Course syllabus for

Ocular Anatomy, Physiology and Diseases 1, 7.5 credits

Ögats anatomi, fysiologi och sjukdomar 1, 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:
Spring2013 , Autumn2013 , Autumn2015 , Spring2017 , Autumn2017

Course code	1OP043
Course name	Ocular Anatomy, Physiology and Diseases 1
Credits	7.5 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	Programnämnd 8
Decision date	2012-05-08
Revised by	Education committee CNS
Last revision	2020-04-01
Course syllabus valid from	Autumn 2017

Specific entry requirements

MaB, FyA, KeA and BiA (or NkB)

Objectives

After the course, the student should be able to:

1) describe and account for the embryology of the eye

2) describe and explain the osteology of the orbit, and its blood supply and innervation.

3) describe and account for the sclera the cornea, the conjunctiva and limbus/the border between the cornea and the conjunctiva and their structure and function,

4) describe and account for the lens and uvea

5) describe and account for media/chambers and accommodation,

6) describe and account for human ocular accommodation - how it be stimulated and changes with age, and describe and account for pupil reactions and how these are connected with the accommodation

7) carry out and interpret pressure measurings

8) describe and account for the external parts of the eye (eyelids and lachrymal system),

9) describe and account for the structure and function of the tear film and measure the stability of the tear film (break-up-time, BUT),

10) describe and account for the external muscles - their process, function, movement and innervation and vascular supply of the eye

11) list and differential diagnose injuries and diseases in the main parts of the eye

12) carry out and interpret pupil reactionst and

13) carry out slit-lamp examination of the main parts of the eye

14) describe the differences in the incidence of diseases of the anterior segment from an ethnically and global health perspective.

And, as part of the generall teaching of scientific knowledge, that the student should be able to show:
15) ability to distinguish knowledge at the scientific level
16) describe different scientific types of publications and about the disciplinary foundation of the field
17) ability to distinguish and combine relevant information from scientific literature and to discuss new facts, phenomena and issues and
18) ability to orally and in writing account for and discuss information, problems and solutions in dialogue with different groups.

Aim 15-18 should be seen in relation to the document "Vetenskaplig strimma Optikerprogrammet".

Content

The course contains of the following parts: Anatomy, physiology and diseases in the main parts and study of the eye and evaluation of main segments. In addition to this the course is part of the teaching of general scientific knowledge within the program. In connection with this the students will continue to specialize within scholarship scholarship and best practice and scientific communication. They will also develop his knowledge and understanding, his skills and abilities his judgement and his scientific thought- and attitude in relation to optometry and a lifelong learning. The teaching of general scientific knowledge is described in separate document.

The course is divided into three (3) part:

Clinical work, 2.0 hp

Grading scale: VU

Include written assignments and group assignment and clinical work.

Theoretical understanding, 4.0 hp

Grading scale: VU

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

Investigative techniques, 1.5 hp

Grading scale: VU

Including the ability to carry out clinical practical methodology.

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:

Part 1, Clinical work, examines the learning outcomes 1 up to 18. Compulsory participation applies at demonstrations, test, laboratory sessions, seminars, study visits and at practical/clinical exercises. in case of absence, measures to be taken are discussed with the course director. The part is graded according to the scale Fail/Pass.

Part 2, Theoretical understanding, examines the learning outcomes 1 up to 18. The part is examined with written examination. Re examination may be oral. The part is graded according to the scale Fail/Pass/Pass with distinction.

Part 3, Examination methodology, examine aim 13 in the form of practical test in biomicroscopy. The part is graded according to the scale Fail/Pass

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 3, and Pass with distinction in part 2 are required.

Criteria for assessing practical tests are established in separate documents.

A student who fails the regular examination has the right to participate at additional five examinations. If the student fails six examinations/test there will be no additional examination. As an examination, the times that the student has participated the same test are counted. Submission of blank exam is counted as an examination. Examination to which the student has registered but not participated in is not counted as an examination.

Transitional provisions

The course has been cancelled and was offered for the last time in the spring semester of 2019. Last examination according to this syllabus will be provided the fall semester of 2021 for students who have not completed the course.

Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Higher Education.

Teaching in English can occur.

Literature and other teaching aids

Clinical ophthalmology : a systematic approach
Kanski, Jack J.; Bowling, Brad; Nischal, Ken K.; Pearson, Andrew

7. ed. : Edinburgh : Butterworth-Heinemann, 2011 - ix, 909 s.
ISBN:978-0-7020-4093-1 (hbk.) LIBRIS-ID:12189545
Library search

Remington, Lee Ann.

Clinical anatomy and physiology of the visual system

3rd ed. : St. Louis : Elsevier/Butterworth-Heinemann, c2012. - ix, 292 p.
ISBN:1437719260 LIBRIS-ID:20698295
Library search

Lönwe, Bo

Ögonsjukdomar i primärvården

Tornqvist, Kristina; Bengtsson-Stigmar, Elisabeth

[Ny utg.] : Malmö : Leo Pharma Nordic, cop. 2005 - 123 s.
ISBN:91-974368-4-4 LIBRIS-ID:10697668
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

Ehlers, Justis P.; Shah, Chirag P.

The Wills eye manual : office and emergency room diagnosis and treatment of eye disease.

5th ed. /b editors, Justis P. Ehlers, Chirag P. Shah ; associate editors, Gregory L. Fenton, Eliza N. Hoskins, Heather : Philadelphia : Wolters Kluwer / Lippincott Williams & Wilkins, c2008. - xvii, 455 p.
ISBN:978-0-7817-6962-4 LIBRIS-ID:11823109
Library search

Lang, Gerhard K.

Ophthalmology : a short textbook

Stuttgart : Thieme, 2000 - xviii, 586 s.
ISBN:3-13-126161-7 LIBRIS-ID:4669549
Library search

Saude, Trygve

Ocular anatomy and physiology

London : Blackwell Science, cop. 1993 - vii, 168 s.
ISBN:0-632-03599-4 LIBRIS-ID:9066980
Library search