Course syllabus for

Cell- and molecular biology including embryology, 7.5 credits

Cell- och molekylärbiologi inkl embryologi, 7.5 hp
This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.
Please note that the course syllabus is available in the following versions:
Autumn2007 , Autumn2013 , Spring2015 , Autumn2016

Course code	2TL006
Course name	Cell- and molecular biology including embryology
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass, Fail
Department	Department of Dental Medicine
Decided by	Styrelsen för utbildning/Programnämnden för tandläkarprogrammet
Decision date	2007-05-14
Course syllabus valid from	Autumn 2007

Specific entry requirements

Standardised admission requirements E.1.

Objectives

After the course, the student should - be able to explain terms and definitions within cell and molecular biology and embryology to such an extent that these can be related to and applied in the future studies - be able to explain and account for the connection between reactions and processes in the organelles of the cell - be able to explain and describe the dynamics in the genetic information flow and the consequences of disturbances in this flow - be able to describe and explain the development of the embryo chronologically, with a focus on the head and the throat, and be able to account for how disorders in the normal embryogenesis may cause developmental disabilities - be able to reflect on and discuss the importance of the cell and molecular biology and embryology for the development in dental and medical research - have theoretical knowledge about and be able to reflect on and discuss cell culture methodology and various DNA techniques, their possibilities and constraints

Content

Part 1: Cell and molecular biology (Cell and molecular biology) 6 HE credits To facilitate the student's learning, lectures on the theoretical contents of the course are given. The student should also participate in the following compulsory seminars: The cell and its organelles, the genetic information flow, DNA technological methods and a compulsory laboratory session: Polymerase Chain Reaction (PCR) the method. Part 2: Embryology (Embryology) 1.5 HE credits The working methods of the course comprise lectures in embryology and carcinogenesis and individual assignment with study questions.

Cell- and molecular biology, 6.0 hp

Grading scale: GU

To facilitate the student's learning, lectures on the theoretical contents of the course are given. The student should also participate in the following compulsory seminars: The cell and its organelles, the genetic information flow, DNA technological methods and a compulsory laboratory session: Histological analysis of healthy versus carious teeth.

Embryology, 1.5 hp

Grading scale: GU

The working methods of the course comprise lectures in embryology and carcinogenesis and individual assignment with study questions

Teaching methods

The working methods of the course are lectures, individual work with seminar assignments and study questions, seminars and a laboratory session.

Examination

The examination is arranged through written examination, separately for each part. To pass the course, passed results of each part of the course are required Attendance is required at compulsory parts of the course, see above. Missed examinations should be compensated by a make-up assignment from the course provider.

Transitional provisions

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

Other directives

Limited number of examinations or practical training sessions If the student's examination has not passed, the student gets 2 more examination opportunities. After that, the student is recommended to retake the course and is given 3 more examination opportunities. If the student has not passed after 6 trials, he/she has no more admission to the course. (HF chapter 6, section 11 a). Course evaluation is carried out according to the guidelines established by the Board of education. The course substitutes TLOA02

Literature and other teaching aids

Essential cell biology

Alberts, Bruce

2. ed. : New York : Garland, 2004 - xxi, 740 s.
ISBN:0-8153-3481-8 (hft.) LIBRIS-ID:9097354
Library search

Mitchell et al

Embryology an illustrated colour text

ISBN:. ISBN:0-443-07398-8
Library search