

Degree	Type	Year
2502442 Medicine	OB	4

Contact

Name: Nayana Joshi Jubert

Email: nayana.joshi@uab.cat

Teachers

Alberto Selva O'Callaghan

Jose Antonio Hernandez Hermoso

Joan Miquel Noguera

Maria Lourdes Mateo Soria

Claudia Mariana Lamas Gomez

Ana Maria Laiz Alonso

Maria Begoña Mari Alfonso

Teaching groups languages

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

Prerequisites

It is advisable that the student has achieved the basic competences in Anatomy, Physiology of the Musculoskeletal System, Cell Biology, Biochemistry and Histology.

Sufficient knowledge about the psychological bases of states of health and illness is desirable, as well as an adequate level of knowledge in interpersonal communication.

It is absolutely necessary to have acquired sufficient knowledge in:

1. General and specific anatomy of the musculoskeletal system.
2. General and specific physiology of the musculoskeletal system.
3. Pathophysiology and semiology of the musculoskeletal system.

The student will acquire the commitment to preserve the confidentiality and professional secrecy of the data that may have access due to the learning in the assistance services. Also in maintaining an attitude of professional ethics in all its actions.

Objectives and Contextualisation

Its general objective is the study of conditions of the musculoskeletal system and systemic autoimmune diseases, and therefore involves knowledge of the general and basic aspects of musculoskeletal diseases, as well as conditions, fundamentally, of connective tissue.

Teaching objectives:

1. Knowledge of the basic scientific principles of the musculoskeletal system in relation to bone and joint physiology and the repair process of fractures.
2. Knowledge of basic aspects of biomechanics in relation to the musculoskeletal system.
3. Knowledge of complementary diagnostic methods, both invasive and non-invasive with the general principles of application and possibilities.
4. Knowledge of the traumatic pathology of the musculoskeletal system both from a generic point of view on biology, and from the specific point of view of the topographic anatomical location.
5. Knowledge of the systemic pathology of the musculoskeletal system grouped according to its etiology in congenital, metabolic, inflammatory, circulatory, tumoral and idiopathic diseases.
6. Knowledge of the most common non-traumatic regional pathology, grouped around the guiding symptom generated by the clinical consultation.
7. Knowledge of basic aspects of systemic autoimmune diseases, diagnostic methods and treatment guidelines.

- Competences (*listed according to bachelor's degree report*)
- Demonstrate understanding of the manifestations of disease on the structure and function of the human body.
- Demonstrate a basic level of research skills.
- Demonstrate, in professional activity, a critical, creative and research-oriented point of view.
- Adequately give the patient and/or companion relevant information about the pathological process, the bases and consequences, including bad news.
- Develop a diagnostic orientation and establish a reasoned action strategy, assessing the results of the anamnesis and physical examination, as well as the subsequent results of the indicated complementary examinations.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Indicate the most appropriate therapy for the most prevalent acute and chronic processes, as well as for terminally ill patients.
- Indicate the basic diagnostic techniques and procedures and analyse and interpret the results to better specify the nature of the problems.
- Obtain and prepare a medical history that contains all relevant information, structured and patient-centered, taking into account all age groups, gender, cultural, social and ethnic factors.
- Perform a general and systematic physical examination, appropriate to the patient's age and gender, in a complete and systematic manner and a mental assessment.

