



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Physical Techniques For General Optometry 1

1920-2-E3002Q010-E3002Q024M

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#### Aims

Students must understand the neurophysiological mechanisms that regulate the visual system, know how to investigate and measure them using optometric techniques and interpret the results obtained to establish the correct intervention technique.

#### Contents

Functioning of visual system skills

Measurement techniques of various visual abilities (refraction, accommodation, ocular motility, binocularity)

Data analysis to define functioning of each individual optometric case

Establish the most effective treatment modality based on the results obtained

#### Detailed program

Visual acuity and contrast sensitivity

Retinoscopy techniques

Refraction deficit

Accommodation, convergence, Phorias and AC/A ratio

Binocularity and ocular movement

Anamnestic techniques

Preliminary test of visual exam

Phoropter visual analysis and open space analysis

Data analysis techniques and prescription rules

Visual deficit incidence

Aberrations of visual system

Ophthalmoscopy hints

Visual field

Chromatic vision

Low vision

## **Prerequisites**

Visual system anatomy knowledge

Optics and ophthalmic knowledge

## **Teaching form**

frontal lessons in classroom

## **Textbook and teaching resource**

W. Benjamin, "Borish's Clinical Refraction"

T. Grosvenor, "Primary Care Optometry"

M. Scheiman, B. Wick, "Clinical Management of Binocular Vision"

D. Elliott, "Clinical Procedures in Primary Eye Care"

A. Rossetti, P. Gheller, "Manuale di Optometria e Contattologia"

G. Paliaga, "L'esame del Visus"

G. Paliaga, "I Vizi di Refrazione"

## **Semester**

Second academic year divided into two modules for one semester each

## **Assessment method**

A partial written exam is provided with multiple choice questions and open questions for a total of about 30-40 questions.

The result of the partial test is the starting point of the final test.

The final exam consists of an oral test with the reasoned analysis of optometric cases and the decision making on the modalities of corrective optometric intervention. Furthermore, the first written test is taken into consideration to give the possibility to reason about any mistakes made.

## **Office hours**

To establish directly with the professor

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