



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Parasitic Zoonoses

2425-2-I0302D009-I0302D033M

Aims

Definition and classification of the main zoonoses and their transmission routes.

Parasite-host relationship.

Role of the laboratory technician in the application of diagnostic techniques and legislative regulations.

Contents

The course aims to provide the student with knowledge relating to pathogens and the methods of transmission of the main zoonoses to humans and to analytical methods for laboratory diagnosis and identification and current legislative regulations.

Detailed program

Definitions and classification of zoonoses: the parasite – host relationship, zoonoses and companion animals.

Origin of a zoonosis; the jump in species-spillover: the Coronavirus case.

Parasitic anthroponoses and geographical distribution.

- Arbovirus: West Nile, Usutu, Chikungunya, Dengue, Zika, tick-borne encephalitis, yellow fever, neuro-invasive Tuscany virus infections;
International epidemiology, and in particular the Italian one.
- Biological cycle of: Malaria, Babesiosis, Leishmaniasis, African and American trypanosomiasis, Loiasis and

lymphatic filariasis, Toxoplasmosis, Cryptosporidiosis, Teniosis, Cystic echinococcosis, Ascariasis, Trichocephalosis, liver flukes (liver fluke infestations), lung flukes (*Paragonimus westermani*), Botryocephalosis, Hymenolepis spp., Strongiloides stercoralis, Schistosoma spp., Anisakiosis, Toxocaryosis, Dracunculosis, Trichinellosis.

- Lyme disease, Turaemia.

Epidemiology and diagnostics and laboratory techniques: sample collection, sample preparation; extemporaneous and permanent staining, culture, immunochromatographic, serological and molecular techniques.

Prerequisites

Teaching form

All lessons are held in person and in delivery mode.

- 4 lessons of 2 hours carried out in presence mode

Textbook and teaching resource

M.Scaglia, S.Gatti, E.G.Rondanelli PARASSITI E PARASSITOSI UMANE, Selecta Medica

G. Antonelli, M. Clementi, G. Pozzi, G.M. Rossolini PRINCIPI DI MICROBIOLOGIA MEDICA, Casa Editrice ambrosiana

F.Bernieri, D.Crotti, D.Galli, A.Raglio MANUALE ILLUSTRATO DI DIAGNOSTICA PARASSITOLOGICA, Bio-Dev

I.De Carneri PARASSITOLOGIA GENERALE E UMANA, Casa Editrice Ambrosiana

G.Cancrini PARASSITOLOGIA MEDICA ILLUSTRATA, Lombardo Editore in Roma

Terry A. Brown BIOTECNOLOGIE MOLECOLARI, Zanichelli

www.cdc.gov/parasites

www.amcli.it Percorsi diagnostici

Semester

First semester

Assessment method

Short essay to evaluate the ability to independently reflect on the topics covered in class.

Office hours

On appointment requested by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY
