

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Metabolic Diseases

2526-4-H4102D029-H4102D092M

Aims

In this course, the primary aim is to provide students an in depth understanding of diabetes pathophysiology, diabetes complications, diabetes prevention and diabetes therapy. Current and historic milestones of diabetes research, prevalence, diagnosis, and therapy are introduced throughout the course. During this course, we will also focus in particular on diabetic renal complications of type 1 and type 2 diabetes. A further aim of the course is also obesity and related complication and dyslipidemias.

Contents

Diabetes (Type 1 and Type 2 diabetes). Dyslipidemias. Uric acid metabolism and Gout. Obesity and underweight.

Detailed program

DIABETES AND METABOLIC DISEASES Type 2 Diabetes Mellitus, Type 1 Diabetes Mellitus, Gestational diabetes, Complications of Diabetes Mellitus, hypoglycaemia, control of energy metabolism, obesity, gout, dyslipidemias, Gastrointestinal Hormones.

Upon active participation in this course you will be able to:

- Describe and differentiate pathophysiology of type 1 diabetes, type 2 diabetes, and diabetic complications
- Outline the history and prevalence of type 1 diabetes, type 2 diabetes, and diabetic complications
- Outline diagnostic criteria, biomarkers, and current clinical goals for type 1 and type 2 diabetes therapy
- Present pharmacological principles and mode of action of major drugs used for the treatment of diabetes and its complications
- · Identify and describe the features of diabetic renal disease

- · Identify the role of obesity in human health
- Identify the role of dyslipidemias on cardiovascular disease

Prerequisites

Propaedeutic skills in anatomy, biochemistry and human physiology

Teaching form

- Frontal lessons
- Description and analysis with discussion of clinical cases

All the course activities will be held in English

Textbook and teaching resource

- Harrison's Principles of Internal Medicine 21th Edition 2022, McGraw-Hill
- Greenspan's Basic and Clinical Endocrinology, Tenth Edition 2017, McGraw-Hill
- UpToDate

Semester

Second semester

Assessment method

- Multiple choice test comprising 3 questions with only one correct answer (among 4) aimed at evaluating global comprehension of course program. Each correct answer is scored 1.
- Oral examination on the topics covered during the lectures, discussion on clinical problem solving and clinical
- · case analysis
- · All assessments will be done in English

Office hours

Monday, Tuesday, Friday 9.00 - 11.00 To get an appointment, please contact the teacher by e-mail to: roberto.trevisan@unimib.it

Sustainable Development Goals

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