Course syllabus for

Clinical Optometry 2, 4.5 credits

Optometrisk klinik 2, 4.5 hp
This course syllabus is valid from autumn 2022.
Please note that the course syllabus is available in the following versions:
Autumn2021 , Autumn2022

Course code	1OP079
Course name	Clinical Optometry 2
Credits	4.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Optometry
Level	G2 - First cycle 2
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Clinical Neuroscience
Decided by	Education committee CNS
Decision date	2021-04-14
Revised by	Education committee CNS
Last revision	2022-02-23
Course syllabus valid from	Autumn 2022

Specific entry requirements

Passed results of at least 55 credits from the Optometry programme's semester 1 and 2 and at least 45 credits from semester 3 and 4.

Students who have failed their VIL/VFU (clinical training opportunity) after demonstrating serious deficiencies in understanding, skill, or professional attitude, and done this to the degree that client or patient safety or client/ patient/ employer trust for the healthcare has been jeopardised, will qualify for a new VIL/VFU opportunity only after completion of an individual action plan.

Objectives

After the course, the student should be able to

1) based on the optician's role as referring part in the health care be able to write a relevant referral to correct instance and reflect on referral response as well as care and treatment
2) perform complete vision screening according to laws and regulations, analyse and reflect on research results in relation to different optometric case types and be able to prescribe patient adapted optometric care
3) analyse and reflect upon methods for examination of binocular functions and specially adopted

occupational glasses, and evaluate outcome and prescribe treatment
4) analyse and reflect upon structure and function of the anterior and posterior segments of the eye in relation to different pathological conditions
5) analyse and reflect upon vision field screening (perimetry) and fundus image, and be able to see relationships between structure and function
6) analyse and reflect upon OCT- measurements and be able to see relationships between structure and function
7) apply and analyse methods to evaluate dry eyes and recommend treatment and return visit intervals
8) based on a global health perspective be able to describe global differences in occurrence of refraction development among individuals
9) reason about sustainable development as concept, area of knowledge and as an integrated (ecological, economic and social) perspective on social progress and man's interplay with nature - particularly in an optometric perspective
10) identify, reason and reflect on issues of ethics, sustainable development and equal opportunities
11) identify, reason and reflect on her own and other professions' role in contributing to sustainable eye health care development.

In addition to the above the student should, in a level-suited optometry-, care- and scientific perspective, be able to

12) show high ability to search, collect and evaluate information at a scientific level and critically discuss phenomenas, issues and situations
13) demonstrate the ability to follow the knowledge development and identify her need of additional knowledge acquisition to continuously develop her skills in optometry, included knowledge of the scientific foundation of the optometry
14) show high ability to interpret scientific articles, critically review and reflect upon the significance of the results, as well as reflect upon new scientific data in relation to previously published data
15) show ability to formulate scientific text in writing.

Aim 12-15 should be seen in relation to the document "Vetenskaplig strimma Optikerprogrammet" (Scientific Thread in Study Programme of Optometry).

Content

The course contains binocular deviations, meibography, tear meniscus assessment with anterior OCT, handling of referrals and clinical training opportunity (VIL including VFU). Eye examination according to the quality standard, to measure, review and interpret fields of vision, OCT and fundus images.

In addition to this the course is part of the teaching of general scientific knowledge within the program. In relation to teaching of general scientific knowledge, the students continue to broaden their knowledge related to the scientific base of optometry, science and proven experience and scientific communication. They also develop their knowledge and understanding, skills and abilities, their judgement, scientific thought and attitude, in relation to optometry and a lifelong learning. The teaching of general scientific knowledge is described in a separate document.

The course is divided in the following three modules:

Clinical work, 2.5 hp

Grading scale: GU

The module includes VIL/VFU, portfolio and formative assessment of clinical proficiencies and patient care and case examination.

Theoretical understanding, 1.5 hp

Grading scale: VU

The module includes theoretical understanding and renewal of the topic-specific contents of the course.

Scientific development, 0.5 hp

Grading scale: GU

The module includes assignments in KI's virtual learning environment, the programme's scientific thread and written assignments.

Teaching methods

The course includes self-studies, demonstrations, test, laboratory sessions, theoretical overviews (e.g. lectures, seminars, flipped classroom, case methods), practical/ clinical exercises (VIL at the optometry programme's clinic and VFU in an optician's store or equivalent), portfolio and written assignments. The student must herself arrange to find a VFU placement that has to be approved by the course leader. The students are given a possibility to train practical skills but must take a great responsibility themselves.

Some course elements are compulsory, see heading "Examination".

