



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Metabolic Diseases

2324-4-H4102D029-H4102D092M

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#### 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 diabete). Dyslipidemias. 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

## **Teaching form**

- Frontal lectures
- Clinical case description and analysis

In the event of pandemic emergency period, the lectures and clinical case/problem discussions will be held remotely by synchronous online videoconference or recorded video lectures available on demand

All course activities will be held in English language

## **Textbook and teaching resource**

- Harrison's Principles of Internal Medicine 20th Edition 2018, McGraw-Hill
- Greenspan's Basic and Clinical Endocrinology, Tenth Edition 2017, McGraw-Hill
- UpToDate

## **Semester**

Second semester

## **Assessment method**

- Multiple choice test comprising 30 questions with only one correct answer (among 4/5) 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 language

## **Office hours**

Monday, Tuesday, Friday 9.00 - 11.00

## **Sustainable Development Goals**

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

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