

Degree programme	Type	Course
Medicine	OB	3

Contact lecturer

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Group languages

You can consult this information at the [end](#) of the document.

Prerequisites

Students should have successfully attained the basic skills taught in the first and second year subjects, especially those related to Anatomy and Physiology.

As they enter the health care and clinical setting and come into contact with patients, students enrolled in this course undertake the following: to observe the rules of conduct set out on the website of the Faculty of Medicine at UAB; to be familiar with the recommendations document regarding medical students's conduct during the clinical training cycle; and to abide by the following legislation:

-The Spanish Data Protection Act (15/1999)

- The Spanish law regulating the patient's autonomy, rights and obligations regarding information and clinical documentation (41/2002)

Students must also accept the risks inherent in the field of clinical activity, and must be familiar with the vaccination document recommended for students of the Faculty of Medicine at the UAB.

Objectives

General objectives:

- Students should understand the foundations (the biological bases) of surgery and major surgery syndromes

- Students should understand and be able to perform basic surgical techniques

The objectives of this course are complemented by those of the courses in Physiopathology and Clinical Semiology.

Learning outcomes

1. Inform patients about all stages of their healthcare: preoperative, intraoperative, immediate postoperative (critical care unit), ward and monitoring after discharge.
2. Inform on surgical alternatives.
3. Correctly fill in an informed consent form.
4. Identify the first preventive measures (protection and warning) after accidents outside hospitals.
5. Give correct information on protective measures to avoid harmful energy transmission in traumatism.
6. Define prophylactic measures for post-operative complications, focusing on those that can be applied by general practitioners to out-patients.
7. Give correct information on general surgical indications and pre-operative risk.
8. Identify the organism's response to surgery and the contributions of minimally invasive surgery.
9. Define the interactions of biomaterials.
10. Define the bases, indications, tolerance and procedures in transplant donors and recipients.
11. Identify the principal indications of electrophysiological techniques (ECG, EEG, EMG, etc.).
12. Recognise the characteristics of tissues in different injury situations.
13. Identify the reasons for manifestations that help to diagnose the major surgical syndromes.
14. Recognise the organic material that is useful as a biological sample and the method for obtaining it by surgical procedures for further processing.
15. Assess the biomechanics of accidents in the care strategy for a traumatism.
16. Know the physiopathology of the different types of surgical wounds, scars, and haemorrhages.
17. Recognise the factors that increase the risk of post-operative complications in order to apply the corresponding prophylactic measures.
18. Identify the fundamental principles of surgical approaches in conventional and endoscopic surgery.
19. Identify the fundamental principles of surgical interventions in palliative care.
20. Define the reasons for complications in surgery procedures.
21. Formulate a critical analysis of the objectives of surgical interventions, in the face of the adverse effects that they could have.
22. Assess the risk-benefit ratio of surgical procedures on the basis of a medical record.
23. Assess the indications and contraindications of transfusions and transplants.
24. Identify how the current state of the different surgical diagnosis and therapy procedures has been reached, the many questions still to be answered, and potential future advances.
25. Ask the right questions during anamnesis previous to a possible intervention for patients with a surgical process.
26. Seek out the significant elements of the examination of a surgical patient.
27. Perform basic surgical procedures: cleaning, haemostasis and suturing of wounds.
28. Request any additional tests that may be useful, depending on the anamnesis and physical examination, to complete the study of the major surgical syndromes in preparation for a surgical intervention.
29. Recognise and identify life-threatening situations by manual means and instrumental monitoring procedures.
30. Respond in life-threatening situations, acting and correcting in simulations, using manual means and instrumental procedures.
31. Identify the general principles of anaesthesia and resuscitation.
32. Describe the fundamentals of rehabilitation, promotion of personal autonomy, of the functional adaptation of / to the environment, and other physical procedures in morbidity, to improve the quality of life.
33. Analyse life-threatening situations.
34. Select and use the necessary instruments and material to perform the typical procedures of minor surgery.
35. Perform simulated procedures for obtaining biological samples for minor surgery.

36. Perform simulated therapeutic procedures for minor surgery.
37. Apply prophylactic measures for post-operative complications, focusing on those that can be applied by general practitioners to out-patients.
38. Apply thromboembolic prophylactic measures.
39. Manage disinfection and sterilisation techniques.
40. Convey the relevant information on the lesion, its evolution and treatment possibilities.
41. Order and write a medical record in a way that allows the other documents needed by a surgical patient to be written, including those that use non-technical terminology.
42. Identify the main data on a surgery report and on the documentation of a surgical patient.
43. Set up a database to monitor patients who have undergone surgery.
44. Make correct use of the international surgical nomenclature.
45. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
46. Organise and plan time and workload in professional activity.
47. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
48. Communicate clearly, orally and in writing, with other professionals and the media.

Contents

The history of diagnostic and therapeutic surgical procedures; possible future developments currently in the research phase; and general and specific areas of surgery. Preoperative evaluation, informed consent (generic and adapted to each intervention), surgery report form and other legal medical records referring to the surgical patient.

The operating theatre: structure, layout and functioning of the theatre. Classification and management of instrumental and surgical material. Basic surgical manoeuvres and their application in elementary surgical procedures. Applications of surgical anatomy to approaches to the main surgical areas, Instrumental procedures useful in the care, evaluation and monitoring of surgical patients. Pathophysiology of wounds (including burns, freezing and other special types of wounds).

Haemorrhage and haemostasis in surgery, transfusions. Scarring. Artificial materials in surgery. Systemic response to surgery. Characteristics of the tissues in different situations of surgical injury: congenital and acquired alterations in cell growth, inflammation and traumatism. Concepts and classification of cancer surgery. Concepts, and types of transplant surgery and its organization. Surgical infections in the community: local and systemic pathophysiology. Injuries due to physical agents: concept, frequency, and classification. Care of elementary traumatic injuries: wounds and others. Polytraumas: pathophysiology and initial care: scenarios, support units, primary and secondary recognition.

Diagnostic and therapeutic study of the main surgical syndromes of the various compartments of the human body. General principles of anaesthesia and resuscitation. Monitoring of surgical patients in critical care units. Fluid and electrolyte balance, Nutrition and diet therapy in the surgical patient. Routes of access to the venous system. Drains and ostomies. Postoperative care. Complications of surgery and prophylaxis. Nosocomial infections in surgical patients: thromboemboli and others.

Theory classes (23h):

1 History of surgery

- 2 The operating theatre
- 3 Surgery of traumatisms
- 4 Community surgical infections
- 5 Principles of benign and oncological tumor surgery
- 6 Transplantation of organs
- 7 Principles of preoperative surgery
- 8 Systemic response to surgery
- 9 Anaesthesia and pain control
- 10 Alterations of hydroelectrolytic balance and acid base
- 11 Nutritional support in the surgical patient
- 12 Wound healing
- 13 Haemorrhage and haemostasis in surgery
- 14 Surgical site infections
- 15 Postoperative nosocomial infections away from the surgical site
- 16 Main surgical syndromes. Compartmental syndromes
- 17 Shock

18 Acute abdomen 1

19 Extrahepatic obstructive jaundice

20 Digestive haemorrhages

21 Politraumasms 1. Concept, pathophysiology and initial care scenarios

22 Politraumasms 2. Primary and secondary recognitions

23 Postoperative complications

Laboratory Practice (6h)

Drains and Catheters

Basic Life Support

Advanced Clinical Skills Practice (6h)

Access to the superficial venous system

Principles of suturing and treatment of minor injuries

Advanced Clinical Simulation Practice (5h)

Acute Abdomen . Peritonitis

Intestinal obstruction

Hospital practices (15h). General Surgery Service.

