Course syllabus for

Anatomy and physiology of the eye, 6 credits

Ögats anatomi och fysiologi, 6 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:
Spring2008 , Spring2010 , Spring2011

Course code	1OP005
Course name	Anatomy and physiology of the eye
Credits	6 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Optometry
Level	G1 - First cycle 1
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Clinical Neuroscience
Decided by	Programnämnden för Optikerprogrammet
Decision date	2007-10-17
Revised by	Programnämnd 8
Last revision	2010-10-14
Course syllabus valid from	Spring 2011

Specific entry requirements

Standardised admission requirements E.1.

Objectives

1) describe and explain the osteology of the orbit, and its blood supply and innervation. 2) describe and explain the external tissues of the eye (sclera, cornea, conjunctiva, and limbus) 3) describe and explain the medial tissues and structures of the eye (uvea, choroidea, ciliary body and iris). 4) describe and explain the inner tissues and structures of the eye, the ocular media and focusing system (anterior chamber, posterior chamber, lens, vitreous humor, aqueous humor, intraocular pressure and accommodation 5) perform and interpret IOP measurements 6) describe and explain the cells, tissues, bloody supply, innervation and metabolism of the retina. 7) describe and explain the optic tract, its structure, function and blood supply (optic nerve, optic chiasm, lateral geniculate body, optic radiations, and visual cortex). 8) describe and explain the external parts of the eye (Tennons capsule, superciliary arcus, palpebra and conjunctiva). 9) describe and explain the tearing mechanism, the structure and function of the tear film, and the tear films stability (break-up-time, BUT).

Content

The course contains the following parts: the orbit; external, medial and internal eye tissues; tonometry; retina; optical tract; the external parts of the eye; tearing mechanism; tear film grading. A detailed list of course topics is available in a separate document. The course is divided in three parts: 1) Mandatory attendance - 1 credit (Mandatory attendance - 1 ECTS credit). Compulsory attendance comprises attendance at demonstrations, test, laboratory sessions, seminars, study visits and at practical/clinical exercises. 2) Assignments - 1 credit (Assignments - 1 ECTS credit). Comprises submission of written assignments and completed group assignment. 3) Theoretical understanding - 4 credits (Theoretical understanding - 4 ECTS credits). Comprises a theoretical understanding and application of the subject-specific contents of the course.

Mandatory attendance, 1.0 hp

Grading scale: VU

Compulsory attendance comprises attendance at demonstrations, test, laboratory sessions, seminars, study visits and at practical/clinical exercises.

Assignments, 1.0 hp

Grading scale: VU

Comprises submission of written assignments and completed group assignment.

Theoretical understanding, 4.0 hp

Grading scale: VU

Comprises a theoretical understanding and application of the subject-specific contents of the course.

Teaching methods

The course comprises self-study, demonstrations, laboratory sessions, theoretical overviews (in the form of lectures, seminars, Case methods, practical exercises), study visits and written assignments. The students are given a possibility to train practical skills but must take a great responsibility themselves.

Examination

The examination comprises: 1) Compulsory attendance 2) Assignments. Examines the goalds 1 up to 9. 3) Written/Oral examination. Examines the goalds 1 up to 9. This includes attendance for demonstrations, spot-on tests, labs, seminars, field trips and clinical practice. In case of absence, measures to be taken are discussed with the course director. The part is graded according to the scale Fail/Pass. In the part submission/group assignments, submission of complete assignments is required. The part is graded according to the scale Fail/Pass. The part Theoretical understanding is examined through written/oral examinations. The part is graded according to the scale Fail/Pass/Pass with distinction. For admission to the examination, it is required that the parts Mandatory attendance and Assignments are completed. The whole course is graded according to the scale Fail/Pass/Pass with distinction. A Pass grade requires a Pass grade in all the parts. For a Pass with distinction, a Pass grade in parts 1 and 2, and a Pass with distinction in part 2 is required. When a student fails an examination, there will be an opportunity for a new examination. All in all, 6 opportunities for a new examination are provided for all parts

Transitional provisions

If the course is closed down or undergoes major changes, students who have not completed the course are given the possibility, during four semesters from the date when the student first registered in the course, to be examined under the then current syllabus After four semesters, the student is examined under the new syllabus.

Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Education. The course is given in parallel with the course Eye movements and binocular vision and is, at the same time, also based on previous courses in the program.

Literature and other teaching aids

Remington, Lee Ann
Clinical anatomy of the visual system

2. ed. : St. Louis; Mo : Elsevier Butterworth Heinemann, 2005 - xi, 292 s. : ill.
ISBN:0-7506-7490-3
Library search

Saude, Trygve
Ocular anatomy and physiology
Fletcher, R.

London : Blackwell Science, 1993 - vii, 168 s. : ill.
ISBN:0-632-03599-4
Library search

Bergmansson, Jan P.G
Clinical ocular anatomy and physiology

Texas eye research and technology center, 2009 - 218 p
ISBN:13:978-0-9800-708-1-1
Library search