- Recognize their role in multi-professional teams, assuming leadership when appropriate, both for the provision of health care, and in interventions for health promotion.
- Recognize and act in situations that put life in immediate danger and those that require immediate attention.
- Learning Outcomes *(listed according to degree report)*
 1. Anticipate and contrast information to make decisions correctly.
 2. Know the main infectious agents and their mechanisms of action.
 3. Demonstrate a basic level of research skills.
 4. Demonstrate, in professional activity, a critical, creative, and research-oriented point of view.
 5. Describe the effects on organs and systems of the musculoskeletal system, diseases of the blood, cardiocirculatory system, digestive system, respiratory system, infectious pathologies, endocrine, nervous, genitourinary, and elderly systems.
 6. Describe the main pathological situations of the musculoskeletal system, blood, organs of the cardiocirculatory system, digestive system, respiratory system, infectious pathologies, endocrine systems, nervous system, genitourinary system, and the elderly.
 7. Describe the main pathological situations of nutrition.
 8. Detail the steps and procedures to follow to report bad news.
 9. Design treatment for the main pathologies of the blood and hematopoietic system, the cardiocirculatory system, the digestive system, the respiratory system, the endocrine system, the nervous system, the nephrogenitourinary and retroperitoneal system, the elderly, and the musculoskeletal system.
 10. Provide information in an understandable and prudent manner, including preventive measures to prevent the spread and spread of the disease.
 11. Carry out an adequate physical examination for the main pathologies of the blood and hematopoietic system, the cardiocirculatory system, the digestive system, the respiratory system, infectious diseases, the endocrine system, the nervous system, the nephrogenitourinary and retroperitoneum system, the elderly, and the musculoskeletal system.
 12. Explain the mechanisms by which disease affects the structure and function of the human body.
 13. Explain multidisciplinary intervention during the care process of patients.
 14. Express the most likely diagnosis in the main pathologies of the blood and hematopoietic system, the cardiocirculatory system, the digestive system, the respiratory system, infectious, the endocrine system, the nervous system, the nephrogenitourinary and retroperitoneal system, the elderly, and the musculoskeletal system.
 15. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
 16. Identify the fundamentals of palliative medicine.
 17. Identify tumor disease, its diagnosis and management.
 18. Identify pathologies of the immune system, their diagnosis and management.
 19. Indicate the complementary examinations suitable for the diagnosis of the main diseases of the blood and the hematopoietic system, the cardiocirculatory system, the digestive system, the respiratory system, infectious, the endocrine system, the nervous system, the nephrogenitourinary and retroperitoneal system, the elderly, and the musculoskeletal system.
 20. Inform the patient, appropriately and with as much information as possible, about their state of health, diagnostic steps, complementary examinations, and treatments.
 21. Perform basic and advanced life support maneuvers.
 22. Make a history that guides the diagnosis of the main diseases of the blood and the hematopoietic system, the cardiocirculatory system, the digestive system, the respiratory system, infectious diseases, the endocrine system, the nervous system, the nephrogenitourinary and retroperitoneum system, the elderly, and the musculoskeletal system.
 23. Assess the modifications of clinical parameters at different ages.

Competences

- Demonstrate basic research skills.

- Demonstrate understanding of the manifestations of the illness in the structure and function of the human body.
- Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- 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. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
5. 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.
6. Describe the main pathological situations of nutrition.
7. 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.
8. 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.
9. Detail the steps and procedures for giving bad news.
10. Explain multidisciplinary intervention during patient care.
11. Explain the mechanisms by which illness affects the structure and function of the human body.
12. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
13. Give patients the maximum possible information about their health, diagnostic steps, complementary examinations and treatments in an appropriate way.
14. Identify the fundamental principles of palliative medicine.
15. Identify the pathologies of the immune system and the diagnosis and management of these.
16. Identify tumour diseases, and the diagnosis and management of these.
17. 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.
18. Inform with caution and clarity, including measures to prevent the spreading of disease.
19. Know the main agents of infection and their mechanisms of action.

20. 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.
21. Perform basic and advanced life support manoeuvres.
22. 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.
23. 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

Development of semiology and complementary exploration of the musculoskeletal system and systemic autoimmune diseases.

General etiology of musculoskeletal diseases and systemic autoimmune diseases.

Pathophysiology and major syndromes of the musculoskeletal system.

Distributive blocks

A. Introduction to the pathology of the musculoskeletal system: Basic physiopathological processes of the musculoskeletal system.

B. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of trauma to the musculoskeletal system.

C. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of orthopedic conditions of the musculoskeletal system.

D. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of systemic autoimmune conditions or collagenopathies.

Theoretical Lessons:

A. Introduction to the pathology of the musculoskeletal system: Basic physiopathological processes of the musculoskeletal system

UNIT 1. Distribution of the subject. Physical structure and function of the bone.

UNIT 2. Joint pathophysiology. Physiology and injuries to muscles, tendons and ligaments. Entesitis

UNIT 3. Bone repair. Bone response patterns.

B. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of trauma to the musculoskeletal system

UNIT 4. Generalities of fractures. Clinic. Rankings. Pathological fractures. Open fractures. Generalities of dislocations. Clinic. Rankings.

UNIT 5. Fracture treatment: non-surgical treatment, surgical treatment. Osteosynthesis.

UNIT 6. Complications of fractures and dislocations. Pseudoarthrosis: atrophic, hypertrophic, others. Compartment syndrome. Volkman retraction.

