UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

## Principles of Ocular Pathology

**2223-3-E3002Q018**

### Aims

The course is intended to provide students with fundamental concepts on pathology relevant for their professional field.

### Contents

PATHOLOGY: Homeostasis and disease. Etiology and pathogenesis: disease-causing agents. Tissue damage. Inflammation and tissue repair. Oncology.

### Detailed program

GENERAL PATHOLOGY: Homeostasis and disease. Etiology and pathogenesis: disease-causing agents. Tissue damage. Acute and cronic Inflammation, tissue repair. Cellular growth alterations. Oncology.

OCULAR PATHOLOGY:
• Bulbar and ocular anatomy. Optical pathway anatomy.
• Ocular physiology: single binocular vision, extrinsic and intrinsic ocular motility, eyelid motility, lacrimation physiology, corneal physiology, pupillary reflexes, ocular hydrodynamic physiology, accommodation, vision physiology, epithelial physiology retinal pigment.
• Clinical and instrumental diagnostics. Visual acuity, visual field, main clinical signs, clinical instrumentation, visual acuity examination, visual field examination, biomicroscopy, tonometry, retinal angiography, optical coherence tomography, ultrasound.
• Refraction defects: myopia, hyperopia, astigmatism.
• Acute affections disabling visual function: hemovitreus, occlusion of the central artery and central retinal vein,

exudative age-related macular degeneration, rhegmatogenous retinal detachment, anterior ischemic opticopathy, papillitis, retrobulbar neurotticopathy.
• Chronic affections disabling the visual function: refractive errors, cataracts, open angle glaucoma, atrophic age-related macular degeneration.
• Mainly inflammatory affections: blepharitis, dacryocystitis, conjunctivitis, keratitis, dry eye, iridocyclitis, angle closure glaucoma (acute glaucoma).
• The eye and systemic diseases: diabetic retinopathy, hypertensive retinopathy, ocular immunopathology, papilledema, incomitating strabismus, exophthalmos.
• Ocular pathologies of pediatric interest: amblyopia, concomitant strabismus, leukocoria, congenital glaucoma.
• Ocular traumatology.

## Prerequisites

Propedeutic courses

## Teaching form

Ex cathedra lectures

## Textbook and teaching resource

PATOLOGIA GENERALE: Pontieri G.M., Elementi di Patologia per i corsi di Laurea in Professioni Sanitarie, III Edizione, Piccin
Slides and teaching materials

## Semester

III year, I Semester

## Assessment method

Written examination: thirty multiple-choice questions and one open-ended questions on the course topics
There will not be in itinere examinations.
The questions are aimed at ascertaining the effective acquisition of theoretical knowledge presented during the course.
The evaluation criteria are the followings: the correctness of the answers, the ability to understand the text of the open question, to argue the answer and to synthesize.
It is possible, at the request of the student, to take the exam in English.

## Office hours

Upon request

## Sustainable Development Goals

GOOD HEALTH AND WELL-BEING