Course syllabus for

Optics of investigative instruments, 3 credits

Instrumentoptik, 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:
Autumn2008 , Autumn2011

Course code	1OP014
Course name	Optics of investigative instruments
Credits	3 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	2008-03-19
Revised by	Education committee CNS
Last revision	2020-04-01
Course syllabus valid from	Autumn 2011

Specific entry requirements

Passed results of at least 45 higher education credits from The Optometry program semester 1 and 2.

Objectives

After the course, the student should:

- account for optical principles and functions of the most common examination and measuring instruments that an optician comes into contact with
- relate the function of the instruments to common examination methodology and be able to develop an attitude of one's own to the instruments
- assess the instruments' limitations regarding precision, measurement errors and various handling errors
- evaluate and get familiar with functions of future examination instruments

Content

Optometric methods of measurement. Overview of the structure of the most common examination

instruments, and especially the optical principles underlying their function. The course comprises the biomicroscope, the direct and indirect ophthalmoscope, the retinoscope, subjective and objective refractometers, autorefractors, keratometers and instruments for corneal topography and various types of focimeters.

Teaching methods

The teaching is given in the form of lectures interleaved with assisted problem solving where the theoretical knowledge is illustrated and practiced individually through calculation examples.

Examination

The course is examined through written assignments and written examination. The grading scale Fail/Pass/Pass with distinction.

Criteria for evaluating the parts of the course are established in separate documents.

Students who have not passed the regular examination are entitled to participate in five more examinations. If the student has failed six examinations/tests, no additional examination or new admission is provided. The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of a blank examination is regarded as an examination. An examination for which the student registered but not participated in, will not be counted as an examination.

Transitional provisions

The course has been cancelled and was offered for the last time in the spring semester of 2020. 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 Education.

Literature and other teaching aids

Freeman, Michael Harold

Optics

Hull, C. C.; Charman, W. N.

11. ed. : Oxford : Butterworth-Heinemann, 2003 - 563 s.

ISBN:0-7506-4248-3 LIBRIS-ID:8917891

Library search

Rabbetts, R. B.

Clinical Visual Optics

4:e upplaga : Oxford: Butterworths - 488s. : 2007

ISBN:0-7506-8874-2

Library search