Examination

The course is examined in the following way:

Module 1, Clinical work
a) continuous examination of clinical proficiencies and patient care in connection with VIL at the optometry programme's clinic, is graded U (Fail) or G (Pass)
b) continuous examination of clinical proficiencies and patient care in connection with VFU in an optician's store or equivalent, is graded U or G
c) compulsory portfolio according to instructions
d) compulsory seminars and demonstrations as per schedule

The module is graded U or G. The grade G requires G on examination assignment a) and b) and fulfillment of compulsory course elements.

Module 2, Theoretical understanding
a) written examination, is graded U, G or VG (Pass with distinction)
Re-examination may take place orally.
b) compulsory seminars and demonstrations as per schedule

The module is graded U, G or VG. The grade G requires G on written examination, and fulfillment of compulsory course elements. VG requires VG on written examination, and fulfillment of compulsory course elements.

Module 3, Scientific development
a) compulsory assignments in KI's virtual learning environment
b) written assignments, each graded U or G
c) compulsory seminars and demonstrations as per schedule, a part of the scientific thread in the programme

The module is graded U or G. The grade G requires G on all written assignments b), and fulfillment of compulsory course elements.

Course grade
The entire course is given the grade Fail (U), Pass (G) or Pass with distinction (VG).
The grade Pass on the entire course requires Pass on all modules 1-3. Pass with distinction requires Pass on module 1 and 3, and Pass with distinction on module 2.

Absence from or unfullfillment of compulsory course element
The examiner decides whether, and if so how, absence from or unfulfillment of compulsory course elements can be made up for. Study results cannot be reported until the student has participated in or fulfilled compulsory course elements, or compensated for any absence/ failure to fulfill in accordance

with instructions from the examiner. Absence from or unfulfillment of a compulsory course element may imply that the student can not retake the element until the next time the course is offered.

Guidelines in case of failure of VIL/VFU
The examiner may, with immediate effect, interrupt a student's VIL/VFU (clinical placement) if the student demonstrates such serious deficiencies in knowledge, skills or attitude that patient safety or patient confidence in healthcare is at risk. If a VIL/VFU placement is interrupted in this way the student is deemed to have failed that element and to have used up one VIL/VFU opportunity. In such cases, an individual action plan should be set up stating which activities and tests are required before the student is qualified for a new VIL/VFU placement on the course.

Possibility of exception from the course syllabus' regulations on examination
If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected knowledge, skills and attitudes may not be changed, removed or reduced.

Transitional provisions

If the course is cancelled or goes through substantial changes, information about interim regulations will be stated here.

Other directives

Course evaluation takes place in accordance with KI's local guidelines. Compilation of the students' answers in course questionnaires and the course coordinator's analysis of these are published on KI's public course web.

Teaching in English may occur.

Literature and other teaching aids

Mandatory literature

Benjamin, William J.; Borish, Irvin M.
Borish's clinical refraction

2nd ed. : St. Louis, Mo. : Butterworth-Heinemann/Elsevier, c2006. - xviii, 1694 p.
ISBN:0-7506-7524-1 LIBRIS-ID:10580274
Library search

Scheiman, Mitchell; Wick, Bruce
Clinical management of binocular vision : heterophoric, accommodative, and eye movement disorders

Fourth edition. : Philadelphia, Pennsylvania : Lippincott Williams & Wilkins, 2014 - ix, 722 pages
ISBN:9781451175257 LIBRIS-ID:16337727
Library search

Reference literature

Rabbetts, Ronald B.
Clinical visual Optics

4.ed. : Edinburgh : Elsevier/Butterworth Heinemann, 2007 - 470 p

ISBN:9780750688741
Library search

Clinical procedures in primary eye care
Elliott, David B.

3rd ed. : Edinburgh ;a New York : Elsevier/Butterworth Heinemann, 2007 - xii, 342 p.
ISBN:978-0-7506-8896-3 LIBRIS-ID:11008167
Library search

Grosvenor, Theodore P
Primary care optometry

5th ed. : St. Louis : Butterworth-Heinemann/Elsevier, 2007 - 510 p.
ISBN:978-0-7506-7575-6
Library search

Millodot, Michel
Dictionary of optometry and visual science

7. ed. : Oxford : Butterworth-Heinemann, 2009 - 409 p
ISBN:978-0-7020-2958-5
Library search

Evans, Bruce J. W.; Pickwell, David.t Binocular vision anomalies
Pickwell's binocular vision anomalies

5. ed. /b Bruce J.W. Evans : Edinburgh ;a New York : Elsevier Butterworth Heinemann, 2007 - 454 s.
ISBN:978-0-7506-8897-0 LIBRIS-ID:10659509
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

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

Steinman, Scott B.; Steinman, Barbara A.; Garzia, Ralph P.
Foundations of binocular vision : a clinical perspective

New York : McGraw-Hill Co., c2000. - xi, 345 p.
ISBN:978-0-8385-2670-5 (alk. paper) LIBRIS-ID:11950260
Library search