



**Karolinska
Institutet**

Course syllabus for

Clinical Optometry 2, 4.5 credits

Optimetrisk klinik 2, 4.5 hp

This course syllabus is valid from autumn 2021.

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	Fail (U), pass (G) or pass with distinction (VG)
Department	Department of Clinical Neuroscience
Decided by	Education committee CNS
Decision date	2021-04-14
Course syllabus valid from	Autumn 2021

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 (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 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.

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

10) show high ability to search, collect and evaluate information at a scientific level and critically discuss phenomena, issues and situations

11) 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

12) 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

13) show ability to formulate scientific text in writing.

Aim 10-13 should be seen in relation to the document "Vetenskaplig strimma Optikerprogrammet" (Scientific Streak of the Optometry Program).

Content

The course contains binocular deviations, meibography, tear meniscus assessment with anterior OCT, handling of referrals and clinical training opportunity (VIL). 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, 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 scientific streak 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), portfolio and written assignments. The students are given a possibility to train practical skills but must take a great responsibility themselves.

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 (Fail/Pass)
- b) compulsory portfolio according to instructions
- c) compulsory seminars and demonstrations as per schedule

The module is given the grade Fail or Pass. The grade Pass requires Pass on examination assignment a) and fulfillment of compulsory course elements.

Module 2, Theoretical understanding

- a) written examination (Fail/Pass/Pass with distinction)

Re-examination may take place orally.

- b) compulsory seminars and demonstrations as per schedule

The module is given the grade Fail, Pass or Pass with distinction. The grade Pass requires Pass on written examination, and fulfillment of compulsory course elements. Pass with distinction requires Pass with distinction 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 (Fail/Pass)
- c) compulsory seminars and demonstrations as per schedule, a part of the scientific streak of the programme

The module is given the grade Fail or Pass. The grade Pass requires Pass 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 unfulfillment 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.

Limitation of the number of practical test or training sessions

Students who do not pass a regular examination are entitled to re-sit the examination on five more occasions. If the student has carried out six failed tests, no further examination opportunity is given. Each occasion the student participates in the same test counts as an examination. In case a student is registered for an examination but does not attend, this is not regarded as an examination. To be valid for judgement, the examination must be submitted at the given time, or the student will be referred to the next examination occasion.

Regarding VIL, the number of times a student has the right to participate/go through the course and be

assessed on the same is limited to two (2) times.

Guidelines in case of failure of VIL

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 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](#)