



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Vascular Surgery

2021-4-H4102D024-H4102D086M

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#### Aims

This course focuses on pathophysiology, clinical evaluation, diagnosis and treatment of vascular diseases.

#### Contents

The lectures will cover the most important aspects related to surgical treatment of vascular pathologies as aneurysms, carotid disease, peripheral artery disease. Students will acquire the basic knowledge required to diagnose the most important vascular disease and will learn about treatment indications and main surgical procedures.

#### Detailed program

- Atherosclerosis and vulnerable plaques: plaque rupture, embolization and thrombosis.
- Clinical evaluation of patients with vascular disease. Arterial pulses.
- Carotid atherosclerosis. Assessment of carotid plaque morphology and rate of carotid stenosis. Definition of symptomatic carotid plaque. Surgical and endovascular treatment of carotid stenosis.
- Subclavian Steal Syndrome (SSS).
  
- Thoracic Outlet Syndrome (TOS).
- Peripheral artery disease (PAD). Leriche syndrome. Arterial Ulcers. Lower limb revascularization.

- Hypoperfusion, hypoxia, ischemia and necrosis. Acute limb ischemia. Compartmental syndromes. Ischemia-reperfusion injury
- Aortic aneurysm. Ruptured abdominal aortic aneurysm. Indication to treatment. Surgical and endovascular treatment
- Post-catheterization pseudoaneurysms. Traumatic pseudoaneurysm and blunt aortic injury
- Mycotic aneurysm.
- Acute aortic syndromes. Aortic dissections, classification, pathophysiology, management. Intramural hematoma (IMH). Penetrating aortic ulcer (PAU)
- Deep venous thrombosis. Triad of Virchow. Superficial venous thrombosis and phlebitis. Venous ulcers.
- Chronic venous insufficiency. CEAP Classification. Conservative, elastocompressive, surgical and thermal ablation treatment.
- Differential diagnosis of edema, pain and inflammation in lower limbs.

## **Prerequisites**

- Basic anatomy, physiology, pathology and diagnostics of vascular diseases
- English language

## **Teaching form**

- During COVID-19 emergency period, the lectures (including theoretical concepts, clinical examples and case presentations) will be held remotely by asynchronous online videoconference (recorded video lectures available on demand)
- All course activities will be held in English language

## **Textbook and teaching resource**

- Schroeder Jürgen. Peripheral Vascular Interventions: An Illustrated Manual. 2013 Edition. Thieme
- Moore WS, Jimenez JC. Handbook of Vascular Disease Management. 2011 Edition. World Scientific

## **Semester**

- First semester

## **Assessment method**

Written exam with multiple choice quiz comprising 30 questions with only one correct answer (among 5) aimed at evaluating global comprehension of course program.

Exams will be done in English language.

## **Office hours**

By email appointment at [alberto.froio@unimib.it](mailto:alberto.froio@unimib.it)

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