UNIT 7. Pediatric traumatology. Traumatic epiphysiolysis.

UNIT 8. Polytrauma. Polytraumatic.

UNIT 9. Fractures of the pelvis and acetabulum.

UNIT 10. Fractures of the shoulder girdle. Fractures of the upper extremity of the humerus. Shoulder dislocation.

UNIT 11. Diaphyseal fractures of the humerus. Fractures of the lower part of the humerus. Elbow dislocations. Fractures of the upper forearm. Monteggia fracture-dislocation, Galeazzi. Essex-Lopresti. Diaphyseal fractures of ulna and radius.

UNIT 12. Fractures of the distal end of the radius and ulna. Fractures and dislocations of the carpal and hand. Carpal instabilities. Tendon injuries of the hand.

UNIT 13. Fractures of the upper limb of the femur. Proximal fractures of the femoral head. Coxo-femoral dislocations.

UNIT 14. Diaphyseal fracture of the femur. Fractures of the articular ends of the femur and tibia, which constitute the knee. Diaphyseal fracture of the tibia and fibula.

UNIT 15. Injuries to the meniscus and ligaments of the knee. Dislocation of the knee. Trauma to the extensor apparatus. Patella fractures.

UNIT 16. Fractures of the lower extremity of the tibia and fibula, tibial pylon. Ankle-ligament injuries. Fractures and dislocations of the ankle.

UNIT 17. Fractures and dislocations of the tarsus and foot. Achilles tendon rupture.

UNIT 18. Spinal trauma. Spinal cord injury.

C. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of orthopedic conditions of the musculoskeletal system.

UNIT 19. Bone alterations of ischemic origin. Epiphysal necrosis. Bone infarction. Osteochondritis dissecans. Osteochondrosis, osteonecrosis.

UNIT 20. Bone infections. Osteitis. Osteomyelitis. Tuberculosis osteoarticular and mycosis.

UNIT 21. Periprosthetic infections and surgical implants. Acute septic arthritis.

UNIT 22. Bone tumors. Classification. Description.

UNIT 23. Soft tissue tumors, chronic synovial processes. Classification. Description.

UNIT 24. Metastatic bone disease.

UNIT 25. Traumatic injuries to peripheral nerves. Compression neuropathies of the peripheral nerve trunks. Plexus injuries.

UNIT 26. Pain syndrome of the wrist and hand of the adult. Hand infections: tenosynovitis

UNIT 27. Adult painful shoulder. Adult painful elbow.

UNIT 28. Childhood hip I. Developmental dysplasia of the hip. Coxa congenital rod.

UNIT 29. Childhood hip II. Epiphysiolysis. Perthes disease.

UNIT 30. Pediatric pathology of the foot.

UNIT 31. Adult pathology of the foot. Diabetic foot.

UNIT 32. Angular deviations of the lower extremities. Dysmetrias. Adult painful hip. Painful knee.

UNIT 33. Deformities of the development of the shoulder girdle and upper limb. Congenital torticollis. Sprengel deformity. Madelung deformity. Paralysis of the neonatal brachial plexus.

UNIT 34. Cervicobrachialgias and myelopathy.

UNIT 35. Back pain and degenerative pathology of the lumbar spine. Spondylolysis, spondylolisthesis, channel stenosis.

UNIT 36. Coronal deformities of the spine. Scoliosis.

UNIT 37. Sagittal deformities of the spine. Scheuermann.

D. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of systemic autoimmune conditions or collagenopathies.

UNIT 38. Systemic lupus erythematosus. Antiphospholipid syndrome.

UNIT 39. Scleroderma. Mixed connective tissue disease.

UNIT 40. Inflammatory myopathies and Sjogren's syndrome.

UNIT 41. Vasculitis I: vasculitis of large vessel. Rheumatic polymyalgia.

UNIT 42. Vasculitis II: vasculitis of medium and small vessel. Pseudovasculitis.

UNIT 43. Rheumatoid arthritis.

UNIT 44. Ankylosing spondylitis.

UNIT 45. Other spondyloarthropathies.

UNIT 46. Bone diseases: Osteoporosis, osteomalacia, Paget's disease.

UNIT 47. Osteoarthritis. Neuropathic arthropathy. In hemophilic arthropathy.

UNIT 48. Microcrystalline arthritis.

Seminars:

ORTHOPAEDIC SURGERY AND TRAUMATOLOGY

1. Clinical cases: Radiological assessment of degenerative and tumor osteoarticular lesions
2. Exploration of the upper and lower extremity
3. Clinical cases: Fractures, radiological, MRI and CT assessment
4. Neurological examination linked to the musculoskeletal system.

RHEUMATOLOGY

1. Auto-antibodies in systemic autoimmune diseases.
2. Clinical cases: Chronic pain and fibromyalgia
3. Clinical cases: Clinical cases and radiological signs most prevalent in rheumatology

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Advanced Clinical Simulation Practice (in humans) (PSCA)	1	0.04	1, 19, 3, 4, 5, 7, 6, 9, 8, 18, 20, 11, 10, 22, 12, 14, 16, 15, 17, 13, 21, 23, 2
Seminars	7	0.28	1, 19, 3, 4, 5, 7, 6, 9, 8, 18, 20, 11, 10, 22, 12, 14, 16, 15, 17, 13, 21, 23, 2
theory	48	1.92	1, 19, 3, 4, 5, 7, 6, 9, 8, 18, 20, 11, 10, 22, 12, 14, 16, 15, 17, 13, 21, 23, 2
Type: Autonomous			
WORK PREPARATION / PERSONAL STUDY / READING ARTICLES / REPORTS OF INTEREST	59	2.36	1, 19, 3, 4, 5, 7, 6, 9, 8, 18, 20, 11, 10, 22, 12, 14, 16, 15, 17, 13, 21, 23, 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 subject in terms of the number and size of groups, distribution in the calendar and dates of examinations, specific criteria for evaluation and review of exams, will be specified in each of the Hospital Teaching Centers (UDH), which will be made explicit through their web pages and the first day of class of each subject, through the teachers responsible for the subject at the UDH.

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

Sant Pau Teaching Center

	Responsible Subject/Childbirth at the UDH	Responsible Subject/Childbirth at the UDH - Surgery	Responsible Subject/Childbirth at the UDH - Medicine
Medicine and Surgery I	Claudia Lamas Gómez clamas@santpau.cat	Claudia Lamas Gómez clamas@santpau.cat	Ana Laiz Alonso alaiz@santpau.cat

Vall d'Hebron Teaching Center

	Responsible Subject/Childbirth at the UDH	Responsible Subject/Childbirth at the UDH - Surgery	Responsible Subject/Childbirth at the UDH - Medicine
Medicine and Surgery I	Nayana Joshi Jubert	Nayana Joshi Jubert	Albert Selva O'Callaghan

Parc Taulí Teaching Center

	Responsible	Responsible	Responsible
	Subject/Childbirth	Subject/Childbirth	Subject/Childbirth
	at the UDH	at the UDH - Surgery	at the UDH - Medicine
Medicine and Surgery I	Alejandro Carballo Garcia acarballo@tauli.cat	Alejandro Carballo Garcia acarballo@tauli.cat	Begoña Mari Alfonso bmari@tauli.cat

Germans Trias i Pujol Teaching Center

	Responsible	Responsible	Responsible
	Subject/Childbirth	Subject/Childbirth	Subject/Childbirth
	at the UDH	at the UDH - Surgery	at the UDH - Medicine
Medicine and Surgery I	José Antonio Hernández Hermoso jahernandezh.germanstrias@gencat.cat	José Antonio Hernández Hermoso jahernandezh.germanstrias@gencat.cat	Lourdes Mateo Soriano lourdes.mateo@uab

Teaching typologies:

Theoretical classes: TE: 48h

Seminars: Seminars on Orthopedic Surgery and Traumatology, sCOT: 4h

Rheumatology Seminars, sREU: 3 h

Advanced Clinical Simulation Practice, PSCA: 1h

Exceptionally and at the discretion of the responsible teaching staff, the resources available and the health situation at all times in the different Teaching Centers, part of the contents corresponding to the theoretical lessons and seminars may be taught in person or virtually.

Note: 15 minutes of a class will be reserved, within the calendar established by the center/degree, for students to complete the surveys of evaluation of the teacher's performance and evaluation of the subject / module.

