



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Optometric Investigative Techniques - II

2425-1-F1702Q007

Aims

General aims of the module

To develop a student's theoretical understanding of the development of the eye and the visual system across childhood and extend the range of competencies of the student in paediatric optometry.

To improve the ability to make refraction in children and determine the appropriate optical correction of refractive errors and strategies to manage myopia progression

To allow students to interact with other professionals in this field.

Specific learning outcomes (LO)

By the end of the module, a successful student will gain:

-LO1: theoretical knowledge about the development of the eye and visual system across childhood and how to perform refraction in children

-LO2: practical skills to perform refractive and binocular vision assessment in children

-LO3: practical skills to perform visual assessment in children

-LO4: theoretical knowledge about the principle of correction with spectacles and contact lenses in children

Contents

The module will cover principles of ocular refraction, visual function assessment, and optical correction in children

Detailed program

Principles of paediatrics: general development in infancy (Principal theories of childhood development, general and ocular development in infancy, prematurity, common genetic problems in paediatrics, eye diseases and other

medical conditions affecting the eyes in children, history taking paediatric subjects)

1. Development of eye & visual system
2. Development of binocular vision & accommodation
3. Development of refractive errors in childhood
4. Examination methods in children: visual acuity, refractive error, binocular vision, accommodation, ocular health
5. Optometric factors in learning disabilities/difficulties
6. Optical prescribing for children
7. Myopia management in children
8. Children & contact lenses

Prerequisites

See curricular prerequisites for the admission Master's Degree Program

Teaching form

Learning objectives will be pursued through different teaching methods:

- Frontal Lecture (7 hours on topic n.1)
- Online non-interactive asynchronous lectures (12 hours on all topics: 2-9)
- Online interactive synchronous lectures (8 hours on topics n. 2-9)
- In person Labs/clinics's topics (12 hours on topics n. 5, 8)
- In person Online tutoring
- Student-managed learning

Textbook and teaching resource

Lecturers' handouts

Slides of the lectures

Scientific papers suggested by the lecturers

Semester

Second Semester

Assessment method

Short Essay, and Final summative assessment (Written: MCQs + 1 open question; oral exam)

Office hours

Appointment needed

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION
