



**Karolinska  
Institutet**

Course syllabus for

## **Refraction 2, 6 credits**

Optimetrisk 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:

Autumn2008 , [Autumn2009](#) , [Autumn2010](#)

Course code	1OP013
Course name	Refraction 2
Credits	6 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Optometry
Level	G1 - First cycle 1
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Clinical Neuroscience
Decided by	Programnämnden för Optikerprogrammet
Decision date	2008-04-23
Course syllabus valid from	Autumn 2008

## **Specific entry requirements**

Standardised admission requirements E.1.

## **Objectives**

After the course, the student should: 1) list, describe and analyse different physiological aspects of visual defects 2) describe and apply methods for the measurement of vergence capacity and be able to analyse the results in relation to other measurements, 3) analyse research results in relation to various optometric case types 4) describe and handle the role of the optician as a referring practitioners in the health care 5) describe and apply measuring, choice of glasses in relation to vision needs and assembly/dotting of optical multifocal glasses, 6) describe, apply and analyse the results of optometric screening instruments.

## **Content**

The course contains the following parts: physiological aspects of visual defects, vergence measurements, case studies, recipes/referrals, multifocal glasses and screening methods. Each student should also auscultate 1 day in an optometric practice - this placement is arranged by the students themselves. The course starts with self-study and continues with exercises, theoretical overview and

demonstrations. The theoretical overview is made through different tuition forms (Case methodology, whole-group lectures etc). The students are given a possibility to train practical skills but must take a great responsibility themselves. The course is divided in four parts: 1) Mandatory attendance - 1 credit (Mandatory attendance - 1 ECTS credit). Mandatory attendance comprises attendance in mandatory demonstrations, laboratory sessions and auscultations. 2) Theoretical understanding - 2 credits (Theoretical understanding - 2 ECTS credits). Comprises a theoretical understanding and application of the subject-specific contents of the course. 3) Practical dispensing - 1 credit (Practical dispensing - 1 ECTS credit). Comprises the ability to fit, choose and verify multifocal glasses. 4) Clinical work - 2 credits (Clinical work - 2 ECTS credits). Comprises the ability to refraction and make vision screenings by means of foropter.

### **Mandatory attendance, 1.0 hp**

Grading scale: UG

### **Theoretical understanding, 2.0 hp**

Grading scale: UV

### **Practical dispensing, 1.0 hp**

Grading scale: UG

### **Clinical work, 2.0 hp**

Grading scale: UV

## **Teaching methods**

The course comprises self-study, demonstrations, laboratory sessions, theoretical overviews (in the form of lectures, seminars, Case methods, practical exercises), auscultation and written assignments.

## **Examination**

The examination comprises: 1) Mandatory attendance. 2) Written/Oral examination. Examines the aims 1 to 6. 3) Focimeter skills. Examining learning outcome 5. 4) Practical test refraction in foropter. Examines the aims 2 and 3. In the part Mandatory attendance, attendance is required in demonstrations, seminars, laboratory sessions and auscultation. In case of absence, measures to be taken are discussed with the course director. The part is graded according to the scale Fail/Pass. The part Theoretical understanding is examined through written/oral examinations. The part is graded according to the scale Fail/Pass/Pass with distinction. For admission to the examination in Theoretical understanding, completion of any supplementation for the part Mandatory attendance, is required. The part Practical dispensing is examined through a practical test in focimeter skills. The part is graded according to the scale Fail/Pass/. The part Clinical work is examined through a practical refraction test. 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 a Pass grade in the course, a Pass grade is required for all its parts. For a Pass with distinction, a Pass in parts 1 and 3, and a Pass with distinction in parts 2 and 4, is required.. Criteria for evaluating the parts of the course are determined in separate documents. When a student fails an examination, there will be an opportunity for a new examination. All in all, 6 opportunities for a new examination are provided for all parts

## **Other directives**

Course evaluation will be carried out in accordance with the guidelines established by the Board of

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

## Literature and other teaching aids

*Grosvenor, Theodore P*

### **Primary care optometry**

5th ed. : Butterworth-Heinemann/Elsevier, 2007

ISBN:ISBN10: 0750675756 ISBN13: 9780750675758

[Library search](#)

*Rabbetts, Ronald B.*

### **Clinical visual Optics**

4.ed. : Edinburgh : Elsevier/Butterworth Heinemann, 2007 - 470 p

ISBN:9780750688741

[Library search](#)