolar process with digital intraoral technique and be able to /process the images in a relevant way/ perform relevant imaging/

Judgement and approach
The student should:
-demonstrate clinical maturity with a professional attitude towards patients and colleagues both orally and in writing.
-demonstrate the ability to identify his/her need for additional knowledge and continuous education and skill development.

Content

The course is divided into 2 modules:

Radiographic panorama technology, 1.5 hp In this course module radiological panorama technique and advanced education in the properties and biological impact of X-ray radiation is given, as well as radiation protection and radiation protection regulations particularly applicable for panorama technology. Pre-clinical and clinical exercises are carried out for panorama X-ray examinations and exercises in interpretation of normal X-ray anatomy and pathological changes regarding teeth, jaws and facial skeleton in the panoramic X-ray image. **Advanced clinical diagnostic radiology, 1.5 hp** Lectures and seminars are given including evaluation of diagnostic methods, image quality and interpretation of normal anatomy and pathological changes in intraoral and panoramic X-ray images. In connection with each clinical session, discussions concerning selection criteria and indications are carried out before intraoral and panorama X-ray imaging in the patient. Clinical duty is carried out with intraoral and panorama X-ray examination in patients, with interpretation of normal anatomy and pathological changes in X-ray images from complete radiographic examinations in a written statement.

Teaching methods

Lectures, group assignments with presentations, seminars, pre-clinical and clinical exercises and clinical patient care.

Compulsory attendence at group assignments with presentations, seminars and clinical training.

The course coordinator decides whether, and if so how, absence from compulsory course elements can be made up. Study results cannot be reported until the student has participated in compulsory course

elements or compensated for any absence in accordance with instructions from the course coordinator. Absence from a compulsory course element could mean that the student can not retake the element until the next time the course is offered.

Examination

- Written examination
- Clinical exercises with intraoral imaging

Parallel with Oral Radiology 3 it is possible to carry out panoramic examinations of patients according to a specific protocol. To obtain a certificate for a licence to possess and use the panoramic x-ray equipment with rated voltages that can exceed 75 kilovolts, the student must pass the course with panoramic screening examination and have completed approved panoramic imaging with image interpretation and diagnosis of at least six patients. The implementation of panorama imaging should be completed before the final degree exam (DDS) in semester 10.

Limited number of examinations or practical training sessions
If the student does not pass the examination, the student gets 2 more attempts. After that, the student is recommended to retake the course and is given 3 more examination opportunities. If the student has not passed after 6 trials, he/she has no more admission to the course. (HF chapter 6, section 11 a).

Each occasion the student participates in the same test counts as an examination. Submission of a blank exam paper is regarded as an examination. In case a student is registered for an examination but does not attend, this is not regarded as an examination.

Interruption of clinical placement
The examiner may, with immediate effect, interrupt a student's clinical placement (or equivalent) if the student demonstrates such serious deficiencies in knowledge, skills or attitude that patient safety or patient confidence in healthcare is at risk. If a clinical placement is interrupted in this way the student is deemed to have failed that element and to have used up one clinical placement opportunity. In such cases, an individual action plan should be set up stating which activities and tests are required before the student is qualified for a new clinical placement on the course.

Transitional provisions

If the course is discontinued or undergoes major changes, examination with the previous literature list and learning outcomes will be offered for no more than one academic year after the implementation of the revision/discontinuation.

Other directives

A course evaluation is carried out according to the guidelines established by the Board of education.

Literature and other teaching aids

Oral radiology : principles and interpretation
White, Stuart C.; Pharoah, Michael J.

7th ed. : St. Louis, Mo. : Mosby/Elsevier, cop. 2014 - xv, 679 p.
ISBN:9780323096331 LIBRIS-ID:15085416
Library search

Oral radiologi
Gröndahl, Hans-Göran; Ekestubbe, Annika; Lilja, Agneta

3. uppl. : Stockholm : Gothia, 2005 - 102 s.

ISBN:91-7205-475-1 LIBRIS-ID:9976139

Library search

Petrén, Ture; Carlsöö, Sven

Anatomi för tandläkarstuderande och tandläkare

[Ny utg.] : Stockholm : Nordiska bokhandelns förlag :b Norstedts akademiska förlag :b [ePan], 2006 - 377, [1] s.
ISBN:91-7297-805-8 LIBRIS-ID:10228789

Library search

Whaites, Eric

Essentials of dental radiography and radiology

4. ed. : Edinburgh : Churchill Livingstone, 2007 - 473 s.
ISBN:0-443-10168-X LIBRIS-ID:10371710

Library search