UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Optometry Laboratory

2627-2-E3006Q009

Aims

The aims fall within the area of "Professional training" and refer to the following Dublin Descriptors:

1 – Knowledge and understanding

- Provide basic practical knowledge to perform an optometric visual examination aimed at determining the user's refractive status and assessing the case in order to prescribe the best optical correction

2 – Applying knowledge and understanding

- Develop skills in the use of instruments and technologies for optometric visual analysis

3 – Making judgements

- Develop the ability to reflect independently on the course content

4 – Communication skills

- Develop the ability to communicate effectively and contribute proactively to group work
- Develop the ability to communicate with the examined subjects

5 – Learning skills

- Develop the ability to reflect independently on the course content in order to acquire learning skills with a view to future developments in the field

Contents

- Eye examination
- Optometric performance tests for the classification of the optometric clinical case

Detailed program

Measurement of Visual Acuity, Contrast Sensitivity and curve construction, Static Retinoscopy, Refraction, Cover Test, Horizontal and Vertical phorias, Fixation Disparity, Degrees of Fusion, Measure of Vergences, Measure of Vertical Vergences, Accomodative Amplitude, Near Point of Convergence, Accomodative Facility, Vergence Facility, Negative and Positive Relative Accommodation, Fused Cross Cylinders, MEM and NOTT Retinoscopy, Ocular Motility, Colors Vision (Ishihara Tablets, Farnsworth Test and Lanthony Test), Addition attempt, Introduction to analysis with the graphical method, Introduction to integrated analysis.

Prerequisites

Knowledge deriving from the courses: Human and OcularAnatomy and Histology , Geometric and ophthalmic optics with laboratory, Optical and ophthalmic systems with laboratory, Physical techniques for Generic Optometry

Teaching form

The course takes place in the laboratory (except for some introductory lessons of the new tests that will take place in the classroom). During the lessons the students are divided into groups and, among the year, they are invited to change frequently groupmates to allow the examination and the study of different cases.

Textbook and teaching resource

The course uses the professional instrumentation present in the laboratories: paper and electronic optotypes, phoropter, trial frame, set lenses, prisms, retinoscope, ophthalmoscope, test with polarized filters, test with anaglyphic filters.

Textbooks:

David b. Elliott, "Clinical procedures in Primary Eye Care", Elsevier Saunders, Fourth Edition 2013

M. Scheiman & B. Wick, "Clinical Management of Binocular Vision. Heterophoric, Accommodative, and Eye Movement disorders ", Lippincott Williams & Wilkins, FifthEdition 2019

Other optional textbooks:

W. J. Benjamin, "Borish's clinical Refraction", Butterworth Heinemann Elsevier, Second Edition 2006

N. B. Carlson - D. Kurtz, Clinical procedures for ocular examination, McGraw-Hill Education, Fourth Edition, 2016

Other teaching resources provided by teachers on the e-learning platform

Semester

The course is annual from October to the end of May (approximately).

Assessment method

During the course, partial tests on all the subjects studied until then are proposed to the students. Their overcoming replaces the complete examination that will be held during the regular examination sessions.

The profit examination consists of a practical test carried out in the laboratory in which the student must perform a complete optometric examination and the execution of all the tests required by the teacher chosen among those studied during the year. During the exam the candidate will be asked questions about the tests procedures, the meaning of the results obtained and on what other investigations could be initiated to confirm or deny the hypothesis developed in relation to the clinical case that occurred or could virtually occur.

Office hours

By appointment before the lessons.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING