Course syllabus for

Medical and Odontological Subsidiary Subjects 1, 11 credits

Medicinska och odontologiska stödämnen 1, 11 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:
Autumn2015 , Autumn2018

Course code	1TH025
Course name	Medical and Odontological Subsidiary Subjects 1
Credits	11 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Dental Medicine
Participating institutions	• Department of Neuroscience • Department of Laboratory Medicine
Decided by	Board of Undergraduate Education, Department of Dental Medicine
Decision date	2015-04-28
Course syllabus valid from	Autumn 2015

Specific entry requirements

Ma B, Sh A and Nk B (or Fy A, Ke A and Bi A).

Objectives

The course consists of four modules, 11.0 credits:

Module 1: Dental anatomy/Occlusal development (3.0 credits)
On completion of the course, the student should be able to:
- describe the normal development of the primary and permanent teeth.
- identify teeth and describe the anatomy of the teeth.
- identify and describe the nomenclature and structure of the teeth and have identify and tell the difference between primary and permanent teeth.

Module 2: Oral histology and cell biology (1.5 credits)

On completion of the course, the student should be able to:
- describe the structure of the cell and its components.
- relate the different cell organelles to their functions.
- explain and understand the central importance of cell and molecular biology.
- account for basic knowledge of craniofacial embryology.
- describe odontogenesis and its surrounding tissues.
- characterise in detail all stages of odontogenesis.
- describe the histological development up to the complete tooth.
- describe the histological structure of the oral mucous membrane and be able to relate to its functions.

Module 3: Functional anatomy (3.0 credits)
On completion of the course, the student should be able to:
- state and identify the main anatomic structures in the musculoskeletal system
the circulatory system, the respiratory system, the digestion apparatus, the urogenital organs,
the endocrine organs, the nervous system, the sensory organs and the head with medical terminology (Latin).
- relate the systematic anatomy of the musculoskeletal system, the circulatory system, the respiratory system,
the digestion apparatus, the urogenital organs and the endocrine organs
to the specific function that each area has.
- relate the anatomy of the nervous system and the sensory organs to their functions.
- explain the relationship between the anatomy of the head and the functions of the head in the musculoskeletal system,
the circulatory system, the respiratory system, the digestion apparatus, the endocrine organs,
the nervous system and the sensory organs.

Module 4: General and oral microbiology (3.5 credits)
- describe the structure and classification of microorganisms, and account for their virulence and pathogenesis.
- describe current guidelines for hygiene procedures and disease control within dental care.
- describe the basics of the immune system and its function.

The aim of the course is for the student to acquire basic knowledge about the different stages of odontogenesis, cell and molecular biology, the importance of microorganisms in infections, the structure and function of the immune system and basic knowledge about hygiene and disease transmission. Within the module on functional anatomy, the student is expected to acquire general knowledge of the anatomy of the body and the head and of how the anatomic structures of the body can be connected with different functions. The knowledge within the course will constitute the basis for continued studies and patient treatment.

Content

The course consists of the following four modules that together include 11.0 credits:

Module 1: Dental anatomy/Occlusal development 3.0 credits
Module 2: Oral histology and cell biology 1.5 credits
Module 3: Functional anatomy 3.0 credits
Module 4: General and oral microbiology 3.5 credits

Toothanatomy/Dental Development, 3 hp The content of this module is focused on the normal development of the primary and permanent teeth and treats the anatomy, nomenclature and structure of the teeth. **Oral Histology and Cellbiology, 1.5 hp** This module emphasises the importance of cell and molecular biology and treats the formation of cells and tissues and the structure and function of the oral mucous membrane. This module also treats craniofacial embryology and the development of teeth from a histological perspective. **Functional gross Anatomy, 3 hp** This module includes medical terminology, the anatomy of the musculoskeletal system, the anatomy of the circulatory system, the anatomy of the respiratory system, the anatomy of the digestion apparatus, the anatomy of the urogenital organs, the anatomy of the endocrine organs, the anatomy of the nervous system, the anatomy of the sensory organs

and the anatomy of the head. **General and Oral Microbiology, 3.5 hp** This module treats the structure and classification, normal flora, virology and immunology and immune system of microorganisms, and their function as well as basic knowledge about hygiene and disease transmission.

Teaching methods

Module 1: Dental anatomy/Occlusal development 3.0 credits
The study forms consist of lectures, seminars, compulsory participation in clinical demonstration, pair and group work and self-study.

Module 2: Oral histology and cell biology 1.5 credits
The study forms are constituted by lectures and group work with a virtual histological computer program and self-study with study questions.

Module 3: Functional anatomy 3.0 credits
The study forms are constituted by lectures and group work with model studies and self-study.

Module 4: General and oral microbiology 3.5 credits
The study forms are constituted by lectures, seminars, demonstrations, group work, mandatory laboratory sessions and self-study.

Examination

Module 1: Dental anatomy/Occlusal development 3.0 credits
Individual written examination and compulsory participation in clinical demonstration.

Module 2: Oral histology and cell biology 1.5 credits Individual written examination.

Module 3: Functional anatomy 3.0 credits Individual written examination.

Module 4: General and oral microbiology 3.5 credits Individual written examination and compulsory participation in laboratory sessions.

For all modules compulsory participation in seminars, demonstrations, pair and group work and laboratory sessions applies. The course coordinator decides whether and if so how absence can be made up.

To achieve the pass with distinction grade for the whole course, the pass with distinction grade is required on all parts in the modules Dental anatomy/Occlusal development, Functional anatomy and General and oral microbiology, and at least a pass grade in oral histology and cell biology.

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

Other directives

- A course evaluation will be carried out according to the guidelines established by the Board of Education.
- This course may not be included in a higher education qualification along with a completed course whose
contents completely or partly correspond to this course.

Literature and other teaching aids

Nanci, Antonio

Ten Cate's oral histology : development, structure, and function

Ten Cate, Arnold Richard

8. ed. : St. Louis : Elsevier, cop. 2013 - xiii, 379 s.
ISBN:9780323078467 LIBRIS-ID:13486028
Library search

Erlanson-Albertsson, Charlotte; Gullberg, Urban

Cellbiologi

2., [rev. och uppdaterade] uppl. : Lund : Studentlitteratur, 2007 - 350 s.
ISBN:978-91-44-04738-6 LIBRIS-ID:10532220
Library search

Sand, olav; et al

Människokroppen : Fysiologi och anatomi

Stockholm : Liber, 2007 - 544s
ISBN:9789147084357
Library search

Halsens och huvudets deskriptiva och topografiska anatomi

Albiin, Nils

Lund : Studentlitt., 1982 - 164, [9] s.
ISBN:91-44-17811-5 LIBRIS-ID:7276881
Library search

Melhus, Åsa

Klinisk mikrobiologi för sjuksköterskor

1. uppl. : Stockholm : Norstedt, 2010 - 413 s.
ISBN:978-91-1-302283-3 LIBRIS-ID:11506698
Library search

Chiego, Daniel J.

Essentials of oral histology and embryology : a clinical approach

4. ed. : St. Louis, Mo. : Elsevier Mosby, cop. 2014 - viii, 221 s.
ISBN:9780323082563 (pbk.) LIBRIS-ID:14677200
Library search