



**Karolinska
Institutet**

Course syllabus for

Refraction 2, 6 credits

Optometrisk refraktion 2, 6 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:

Spring2014 , Autumn2015

Course code	1OP047
Course name	Refraction 2
Credits	6 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	Programnämnd 8
Decision date	2012-05-08
Revised by	Education committee CNS
Last revision	2020-04-01
Course syllabus valid from	Autumn 2015

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 be able to:

- 1) examine and analyse examination results in relation to different optometric case types
- 2) describe and handle the role of the optometrist as a referring practitioners in the health care
- 3) describe, apply and analyse the results of optometric screening
- 4) use and analyse advanced methods for ocular studies and
- 5) reason about sustainable development as concept knowledge field and as an integrated (ecological, economic and social) perspective on social progress and man's interplay with nature - particularly in an optometric perspective.

And that the student in relation to general scientific knowledge should be able to show:

- 6) ability to search, collect and evaluate information in a problem and to discuss phenomena, issues and situations critically

- 7) the ability to identify independently, formulate and solve problems in writing and to carry out assignments within given time frames and
- 8) ability to formulate scientific text in writing.

Aim 6-8 should be seen in relation to the document "Vetenskaplig strimma Optikerprogrammet".

Content

The course contains the following parts: binocular vision and binocular case studies, recipe/referrals and screening methods. In addition to this the course is part of the teaching of general scientific knowledge within the program. In connection with this the students will continue to specialize within scholarship and best practice and scientific communication. They will also develop his knowledge and understanding, his skills and abilities his judgement and his scientific thought- and attitude in relation to optometry and a lifelong learning. The teaching of general scientific knowledge is described in separate document.

The course is divided into two (2) parts:

Clinical work, 3.0 hp

Grading scale: GU

Includes written assignments and group assignment and completed clinical work.

Theoretical understanding, 3.0 hp

Grading scale: VU

Comprises a theoretical understanding and application of the subject-specific contents of the course.

Teaching methods

The course includes self-study, demonstrations, laboratory sessions, theoretical overviews (in the form of lectures, seminars, Case methods, practical exercises) and written assignments. The students are given a possibility to train practical skills but must take a great responsibility themselves.

Examination

The course be examined against the following aims and on the following way:

Part 1, Clinical work, examines the learning outcomes 1-8. Compulsory participation applies participating at demonstrations, test, laboratory sessions, seminars, study visits and at practical/clinical exercises. in case of absence, measures to be taken are discussed with the course director. The part is examined through written assignments. The part is graded according to the scale Fail/Pass.

Part 2, Theoretical understanding, examines the learning outcomes 1-8. The part is examined with a written test. Re examination may be oral. The part is graded according to the scale Fail/Pass/Pass with distinction.

The whole course is graded according to the scale Fail/Pass/Pass with distinction. For Passed is required passed at part 1 and 2. For a Pass with distinction, a Pass in part 1 and a Pass with distinction in part 2, are required.

Criteria for assessing practical tests are established in separate documents.

A student who fails the regular examination has the right to participate at additional five examinations. If the student fails six examinations/test there will be no additional examination. As an examination, the

times that the student has participated the same test are counted. Submission of blank exam is counted as an examination. Examination to which the student has registered but not participated in is not 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 Higher Education.

The course is based on knowledge acquired in previous courses in the program.

Teaching in English can occur.

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](#)

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](#)

Rabbetts, R. B.

Clinical Visual Optics

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

ISBN:0-7506-8874-2

[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](#)

Steinman, S.; Garzia, B.

Foundations of Binocular Vision - A Clinical Perspective.