



**Karolinska
Institutet**

Course syllabus for

Advanced Optometry 2, 7.5 credits

Synundersökningsmetodik 2, 7.5 hp

This course syllabus is valid from autumn 2023.

Please note that the course syllabus is available in the following versions:

Autumn2020 , Autumn2022 , Autumn2023 , Autumn2024

Course code	1OP073
Course name	Advanced Optometry 2
Credits	7.5 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	2020-04-01
Revised by	Education committee CNS
Last revision	2023-03-22
Course syllabus valid from	Autumn 2023

Specific entry requirements

Passed results of at least 45 credits from the Study Programme in Optometry's semester 1 and 2.

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 have 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) describe and handle the role of the optometrist as a referring practitioner in the health care
- 2) describe and apply methods for study of binocular functions and evaluate outcome
- 3) perform complete vision screening and analyse research results in relation to different optometric cases, including prescribe and practically apply treatment
- 4) apply methods to examine and evaluate the anterior and posterior segments of the eye
- 5) carry out and interpret vision field screening (perimetry) and interpret and evaluate posterior segments in relation to what is normal/abnormal

- 6) carry out eye examination for driving licenses and have knowledge of the vision requirements that apply to A/B/C/D/E driving licences
- 7) from a global health perspective, be able to understand and evaluate occurrence and differences in refraction development among individuals
- 8) reason about sustainable development as concept, field 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
- 9) identify, reason and reflect on issues of ethics, sustainable development and equal opportunities
- 10) identify, reason and reflect on their 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

- 11) search, collect and evaluate information from a presented problem, and to discuss phenomena, issues and situations critically,
- 12) independently identify, formulate and solve problems in writing and carry out assignments within given time frames, and
- 13) formulate scientific text in writing.

Aim 11-13 should be seen in relation to the document "Vetenskaplig strimma Optikerprogrammet" (Scientific Thread in Study Programme of Optometry).

Content

The course contains the following: complete vision screening with a focus on external patients, recipe/referrals, prescription, visual field, vision test for driving licence, binocular vision, screening methods and clinical/ practical training (VIL including VFU).

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 skills and patient care.

Theoretical understanding, 2.5 hp

Grading scale: VU

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

Scientific development, 2.5 hp

Grading scale: GU

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

Teaching methods

The course includes self-study, 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

The module is graded U or G. The grade G requires G on examination assignment a) and b) as well as 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.

The module is given the same grade as the written examination, U, G or VG.

Module 3, Scientific development

- a) compulsory assignments in KI's virtual learning environment
- b) compulsory written assignments
- c) compulsory seminars and demonstrations as per schedule, a part of the scientific thread of the programme

The module is graded U or G. The grade G requires fulfillment of compulsory course elements.

Course grade

The entire course is graded U, G or VG.

The grade G requires G on all modules.

The grade VG requires G on module 1 and 3, and VG on module 2.

Absence from or unfulfillment of compulsory course elements

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

The examiner may, with immediate effect, interrupt a student's VIL/ VFU placement if the student demonstrates such serious deficiencies in knowledge, skills or attitude that client or patient safety or confidence in healthcare is at risk. If a VIL/ VFU opportunity is interrupted in this way, the student is deemed to have failed that module and to have used one VIL/ VFU opportunity. In such cases, an individual action plan should be established, where it is made explicit what activities and examinations are required before the student is qualified for a second VIL/ VFU opportunity 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' 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 closed down 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.

Some teaching may be in English.

Literature and other teaching aids

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; Steinman, Barbara A.

Clinical management of binocular vision : heterophoric, accommodative, and eye movement disorders

Fifth edition : Philadelphia, PA : Wolters Kluwer, [2020] - ix, 723 pages

ISBN:9781496399731 LIBRIS-ID:0c2sjhr1x9bq65pq

[Library search](#)

Clinical procedures in primary eye care

Elliott, David B.

Fifth edition. : Amsterdam : Elsevier, [2021] - xi, 324

ISBN:9780702077890 LIBRIS-ID:hvmmfz27fzbcwq7n

[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](#)

Foundations of binocular vision [Ljudupptagning] : a clinical perspective

Steinman, Scott B.; Steinman, Barbara A.; Garzia, Ralph Philip; Nygaard, Ragnhild

Johanneshov : TPB, 2010 - 1 CD-R (29 tim., 5 min.)

LIBRIS-ID:12620973

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](#)

Rabbetts, R. B.

Clinical Visual Optics

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

ISBN:0-7506-8874-2

[Library search](#)

Rutstein, Robert P.

Anomalies of binocular vision : diagnosis & management

Daum, Kent Michael

St. Louis ; b Mosby, c cop. 1998 : Mosby, cop. 1998 - xv, 368 s.

ISBN:0-8016-6916-2 LIBRIS-ID:5674465

[Library search](#)