



**Karolinska
Institutet**

Course syllabus for

Binocular Vision and Orthoptic Treatment, 7.5 credits

Binokulärseende och behandling, 7.5 hp

This course syllabus is valid from autumn 2022.

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

Autumn2012 , Spring2017 , Autumn2022

Course code	3OP008
Course name	Binocular Vision and Orthoptic Treatment
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Optometry
Level	AV - Second cycle
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	2024-04-11
Course syllabus valid from	Autumn 2022

Specific entry requirements

Degree of Bachelor of Science in Optometry about 180 credits and professional status qualification as optician with contact lens qualification. Or Degree of Bachelor of Science in Nursing of at least 180 credits, professional status qualification as nurse and 60 credits supplementation within eye care.

Knowledge in Swedish and English equivalent Swedish B/ Swedish 3 and English A/ English 6 (with lowest grade Passed).

Objectives

After the course, the student should be able to

- 1) describe and analyse the vergence and accommodation system on the basis of current models
- 2) evaluate binocular vision with objective and subjective methods
- 3) examine and treat (optometrically and via referral) children and adults with comitant and incommittant squints
- 4) detect and take care of (treat, refer) children that run risk to develop binocular disturbances

- 5) use tests and evaluate test results of neurological functions related to binocular vision
- 6) describe the development of myopia in different populations from a global health perspective and reflect on prevention models related to the level of resources.

Content

The course contains the following parts: accommodation and vergens system, adaptation, comitant foris and tropies, microtropies, amblyopia, incommittant squints, A and V syndrome, accommodative problems and neurological changes that influence binocular vision.

The course is divided into the following two modules:

Assignments, 2.5 hp

Grading scale: GU

Includes accomplished and passed written assignments

Theoretical understanding, 5.0 hp

Grading scale: VU

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

Teaching methods

The course contains labs, exercises, a theoretical overview and demonstrations. The theoretical overview is made through different tuition forms (case methodology, lectures etc). 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, Written assignments, examines aim 1-6

a) written assignments, each graded U (Fail) or G (Pass)

The module is graded U or G. The grade G requires G on all written assignments.

Module 2, Theoretical understanding, examines aim 1-6

a) written examination, is graded U, G or VG (Pass with distinction)

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

Course grade

The course is graded U, G or VG.

The grade G on the entire course requires G on module 1 and 2.

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

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 skills, knowledge and attitudes may not be changed, removed or reduced.

Transitional provisions

The course is cancelled and was offered for the last time in the fall semester of 2023. Examination will

be provided until the spring of 2026 for students who have not completed the course. As from the fall of 2026, examination will be provided according to guidelines in the syllabus that applies at the time in question.

Other directives

Course evaluation takes place according to guidelines established by Karolinska Institutet.

Teaching in English may occur.

Literature and other teaching aids

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](#)

Ansons, Alec

Diagnosis and management of ocular motility disorders

Davis, Helen

3 : Oxford : Blackwell science, 2001 - 532 sid

ISBN:0-632-04798-4

[Library search](#)