Course syllabus for

Clinical Optometry 3, 12 credits

Optometrisk klinik 3, 12 hp
This course syllabus is valid from spring 2023.
Please note that the course syllabus is available in the following versions:
Spring2022 , Spring2023 , Spring2024 , Spring2025

Course code	1OP082
Course name	Clinical Optometry 3
Credits	12 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	2021-10-13
Revised by	Education committee CNS
Last revision	2022-09-28
Course syllabus valid from	Spring 2023

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) independently perform a complete eye examination and show a very high understanding of laws and regulations, analyze and reflect on examination results in relation to different optometric case types, and to prescribe patient-adapted optometric care
2) analyze and reflect on methods for examination of binocular functions, occupation correction, low vision patients and evaluate outcomes and prescribe treatment/ glass solution
3) independently analyze and reflect on the structure and function of the anterior and posterior segments

of the eye in relation to various pathological conditions
4) independently analyze and reflect on visual field screening (perimetry) and fundus examination and the connection between structure and function
5) analyze and reflect on OCT measurement and the connection between structure and function
6) apply and analyze methods for evaluating dry eyes and recommend treatment and return intervals
7) from a global health perspective, be able to explain global differences in the prevalence of refraction development among individuals
8) reason about sustainable development as a concept, area of knowledge and as an integrated (ecological, economic and social) perspective on societal development and human interaction with nature - especially in an optometric perspective.

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

9) show high ability to search, collect and evaluate information at a scientific level and critically discuss phenomenas, issues and situations
10) 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
11) 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
12) show ability to formulate scientific text in writing.

Aim 9-12 should be seen in relation to the document "Vetenskaplig strimma Optikerprogrammet" (Scientific Streak of the Optometry Program).

Content

The course includes binocular abnormalities, meibomography, refraction on low vision patients, interpretation and analysis of OCT, visual field, topography, anterior and posterior segments, referral process and clinical training opportunity (VIL including VFU). Eye examination according to the quality standard, knowledge of neuropsychiatric disabilities and reading and writing difficulties. Knowledge of surgical treatments for correction.

In addition to this the course is part of the scientific streak of the programme. In relation to teaching of general scientific knowledge, the students continue to, in a level- and topic-suited way, deepen 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, 5.0 hp

Grading scale: GU

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

Theoretical understanding, 5.5 hp

Grading scale: VU

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

Scientific development, 1.5 hp

Grading scale: GU

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

Teaching methods

The course includes self-studies, demonstrations, 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 or G
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 participation on presentation of portfolio

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

Module 2, Theoretical understanding
a) written examination, graded U, G or VG
b) compulsory assignments in KI's virtual learning environment

The module is given the grade U, G or VG. The grade G requires G on written examination, and fulfillment of compulsory course elements. The grade 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, graded U or G
c) compulsory seminars and demonstrations as per schedule, a part of the scientific streak of 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 graded U, G or VG.
The grade G on the entire course requires G on all modules 1-3. The grade VG requires G on module 1 and 3 and VG 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 clinical placement (or equivalent) 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 clinical placement is interrupted in this way the student is deemed to have failed that element and to have used up one clinical placement 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 clinical 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 according to guidelines established by Karolinska Institutet. Compilation of the students' answers in course questionnaires and the course coordinator's analysis of these are published on KI's public course web.

Some teaching may be in English.

Literature and other teaching aids

Mandatory litterature

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

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

Recommended 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

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