UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

General Surgery 2

2526-2-I0101D012-I0101D039M

Aims

General Objective

By the end of the course, students will be able to:

Knowledge and Understanding
Describe signs and symptoms, pathophysiological mechanisms, the main steps of the diagnostic process, and the therapeutic approach to selected surgical clinical conditions.

Applying Knowledge and Understanding
Integrate anatomical, physiological, pathophysiological, and clinical concepts to interpret specific surgical conditions and to understand diagnostic choices and related therapeutic rationales.

Making Judgements
Develop the ability to critically analyze surgical clinical cases and therapeutic decisions through case discussions, active learning methodologies, and classroom exercises.

Communication Skills
Use appropriate scientific language to describe and discuss surgical clinical cases, including in group or interprofessional settings during educational activities.

Learning Skills
Strengthen autonomy in study and reflective learning skills through clinical case analysis, guided exercises, and active learning methods proposed during the course.

Specific Objectives

By the end of the course, students will be able to:

Knowledge and Understanding

- Describe the characteristic signs and symptoms of selected surgical clinical conditions*
- Explain the main underlying pathophysiological mechanisms*
- Recognize the essential steps of the diagnostic process and the most commonly used diagnostic tools*
- Illustrate the main therapeutic approaches and their clinical objectives*
- Applying Knowledge and Understanding*
- Relate observed clinical data (signs and symptoms) to the corresponding pathophysiological processes
- Analyze the implications of diagnostic tests for clinical and therapeutic decision-making
- Interpret clinical and laboratory data in an integrated manner within the discussed surgical cases

Making Judgements
Critically reflect on diagnostic and therapeutic choices in surgical clinical cases.
Discuss possible alternative or complementary pathways to those proposed, based on scientific evidence, through active and simulated learning activities.

Communication Skills
Clearly present key clinical, pathophysiological, and therapeutic concepts using appropriate technical language.
Effectively participate in group discussions on clinical cases presented in class, demonstrating synthesis and reasoning skills.

Learning Skills
Independently identify areas requiring further study to understand complex clinical scenarios.
Actively use learning resources (clinical cases, exercises, discussions) to improve both content comprehension and study methods.

Contents

The course covers the surgical approach to the person undergoing surgery in a number of surgical specialities: Thoracic Surgery, Gynaecology, Cardiac Surgery, Vascular Surgery, Abdominal Surgery (intestinal tract surgery with stomal packing), Urology, Neurosurgery, Otolaryngology, Bariatric Surgery, Vulnology Surgery, Maxillofacial Surgery.

Detailed program

- **Cardiac surgery:** ischaemic heart disease and pulmonary embolism (outline), aortic and mitral valvulopathy, pathology of the thoracic aorta
- **vascular surgery:** carotid stenosis, abdominal aortic aneurysm, varices and thrombophlebitis, arteriopathies

- **Thoracic surgery**: pneumothorax, pleural effusions, lung tumours.
- **Neurosurgery**: cerebral tumours, cerebral haemorrhage, hydrocephalus, head trauma (briefly).
- **Oculistics**: glaucoma, cataracts, retinal detachment, neoplasms (briefly).
- **Otorhinolaryngology**: otitis, tonsillitis, epistaxis, tumours of the larynx, thyroid surgery
- **Urology**: neoplasms of the bladder, prostate, kidney (outline), urological surgery (phimosis, varicocele, testicular neoplasm, etc.).
- **maxillofacial surgery**: neoplasms, trauma (outline), cleft lip and palate.
- **Bariatric surgery** various types of approach
- **Gynaecology surgery** main benign and malignant pathologies of the uterus, ovary and salpinx. Surgery and fertility (briefly)
- **Vulnology surgery** surgical approach to the management of complex skin lesions

Prerequisites

Defined by the academic regulations.

Teaching form

8 two-hour lessons delivered in face-to-face mode through a tele-teaching system.
2 two-hour lessons delivered remotely.

Textbook and teaching resource

- Lise M. (2017), Chirurgia per le professioni sanitarie, V edizione Piccin, Padova
- Brugnolli, A. & Saiani, L., 2022. In: A. Di Leo, a cura di, Trattato di Chirurgia e Infermieristica. IV ed. Napoli: Idelson-Gnocchi.
  Teaching material provided by the lecturer

Semester

2nd Year, 2nd Semester

Assessment method

See main course page.

Office hours

See main course page.

Sustainable Development Goals

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