



Course syllabus for

# **Binocular Vision and Orthoptic Treatment, 7.5 credits**

Binokulärseende och behandling, 7.5 hp

This course syllabus is valid from autumn 2024.

Course code	3OP016
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	Education committee CNS
Decision date	2024-03-13
Course syllabus valid from	Autumn 2024

## **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

### *Knowledge and understanding*

1. apply theoretical knowledge and explanatory models to describe normal binocular vision and binocular anomalies
2. explain the difference between comitant and incomitant strabismus and which deviations need further investigation with regard to neurology

### *Competence and skills*

3. select and adapt the examination methods to the question at issue, situation and the patient, and

perform these with high quality

4. interpret and analyze the results in a binocular examination

5. treat and/or refer patients with binocular anomalies

*Judgement and approach*

6. reflect on the optometrist's role in orthoptic treatment and its importance for sustainable eye care.

## Content

The course covers several methods for investigating binocular symptoms and provides knowledge about which symptoms should be investigated further if a neurological cause can be suspected. The theory of the course provides in-depth knowledge of binocular case types, cycloplegic refraction, comitant and incomitant strabismus, microtropia and sensory adaptations to binocular deviations. Furthermore, the course includes active work with case analysis and selection of treatment strategies. The practical work in the course deals with examination methods including methodology and medical record documentation.

The course is divided into the following three modules:

### Scientific development, 2.0 hp

Grading scale: GU

### Clinical work, 1.0 hp

Grading scale: GU

### Theoretical understanding, 4.5 hp

Grading scale: VU

## Teaching methods

The course includes self-studies, theoretical overview, seminars and labs. The theoretical overview is made through lectures. 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, Scientific development, examines aim 1,2,4 och 6*

a) compulsory written assignments

b) compulsory attendance with active participation in case seminar

The module is graded U (Fail) or G (Pass). The grade G requires fulfillment of compulsory course elements, according to instructions.

*Module 2, Clinical work, examines aim 1-5*

a) compulsory attendance with active participation in laboration

b) compulsory attendance with active participation in case seminar

c) compulsory written assignment

The module is graded U or G. The grade G requires fulfillment of compulsory course elements, according to instructions.

*Module 3, 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 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 all modules 1-3.

The grade VG on the entire course requires G on module 1 and 2, as well as VG on module 3.

*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.

*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.

Teaching in English may occur.

## Literature and other teaching aids

*Ansons, Alec M.*

**Diagnosis and management of ocular motility disorders / Alec M. Ansons, Helen Davis**

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ISBN:9781118712399 LIBRIS-ID:6ktz5jw24ldgzs9v

URL: [Online access for KIB](#)

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*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

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