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
PREPARATION OF WRITTEN STUDIES / PERSONAL STUDY / READING ARTICLES / REPORTS OF INTEREST	65	2.6	
THEORY (TE)	23	0.92	
ADVANCED CLINICAL SIMULATION PRACTICE	5	0.2	
ADVANCED CLINICAL SKILL PRACTICE	6	0.24	
LABORATORY PRACTICALS (PLAB)	6	0.24	
CLINICAL CARE PRACTICALS (PCAh)	15	0.6	

This Guide describes the framework, contents, methodology and general norms of the course, in accordance with the current curriculum. The final organization of the course at each Hospital Teaching Units (i.e., with regard to the number and size of groups, the course dates and dates of examinations, assessment criteria and exam review procedures) will be explained on each Teaching Unit's web page and also on the first day of class of each course by the tutors responsible for the course at the Unit. If the tutors consider appropriate, and depending on the resources available at each Teaching Unit, some of the contents of the theory classes may be taught and evaluated in the simulation classes using the corresponding methodology.

For the present academic year, the following teachers have been appointed by the departments to take charge of the course (at the Faculty and at the Unit):

Department(s) responsible: Surgery

Head of Faculty: José Troya Díaz

Person in charge at the Units:

Sant Pau: Antonio Moral

Vall d'Hebron: Manuel López Cano

Germans Trias i Pujol: José Troya Díaz

Parc Taulí: Francisco Javier García Borobia

Methodology

23 h Theory

6 h Laboratory Practicals

6 h Advanced Clinical Skill Practice

5 h Advanced Clinical Simulation Practice

There will also be 15 hours of clinical care practicals at the General Surgery Service.

In the current exceptional circumstances, at the discretion of the teachers and also depending on the resources available and the public health situation, some of the theoretical classes, practicals and seminars organized by the Teaching Units may be taught either in person or virtually

Annotation: within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
Written assessments using objective tests: multiple choice	30%	1	0.04	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48
Practical assessments: Objective and structured clinical evaluation	20%	1	0.04	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48
Practical evaluation	10%	1	0.04	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48
Written assesments using objective tests: restricted choice tests	30%	1	0.04	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48
Oral assessments:continuous assessment with direct contact with students	10%	1	0.04	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48

The competences acquired by students in this subject will be evaluated by means of:

Oral assessments: continuous assessment with direct contact with students (10%).

Practical assessments: Objective and structured clinical evaluation (20%).

Practical evaluation (10%).

Written assessments using objective tests: multiple choice tests (30%) and restricted tests (30%).

Following UAB regulations a minimum of three evaluatives moments and two evaluatives typologies will be scheduled

Students who do not perform the theoretical and practical assessment tests will not be considered for the examination and will lose their course registration fee.

Students who fail the course may sit a reassessment test scheduled according to the calendar.

This subject does not provide the single assessment system

For this subject, the use of Artificial Intelligence (AI) technologies is permitted exclusively in support tasks, such as bibliographic or information search.

Any form of academic misconduct in an assessment activity-including academic fraud, plagiarism, or the unauthorized use of artificial intelligence (unless such use is explicitly permitted in the course syllabus)-that

results in a significant alteration of the assessment outcome will lead to a grade of zero (0) for that assessment.

Where the course syllabus specifies that achieving a minimum mark in that assessment is a mandatory requirement for passing the course, or where multiple instances of academic misconduct occur within the same course, the final grade for the course will be recorded as zero (0).

In addition, students found to have engaged in such misconduct may be subject to disciplinary procedures in accordance with the University's academic regulations.

Bibliography

Cirugía / [coord.] J.L. Balibrea Cantero ; [autores F. Acín García ...et al.] Madrid : Marbán, cop. 2007

Lo Esencial en ECOE en medicina y cirugía / Aneel Bhangu Bhangu, Aneel A. Barcelona : Elsevier, cop. 2010

Sabiston tratado de cirugía : fundamentos biológicos de la práctica quirúrgica moderna / Courtney M. Townsend, Barcelona : Elsevier España , [2018]

Mandell, Douglas y Bennett compendio de enfermedades infecciosas / [editat per]: John E. Bennett, MD, MACP, Raphael Dolin, MD, Martin J. Blaser, MD Barcelona : Elsevier, [2017]

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Recursos d'Internet https://www.aecirujanos.es/Guias-AEC_es_2_1.html

Software

there is no specific software

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE