



Medical-Surgical Placement I

Code: 106715 ECTS Credits: 7

Degree	Туре	Year	Semester
2502442 Medicine	ОВ	4	0

Contact

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Teaching groups languages

You can check it through this <u>link</u>. To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Teachers

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Prerequisites

It is advisable for the student to have acquired the competencies developed in previous courses, especially the theoretical subjects corresponding to the practical aspects of the current course.

Basic competencies in general and specific physiology, pathophysiology, and semiology of the cardiovascular system, respiratory system, and musculoskeletal system.

Knowledge of human anatomy, histology, genetics, molecular biology, and pharmacology, both general and specific to the cardiovascular system, respiratory system, and musculoskeletal system.

Sufficient knowledge of the psychological foundations of health and disease, as well as an adequate level of knowledge in interpersonal communication and professional behavior.

The students will commit to preserving the confidentiality and professional secrecy of the data they may access during their learning in healthcare services. They will also maintain a professional ethical attitude in all their actions.

Objectives and Contextualisation

Obtaining and developing a medical history that contains all the relevant information, structured and patient-centered, taking into account all age groups, gender, cultural, social, and ethnic factors.

Performing a general physical examination and system-specific examination appropriate to the patient's age and gender, in a comprehensive and systematic manner, as well as a mental assessment.

Ordering appropriate complementary tests for the diagnosis of major diseases of the cardiovascular system, respiratory system, and musculoskeletal system, based on the studied clinical cases.

Effectively providing the patient and/or their companion with relevant information about the pathological process, its foundations, and consequences, including delivering bad news appropriately.

Competences

- Demonstrate understanding of the manifestations of the illness in the structure and function of the human body.
- Establish a diagnostic approach and a well thought-out strategy for action, taking account of the results
 of the anamnesis and the physical examination, and the results of the appropriate complementary tests
 carried out subsequently.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Indicate the basic diagnosis techniques and procedures and analyse and interpret the results so as to better pinpoint the nature of the problems.
- Indicate the most suitable treatment for the most prevalent acute and chronic processes, and for the terminally ill.
- Obtain and prepare a patient record that contains all important information and is structured and patient-centred, taking into account all age and gender groups and cultural, social and ethnic factors.
- Perform a general and a system-by-system physical examination appropriate to the patient's age and sex, in complete and systematic way, and a mental evaluation.

 Recognize one's role in multi-professional teams, assuming leadership where appropriate, both for healthcare provision and for promoting health.

Learning Outcomes

- 1. Anticipate and compare information for good decision-making.
- 2. Describe the effects on all organs and systems of diseases of the blood, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the genitourinary system, infectious pathologies and diseases of the elderly.
- 3. Describe the main pathological situations of the musculoskeletal system, the blood, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the genitourinary system, infectious pathologies and diseases of the elderly.
- 4. Design the treatment for the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
- 5. Explain the mechanisms by which illness affects the structure and function of the human body.
- 6. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- 7. Indicate the complementary examinations for diagnosing the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
- 8. Perform a suitable physical examination for the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
- 9. State the most probable diagnosis for the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
- 10. Write a report giving guidance on diagnosing the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.

Content

Clinical care practices in the medical and surgical field in the hospitalization rooms, day hospital, external consult

- General aspects of the clinical relationship and the concepts of health and illness.
- Care methodology of the perioperative process
- Etiology, pathophysiology, semiology and clinical propaedeutics, major syndromes and disease manifestations
- Diagnostic and therapeutic procedures for the most common diseases
- Functional exploration of the different devices and systems.

- Surgical act. Follow-up of the patient after a surgical procedure. Control of the consequences of surgery
- Surgical syndromes

The clinical experience can be completed by attending the various sessions: care clinics, case closing sessions,

Methodology

This guide describes the framework, content, methodology, and general rules of the subject, in accordance with the current curriculum. The final organization of the subject regarding the number and size of groups, scheduling and examination dates, specific evaluation criteria, and exam review will be specified by each Hospital Teaching Unit (HTU), which will provide explicit information through their websites and on the first day of class for each subject, through the responsible professors of the HTUs.

Each specialty will adapt the assigned practice hours to reinforce the content of the theoretical subjects MIC I and MIC II as effectively as possible. The common methodology will involve integrating students within each assigned medical team, actively participating and interacting with the instructors. Students will receive guidance in the specific learning activities conducted during the regular clinical practice of the medical team (cardiorespiratory auscultation, joint examination, radiology reading, vascular examination, etc.), as well as basic information on the functioning of diagnostic and/or therapeutic equipment such as spirometry, echocardiography, capillaroscopy, bronchoscopy, doppler ultrasound, ankle-brachial index, CT angiography, among others.

Practice distribution (by speciality)	hours	ECTS
Angiology and Vascular Surgery	11,25	0,45
Cardiology	19	0,76
Orthopedic and Traumatological Surgery	30	1,2
Thoracic Surgery	3,75	0,15
Pneumology	26	1,04
Rheumatology	15	0,6

Students will be involved in the activities of a surgical service to observe and/or perform supervised assistance, training, or research tasks.

Each day of practice, students will record the most significant activity carried out to complete the portfolio summarizing their stay in the specific specialty. This summary, along with the feedback from the assigned tutor, will form the basis of the evaluation (60%). The remaining portion (40%) will consist of a more in-depth analysis of two cases observed during the practice period, one medical and one surgical case.

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.

Activities

Learning

Title	Hours	ECTS	Outcomes
Type: Directed			
ASISTENCIAL CLINICAL PRACTICES (PCAh)	105	4.2	1, 2, 3, 4, 8, 5, 9, 6, 7, 10
Type: Autonomous			
PAPERS ELABORATION / PERSONAL STUDY / READING ARTICLES / REPORTS OF INTEREST	65	2.6	1, 2, 3, 4, 8, 5, 9, 6, 7, 10

Assessment

This subject does not provide the single assessment system

The students must have a minimum attendance of 80% in the practical sessions of each specialty in order to be evaluated. Justified absences may be made up later in a manner deemed appropriate, feasible, and convenient by each specialty and Teaching Unit. If the 80% attendance cannot be met, the student will need to retake the course the following year.

The following competencies are assessed:

Attendance, punctuality, and participation in clinical practice with the assigned physician, who will evaluate on a scale of 0-10 points for each responsible person in the Teaching Unit. Maximum score: 20% of the final grade.

Portfolio: Students will record the medical or surgical activity of the most relevant case they have attended that day in a table according to the available model in the Virtual Classroom. It should specify the specialty where the practice took place, the name of the physician or medical/surgical team responsible for the patient, medical history number, the patient's clinical condition, identification of the medical or surgical problem, the pathology, and the diagnostic or therapeutic action performed, as well as the key concepts to remember. Each case should not exceed one DIN A4 page in length. The objective of the portfolio is for students to extract the most significant aspects of the case, such as one or two key concepts to remember. It will be evaluated on a scale of 0-10 by each responsible person in the Teaching Unit. Maximum score: 40% of the final grade.

Written clinical case: Two clinical cases, one surgical and one medical, will be described from those previously recorded in the portfolio. In order to distribute the workload evenly among all professors, the specialty of the assigned clinical cases to students will be proposed by the Teaching Unit. There will be the possibility of exchanging assigned cases with prior communication to the responsible persons of the corresponding subjects. Length: minimum of 1,250 words and a maximum of 3,000 words. It is recommended to include radiological images, records, etc.

The structure of each case will consist of:

Cover page: Student's name, student identification number, date, specialty, and a suggestive title for the case (e.g., "Acute COPD Exacerbation," "Catheterization," "Femur Fracture," "Aortic Prosthesis," "Rheumatoid Arthritis," etc.).

Case description: Reason for consultation/admission, medical history, toxic habits, regular medication, physical examination, complementary examinations, differential diagnosis, working diagnosis, and recommended/performed medical and/or surgical treatment as recommended items.

Discussion: This is the most important part of this section. As a guideline, students should comment on the complementary examinations performed, why they consider various differential diagnoses, why they have chosen the main diagnosis, the medical or surgical treatment to be performed, as well as outlining a prognosis and its justification. Process diagnostic or therapeutic algorithms for the case can be included.

Bibliography is optional (maximum of 10 references, including book chapters, UpToDate, PubMed reviews, scientific society protocols, etc.).

If texts generated by AI systems are detected, appropriate measures will be taken in accordance with the coordinating teachers of each Teaching Unit.

The clinical case will be corrected by the responsible medical or surgical professional from each specific specialty.

Correct orthography, vocabulary, and grammar are expected.

It will be evaluated on a scale of 0-10 by each responsible person in the Teaching Unit. Maximum score: 40% of the final grade.

Both the portfolio and the clinical case are recommended to be written in a standard font (Arial, Calibri, Times New Roman, etc.) with a font size of 11 and a line spacing of 1.5.

The portfolios (1 per specialty) and the clinical cases (medical and surgical) will be uploaded to the corresponding webpage of the Virtual Campus in the respective folders. The portfolios and clinical cases should be sent as separate PDF documents. The files should be named as follows: student ID.portfolio.specialty.pdf, student ID.case.specialty.pdf. For example, student A will send 6 portfolios (123456.portfolio.pneumo.pdf + 123456.portfolio.cardio.pdf + 123456.portfolio.reumato.pdf, etc.) and 2 cases (123456.case.pneumo.pdf and 123456.case.vascular.pdf) to the assigned folder on the subject's webpage in the Virtual Campus.

The responsible medical and surgical professionals of each Teaching Unit will be responsible for compiling the corresponding grades (medical block and surgical block) and subsequently preparing the final grade.

The final grade for the subject is the weighted average of attendance, punctuality, and active participation in the practical sessions, the portfolio of practices, and the 2 written clinical cases.

A minimum grade of 5.00 out of 10 is required to pass the subject. If the minimum requirement is not met (non-submission of required documentation, inadequate format of the documentation, or insufficient content level), it can be made up by submitting it later within the timeframe established by the responsible persons of each Teaching Unit.

It is at the discretion of each subject coordinator to request the oral presentation of the case or cases byeach student, in order to allow for a real evaluation of the knowledge presented in writing, or to decide the assignment of honors, among other requirements.

In all texts, it is recommended to follow the "Guidelines for Non-Sexist Language Use at the Autonomous University of Barcelona" (https://www.uab.cat/doc/llenguatge).

Following the recommendations of "Sustainable Campus - UAB Environment - UAB Barcelona" (
https://www.uab.cat/web/siguem-sostenibles/campus-sostenible-1345811620835.html), all documentation submitted to the faculty will be exclusively in digital format.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Practical clinical care assessment	100%	5	0.2	1, 2, 3, 4, 8, 5, 9, 6, 7, 10

Bibliography

RESPIRATORI I CIRURGIA TORÀCICA

Llibres:

- Farreras A y Rozman C. Medicina Interna. 19ª edición. Elsevier. Barcelona 2020.
- Jameson, Fauci, Kasper, Hauser, Longo, Loscalzo. Principios de Medicina Interna. 20ª edición.
 Ed.McGraw-Hill, Interamericana. Madrid 2019.
- C. Jiménez-Ruiz, G. Peces-Barba, R. Moreno Balsalobre y V. Plaza Moral. Manual SEPAR de Neumología y Cirugía Torácica. 4ª edición. Ed. SEPAR. Madrid 2021.
- Locicero III, J. Shields' General Thoracic Surgery. 8th edition. Ed. Wolters Kluwer. 2018
- Tratado de cirurgia torácica SEPAR. Ed SEPAR- EDIMSA Madrid 2010.
- Parrilla P, García-Granero E, Martín E, Morales-conde S, Navarro S, Targarona EM. Cirugía AEC. Asociación Española de Cirujanos. 3a edición. Ed. Panamericana. Madrid 2022.
- Locicero III, J. Shields' General Thoracic Surgery. 8th edition. Ed. Wolters Kluwer. 2018
- General thoracic surgery. T. E. Shields. Ed Panamericana

Revistes:

- Archivos de Bronconeumología
- Open Respiratory Archives
- European Respiratory Journal
- Thorax
- Lancet Resp Med
- Annals of thoracic Surgery
- European Journal of Cardiothoracic surgery
- Journal of thoracic oncology
- Journal of thoracic disease

Recursos Internet:

- Societat Catalana de Pneumologia (SOCAP): www.socapnet.org
- Sociedad Española de Neumología y Cirugía Torácica (SEPAR): www.separ.es
- European Respiratory Society (ERS): www.ersnet.org
- American Thoracic Society (ATS): www.thoracic.org
- Sociedad espanyola de cirugia toráica (SECT): https://www.sect.es/index.php/formacion-sect
- Annals of Cardiothoracic surgery https://www.youtube.com/@annalsofcardiothoracicsurg2361
- <u>The Society of Thoracic Surgeons (STS)</u>, the <u>American Association for Thoracic Surgery (AATS)</u>, and the <u>European Association for Cardio-thoracic Surgery (EACTS)</u> https://www.ctsnet.org/
- National Cancer Comprehensive Network https://www.nccn.org/guidelines/category_1

- European Society for Medical Oncology https://www.esmo.org/

CARDIOVASCULAR

Llibres:

- Harrison Principios de Medicina Intern. Mc Graw Hill 2022
- Tratado de Medicina Interna Farreras-Rozman. Elsevier.
- Braunwald Tratado de Cardiología. Elsevier.
- Heart disease. A text book of cardiovascular medicine. Braunwald E, Ross R, Topol EJ. Philapdelphia.
- Mayo Clinic Cardiology Review, Murphy
- Electrocardiografía clínica, Bayés de Luna, Antoni. Espaxs, S.A
- La electrocardiografia en la toma de decisiones en urgencias. H. Wellens. Elsevier.
- Rutherford's Vascular Surgery. Saunders. 2014
- Guies de pràctica clínica de la Societat Europea de Cirurgia Vascular (ESVS) https://www.ejves.com/content/guidelines

Revistes:

- Circulation
- Journal of the American College of Cardiology
- European Heart Journal
- Revista Española de Cardiología
- European Journal of Vascular and Endovascular Surgery www.ejves.com
- Journal of Vascular Surgery www.jvascsurg.org
- International Angiology www.minervamedica.it/en/journals/international-angiology/
- Annals of Vascular Surgery www.annalsofvascularsurgery.com
- Revista Angiología www.revistaangiologia.es

Recursos Internet:

- http://www.revespcardiol.org
- http://www.secardiologia.es
- http://www.theheart.org/index.cfmhttp://www.ctsnet.org/residents/ctsn/ (apunts residents cardiologia americans)
- http://www.hemodinamica.com/becas/guidant/imagenes.html (imatges d'estudis hemodinàmics amb bona qualitat i amb un ampli ventall de patologies)
- http://www.erl.pathology.iupui.edu/ (atlas imatges anatomia patològica amb bona iconografia cardiològica)
- http://www.blue.temple.edu/~pathphys/general/tablecontents.html (esquemes malalties cardiovasculars)

- http://www.meddean.luc.edu/lumen/mede/grossanatomy/cross_section/vhpthorax.html (pàgina original que permet obtenir seccions del tòrax a diferents nivells.)
- http://visiblehuman.epfl.ch/stdappletv1.php (similar a la anterior, permet imatgesinteractives, excel·lent anatomia)
- http://www.escardio.org/Pages/index.aspx
- Sociedad Española Angiología y Cirugía Vascular: www seacv.es
- European Society for Vascular Surgery www.esvs.org
- Capítulo de Diagnóstico Vascular no Invasivo: www.cdvni.org
- Capítulo de Cirugía Endovascular: www.c-cev.org
- Capítulo de Cirugía Endovascular: www.c-cev.org
- Capítulo Español de Flebología y Linfología: www.capitulodeflebologia.org

REUMATOLOGIA

- Harrison. Medicina Interna 21 Edición. Mc Graw Hill, 2022.
- Farreras Rozman. Medicina Interna 19ª edición. (2020).
- Manual SER de las Enfermedades Reumáticas (6ª edición). Editorial Elsevier. ISBN edición impresa: 978-84-9022-903-3. ISBN edición electrónica: 978-84-9022-905-7
- Manual SER de diagnóstico y tratamiento de las enfermedades reumáticas autoinmunes sistémicas. Edita: Editorial Elsevier España. ISBN edición impresa: 978-84-9022-857-9. ISBN edición electrónica: 978-84-9022-858-6
- Técnicas de Diagnóstico y Tratamiento en Reumatología. Editorial Panamericana. ISBN: 84-7903-904-3
- Firestein & Kelley's Textbook of Rheumatology (11th edition). Editorial Elsevier 2020. ISBN edición electrónica 9780323639217. ISBN edición impresa: 9780323639200
- Manual de capilaroscopia periungueal JA Todolí Parra ISBN 9788492652228 Editorial Adalia

Software

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