Medicine and Surgery VI

Code: 106704
ECTS Credits: 6

2024/2025

Degree	Type	Year
2502442 Medicine	OB	5

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Teachers

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Ricard Comet Monte

David Parés Martínez

Virginia Pomar Solchaga

Sonia Fernandez Ananin

Teaching groups languages

You can view this information at the end of this document.

Prerequisites

It is recommended to have reached the competences of the following subjects: Biochemistry and Molecular Biology, Cellular Biology, Human Anatomy (I and II), Histology, Human Genetics, Psychological Bases, General Pathology, Fundamentals of Surgery, Microbiology, Radiology and Physical Medicine, Pathological Anatomy, Pharmacology, Immunology, Epidemiology, Obstetrics and Gynaecology.

It would be advisable to review, in order to have sufficient knowledge of the basic sciences, given that these were take three or four years ago. It is convenient be familiar with the physiopathology, the semiology, the general propaedeutic, with the purpose of facing the study of these clinical subjects and the indication and interpretation of the tests for complementary diagnostics. The knowledge of pharmacology is necessary in order to be able to make the prescriptions and opportune indications in the different pathologies and to evaluate the iatrogenic or toxic possibilities.

Sufficient knowledge about the psychological basis of health status and disease is recommended as well as an adequate level of knowledge in interpersonal communication and professional behaviour.

The student will preserve confidentiality and professional secrecy of the data that may be accessible during apprenticeships in clinical care services. Also, to maintain an attitude of professional ethics in all their actions.

Objectives and Contextualisation

Infectious diseases:

The subject of Infectious Diseases aims to provide a level of competence in the management of infectious diseases, suitable for a newly licensed doctor, as well as a solid basis to be able to acquire the skills of a specialty in the future.

The infectious pathology has some particularities of its own: It is an eminently transversal subject, which makes proper coordination with the rest of the medical and surgical disciplines particularly necessary to avoid concretizing content and unifying messages, and especially with the subject of clinical Microbiology, essentially prioritizing the structuring of complementary teaching contents and objectives.

We recognize four major fundamental aspects: (1) Community infections (2) Infections in immunocompromised patients (3) Healthcare-associated infections (4) Travel associated infections. These four areas help us to systematize the set of syndromes and etiological agents that make up the main infections in humans.

The main specific objective of the subject is to allow the student to recognize and diagnose the main infectious syndromes, as well as to make an appropriate therapeutic approach to each of them.

Shared with other clinical subjects, it aims to foster appropriate clinical skills, an appropriate attitude in clinical practice and a comprehensive approach to patients.

Geriatrics

The main objective is to study older people with illnesses, emphasizing the unique characteristics that appear particularly in the advanced stages of life. This includes understanding the physiological changes, the concept of frailty, key geriatric syndromes, the impact of surgery on older adults, the most prevalent diseases, and the organization of geriatric health systems.

Competences

- Demonstrate basic research skills.
- 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.

- Give the patient and/or accompanying persons the relevant information about the disease process, its bases and consequences, including bad news, in an appropriate way.
- 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.
- Recognise and take action in life-threatening situations and others that require an immediate response.
- 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. Assess modifications to clinical parameters in the different age groups.
3. Demonstrate basic research skills.
4. 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.
5. Describe the main pathological situations of nutrition.
6. 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.
7. 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.
8. Detail the steps and procedures for giving bad news.
9. Explain multidisciplinary intervention during patient care.
10. Explain the mechanisms by which illness affects the structure and function of the human body.
11. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
12. Give patients the maximum possible information about their health, diagnostic steps, complementary examinations and treatments in an appropriate way.
13. Identify the fundamental principles of palliative medicine.
14. Identify the pathologies of the immune system and the diagnosis and management of these.
15. Identify tumour diseases, and the diagnosis and management of these.
16. 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.
17. Inform with caution and clarity, including measures to prevent the spreading of disease.
18. Know the main agents of infection and their mechanisms of action.
19. 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.
20. Perform basic and advanced life support manoeuvres.
21. 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.

22. 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

Language for the course: Catalan / Spanish

Infectious diseases

Infectious diseases: Medical and Surgical

THEORY 22h

1. Febrile Syndrome. Clinical, microbiological and therapeutic approach to a febrile syndrome

2. Practical use of antimicrobials

3. Upper and lower respiratory tract infections

4. Cardiovascular infections

5. Central nervous infections system

6. Bone and joint infections

7. Skin and soft tissue infections

8. Urinary tract infections

9. Sexually transmitted diseases

10. Gastrointestinal infections

11. Septic shock

12. Zoonotic diseases

13. Tuberculosis

14. Invasive mycosis

15. Herpes group virus infections

16. HIV infections

17. Infections in the Non-HIV Immunocompromised Patient.

18. Nosocomial infections

19. Imported traveler's illnesses

SEMINARS 9h

1. Respiratory tract infections

2. Cardiovascular infections

3. Cardiovascular infections

4. Urinary tract infections

5. Gastrointestinal infections

6. HIV infections

7. Imported traveler's illnesses

8. Bone and joint infections

9. Nosocomial infections

Advanced clinical simulation practices (SCAP): 2h

Geriatrics: Medical and Surgery

Theory 23 h

1. Epidemiology of aging. Theories of aging

2. Physiological changes in aging

3. Presentation of diseases in the elderly

4. Frailty, disability and multimorbidity

5. Comprehensive Geriatric Evaluation

6. Nutrition in geriatrics.

7. Geriatric Syndromes I

8. Geriatric Syndromes II

9. Geriatric Syndromes III

10. Drugs in geriatrics

11. Dementias

12. Senile osteoporosis

13. Importance of geriatric prevention

14. Vascular diseases. Clinical atherosclerosis

15. Infections in the elderly

16. Other medical prevalent processes in geriatrics I

17. Other medical prevalent processes in geriatrics II

18. Ethical aspects of medical care in the elderly. Surgical treatment in the elderly

19. Sensory deficits in the elderly

20. Surgical aspects of the elderly patient I

21. Surgical aspects of the elderly patient II

22. Surgical aspects of the elderly patient III

23. Organization of geriatric care

Specialized seminars 9 h

1. Comprehensive geriatric evaluation (3h)

2. Decision making in advanced disease (2 h)

3. Clinical research in geriatrics (2 h)

4. Approach to the older patient with surgical pathology (2h)

Advanced clinical simulation practices (SCAP) 1h

Management of complex situations in Geriatrics

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Practice of advanced clinical simulation (PSCA)	3	0.12	1, 8, 17, 19, 9, 11, 13, 16, 12, 22, 2
Specialized seminars (SEM)	18	0.72	1, 18, 3, 4, 6, 5, 8, 7, 17, 19, 9, 21, 11, 13, 15, 14, 16, 12, 20, 22, 2
Theory lecture (TE)	45	1.8	1, 18, 4, 6, 5, 8, 7, 17, 19, 10, 9, 21, 11, 13, 15, 14, 16, 12, 22, 2
Type: Autonomous			
Self-study and reading of articles/reports of interest	75	3	18, 4, 6, 5, 8, 7, 10, 21, 11, 13, 15, 14, 16, 12, 22, 2

This Guide describes the framework, contents, methodology and general rules of the subject, in accordance with the current curriculum. The final organization of the course with respect to the number and size of groups, calendar distribution and dates of examinations, specific criteria for evaluation and review of examinations will be carried out in each of the Teaching Hospital Units (HTU), which will explain to the students through their web pages and the first day of class of each subject, through the teachers responsible for the subject in the HTU.
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, practical 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.

For this course, the professors designated by the Departments as responsible for the subject at Faculty and UDH level are:

Sant Pau Teaching Center

	Surgery	Medicine
Medicine and Surgery VI	Sonia Fernandez SFernandezA@santpau.cat	OlgaH. Torres olga.torres@uab.cat
• Infectious Diseases	Sonia Fernandez SFernandezA@santpau.cat	Virginia Pomar vpomar@santpau.cat
• Geriatrics	Beatriz Espina BEspina@santpau.cat	Olga H. Torres olga.torres@uab,cat

Vall d'Hebron teaching center

	Surgery	Medicine
Medicine and Surgery VI	Nayana Joshi nayana.joshi@vallhebron.cat	Vicenç Falcó vicenc.falco@vallhebron.cat
• Infectious Diseases	Nivardo Rodríguez nivardo.rodriguez@vallhebron.cat	Vicenç Falcó vicenc.falco@vallhebron.cat
• Geriatrics	Nayana Joshi nayana.joshi@vallhebron.cat	Antonio San José antonio.sanjose@uab.cat

Germans Trias i Pujol teaching center

	Surgery	Medicine
Medicine and Surgery VI	Joan F Julian 21127jji@gmail.com	M Luisa Pedro-Botet mlpbotet.germasntrias@gencat.cat
• Infectious Diseases	Joan F Julian 21127jji@gmail.com	M Luisa Pedro-Botet mlpbotet.germasntrias@gencat.cat

• Geriatrics	David Parès dapares@gmail.com	Ramon Miralles ramon.miralles@uab.cat

Parc Taulí teaching center

	Surgery	Medicine
Medicine and Surgery VI	Salvador Navarro Salvador.Navarro@uab.cat	Oriol Gasch Ogasch@tauli.cat
• Infectious diseases	Francisco Javier Guirao fjguirao@tauli.cat	Oriol Gasch Ogasch@tauli.cat
• Geriatrics	Salvador Navarro Salvador.Navarro@uab.cat	Ricard Comet rcomet@tauli.cat

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

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Continuous assessment: Seminars and/or Practice of advanced clinical simulation (PSCA)	30%	3	0.12	1, 18, 3, 4, 6, 5, 8, 7, 17, 19, 10, 9, 21, 11, 13, 15, 14, 16, 12, 20, 22, 2
Theory: Written evaluations through objective test.	70%	6	0.24	1, 18, 3, 4, 6, 5, 8, 7, 17, 19, 10, 9, 21, 11, 13, 15, 14, 16, 12, 22, 2

This course does not allow for a single-assessment evaluation system.

The evaluation system is based on a theoretical component (70% of the final grade) and an evaluation of seminars and advanced simulation practices (30% of the final grade).

Theoretical Component (70%)

Two partial theoretical exams will be scheduled, which will be eliminatory if a grade higher than 5 is obtained in each. The weight of each partial exam in the final grade will be proportional to the covered material and will not exceed 50% of the final grade.

Students who have not passed the partial exams can take the final recovery exam.

Evaluation of Seminars and Advanced Simulation Practices (30%)

Evaluation of seminars (20%), including questions from the seminars or a clinical case presentation, and advanced simulation practices (10%).

Final Grade

The final grade is the weighted average of the theoretical knowledge (70%) and continuous assessment (30%). The weighted average between the theoretical assessment and the continuous assessment cannot be calculated unless a minimum score of 5/10 is obtained in both parts.

Students who do not take both the theoretical and practical evaluation tests will be considered "Not Assessable," thus exhausting their enrollment rights for the course.

Bibliography

Basic

Farreras Rozman. Medicina Interna

19ª edición. (2020). Versió electrònica:

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Farreras Rozman. Medicina Interna
19ª edición. (2020). Versió electrònica:
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Harrison. Medicina Interna 21 Edición.

Mc Graw Hill, 2022.

https://bibcercador.uab.cat/discovery/fulldisplay?context=L&vid=34CSUC_UAB:VU1&search_scope=MyInst_and

Specific

The bibliography of each subject and topic can be consulted on the specific programs attached to the Virtual Campus of the subject

Robert L. Kane, Joseph G. Ouslander, Barbara Resnick, Michael L. Malone. Principios de geriatría clínica, 8e (2018). Versió electrònica:

https://bibcercador.uab.cat/view/action/uresolver.do?operation=resolveService&package_service_id=471389985

Hazzard's geriatric medicine and gerontology / editors, Jeffrey B. Halter, Joseph G. Ouslander, Stephanie Studenski, Kevin P. High, Sanjay Asthana, Mark A. Supiano, Christine Ritchie ; editor emeritus and senior advisor, William R. Hazzard ; senior editorial assistant, Nancy F. Woolard, 7e (2017). Disponible a Medicina - UD Vall d'Hebrón

Internet resources

Pubmed. http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed

Pubget: http://pubget.com/

Google Scholar: http://scholar.google.es/

Scielo: http://www.scielo.cl/

Sociedad Española de Geriatría y Gerontología: https://www.segg.es/ En apartado publicacions buscador por temes y además acceso en PDF al "Libro del Residente en Geriatría", 2011)

Societat Catalana de Geriatria: http://scgig.cat/ (Geribloc i accés per temes al "Tratado de Geriatría para residentes", 2006)

Software

No specific programme is used for teaching

Language list

Information on the teaching languages can be checked on the CONTENTS section of the guide.