

Degree in Medicine and Surgery

Teaching: General Surgery

SSD: MED/18

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Total CFU: 9

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PREREQUISITES

Basic knowledge of cervical, thoracic, and abdominal anatomy is required, along with understanding of physiology, pathophysiology, common signs/symptoms, and main diagnostic techniques.

LEARNING OBJECTIVES

- Acquire appropriate knowledge of surgical pathologies.
- Learn methodological tools for accurate clinical diagnosis.
- Analyze laboratory tests, instrumental examinations, endoscopic and radiological procedures (invasive and non-invasive), and personalized surgical treatments.
- Evaluate and resolve clinical surgical problems, balancing benefits, risks, and costs according to evidence-based medicine principles.

LEARNING OUTCOMES

The course focuses on the acquisition of the following knowledge and skills:

- Understanding diagnostic criteria and treatment principles for general and oncological surgery, emergency, bariatric, endocrine, and breast surgery.
- Appropriate use of diagnostic techniques and integration into patient therapy.
- Surgical indications, timing, strategies, planning, techniques, and management of complications.

Knowledge and Understanding

- Understand the surgical diseases affecting various organ systems.
- Gain the necessary clinical and surgical methodology to address the main surgical pathologies.



• Knowledge of risk management in surgery.

Ability to Apply Knowledge and Understanding

- Interpret laboratory tests, instrumental, endoscopic, and radiological exams (both invasive and non- invasive) to perform the most appropriate personalized surgical treatment.
- Learn the functionality of diagnostic tools, when to use them, and how to perform them.

Communication Skills

- Present topics orally in an organized and coherent manner.
- Use appropriate scientific language aligned with the subject of discussion.

Autonomy of Judgment

- Recognize the importance of in-depth knowledge of topics in line with proper medical education.
- Identify the critical role of correct theoretical knowledge of the subject in clinical practice.
- Acknowledge the potential applications of acquired skills in future career paths.
- Assess the significance of the knowledge gained in the broader process of medical education.

PROGRAM

General Surgery

- Diseases and anomalies of the diaphragm: hiatal hernia, diaphragmatic hernias, post-traumatic hernias, and post-traumatic diaphragmatic hernias. Functional and benign surgical diseases of the esophagus, stomach, duodenum, and small intestine;
- Clinical presentation and surgical approach to colon cancer (right and left side), rectal cancer, esophageal cancer, gastric cancer, small intestine cancer, pancreatic cancer, peritoneal cancer, retroperitoneal cancer, and sarcomas;
- Inflammatory Bowel Diseases (IBD): surgical indications;
- Diverticular disease of the colon: surgical treatment alternatives;
- Gallstone disease: surgical indications;
- Acute abdomen and trauma in surgery;
- Colon polyps: indications for surgical treatment;
- Rectal abscess, anorectal fistula, pilonidal disease: surgical treatment;
- Abdominal wall surgery: inguinal hernia, incisional hernia

Endocrine and Bariatric Surgery

- Principles of thyroid, parathyroid, and adrenal gland surgery;
- Parathyroid surgery (surgical anatomy, primary, secondary, and tertiary hyperparathyroidism);
- Adrenal gland surgery (surgical anatomy, Cushing's syndrome, primary hyperaldosteronism, pheochromocytoma, adrenal incidentaloma, adrenocortical carcinoma);
- Neuroendocrine tumors of the digestive tract (GEP-NET);
- Bariatric surgery: treatment of obesity and related disorders.



Breast Surgery

- Benign and malignant breast diseases: surgical treatment principles.
- Principles of modern oncoplastic surgery.

TEACHING METHODS

The course is structured into 100 hours of frontal teaching, divided into 2-hour lessons according to the academic calendar. Lessons will be conducted using educational tools such as PowerPoint/Keynote presentations with explanatory diagrams, illustrations, and representations that describe clinical scenarios and anatomical and pathophysiological structures. Videos and animations will also be used to complement the processes described in class. Attendance is mandatory.

ASSESSMENT METHODS

The assessment of students' preparation will consist of a written test with 31 multiple-choice questions covering all teaching modules, with only one correct answer per question. Students will have 60 minutes to complete the exam.

To pass the exam, students must answer at least 18 questions correctly. To achieve the maximum score (30/30), students must provide 30 correct answers. Honors (30L) is awarded for answering all 31 questions correctly.

The written test may be supplemented by an oral exam if the student wishes to improve their grade.

Failed: Poor or deficient knowledge and understanding of topics; limited ability to analyze and synthesize; frequent generalization of required contents; inability to use technical language.

18–20: Barely sufficient knowledge and understanding of the topics; sufficient analytical and synthesis skills and independent judgment.

21–23: Routine knowledge and understanding of the topics; correct analytical and synthesis skills with coherent logical reasoning.

24–26: Fair knowledge and understanding of the topics; good analytical and synthesis skills.

27–29: Comprehensive knowledge and understanding of the topics; significant analytical and synthesis skills, and good independent judgment.

30–30L: Excellent level of knowledge and understanding of the topics; remarkable analytical, synthesis, and independent judgment skills.

REFERENCE TEXTS

- Sabiston Textbook of Surgery, 19th Edition. The Biological Basis of Modern Surgical Practice.
- DeVita et al. Cancer: Principles & Practice of Oncology;
- Shields et al. General Thoracic Surgery;
- Current Surgical Therapy 14th Edition by John L. Cameron MD (Editor), Andrew M. Cameron MD PhD FACS (Editor)



- Schwartz's Principles of Surgery 11th Edition by F. Brunicardi (Author) et al.
- Srb's Manual of Surgery 5th Edition by Sriram Bhat (Author)
- Current diagnosis and treatment Surgery di Gerand Doherty 15 ed. Lange McGraw- Hill education
- Zollinger's Atlas of Surgical Operations, Tenth Edition 10th Edition by Robert Zollinger (Author), E. Ellison (Author)
- Netter's Surgical Anatomy and Approaches (Netter Clinical Science) 2nd Edition by Conor P Delaney MCh PhD FRSCI (Gen) FACS (Author)
- Top Knife: The Art and Craft of Trauma Surgery by Dr Asher Hirshberg MD FACS (Author), Dr Kenneth L Mattox MD FACS (Author), Mary K Allen (Editor), Dr Scott Weldon (Illustrator)
- Pocket Guide to the Operating Room Fourth Edition by Maxine A. Goldman BS RN (Author)