- Training activities

Title	Hours	ECTS	Learning Outcomes
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Type: Directed

SEMINARS (SEM)	7	0,28	3, 4, 5, 12, 15, 19
THEORY (TE)	48	1.92	3, 5, 12, 15, 19, 22
Advanced Clinical Simulation Practice (in humans) (PSCA)	1	0,0,4	3, 4, 5, 12, 15, 19
Type: Autonomous			
PREPARATION OF WORKS / PERSONAL STUDY / READING OF ARTICLES / USEFUL REPORTS	59	2,36	3, 5, 12, 15

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	Weighting	Hours	ECTS	Learning Outcomes
Clinical activity: Seminars and/or problems and/or clinical cases Written assessment using objective tests.	20%	2	0.08	1, 19, 3, 4, 5, 7, 6, 9, 8, 18, 20, 11, 10, 22, 12, 14, 16, 15, 17, 13, 21, 23, 2
theory Written assessment through objective tests: selection items; essay tests (broad questions/restricted questions). Oral assessment	80%	8	0.32	1, 19, 3, 4, 5, 7, 6, 9, 8, 18, 20, 11, 10, 22, 12, 14, 16, 15, 17, 13, 21, 23, 2

This subject does not include single assessment.

I. Evaluation of the Clinical Activity (Seminars): 20% of the total grade

Attendance at seminars is mandatory.

Any absence must be justified. More than 3 absences, regardless of the cause, prevent the student from being evaluated (both clinical and theoretical teaching). The evaluation of learning from clinical activity will be carried out as follows:

Evaluation of clinical competences (total 10 points). The following competences are assessed:

- Attendance to seminars, maximum 3 points (3 points if presented in all seminars).
- Short question at the end of each seminar, maximum 1 point per question.

The final grade of clinical activity is the sum of the attendance and qualification of each question. The student can not be evaluated if he does not attend the seminars (mis 3 absences, regardless of the cause, prevents the student from being evaluated).

To pass the clinical evaluation, the grade obtained must be greater than or equal to 5/10.

II. Evaluation of theoretical knowledge: 80% of the total grade

The evaluation of theoretical knowledge will be carried out with at least 2 partials. Each theoretical exam will consist of 55 to 100 multiple choice questions with 4 possible answers and only one true. Wrong answers subtract 0.33 points.

The theoretical exams may also have some short questions, if they consider it the responsible for the subject of each Teaching Unit.

Each partial exam is passed with a numerical score of 5/10. The partial theoretical exams are eliminatory when the grade obtained in the partial is greater than or equal to 5/10.

III. Final score-grade

Weighted sum of the clinical evaluation (20%) and that of the theoretical knowledge (80%) distributed in the different partials. The number of partials will be determined by each UDH.

Students who have not passed the partial exams may take the final recovery test, provided they have attended the seminars and the partial exams. Attendance to the seminars is mandatory. The completion of the partial exams is mandatory to take the final recovery test. Any absence from the seminars must be justified. More than 3 absences in the seminars, regardless of the cause, prevents the student from being evaluated.

Students who have not passed the clinical activities, may take the final exam of the seminars, provided they have attended them and have done the evaluation at the end of each seminar. Expression: Numerical note with one decimal, from 0 to 10.

Qualitative rating: Suspense, approved, remarkable, excellent, MH

IV. Exam review system

The review of the exams will be done individually with the student, upon written request within the established deadlines.

Students who do not take the theoretical and practical evaluation tests will be considered as "Not Evaluable", exhausting the rights to the registration of the subject.

• Evaluation activities

Title	Weight	Hours	ECTS	Learning Outcomes
Clinical activity : Seminars and/or problems and/or clinical cases Written evaluation through objective tests.	20%	2	0,08	1,4, 8, 10, 11, 13, 17, 18, 19, 20, 21, 22, 23
Theory. Written evaluation through objective tests: selection items; Essay tests (extended questions/restricted questions).	80%	8	0,32	4,5 0,18 2, 3, 5, 6, 7, 9, 12, 14, 15, 16,

Bibliography

Basic

- Farreras Rozman. Medicina Interna 19ª edición. (2020).
https://bibcercador.uab.cat/permalink/34CSUC_UAB/1c3utr0/cdi_proquest_ebookcentral_EBC7045003
- Harrison. Medicina Interna 21 Edición. Mc Graw Hill, 2022.

<https://accessmedicina-mhmedical-com.are.uab.cat/book.aspx?bookid=3118>

https://bibcercador.uab.cat/permalink/34CSUC_UAB/avjcib/alma991010719764206709

Specific

- El Manual del Residente de COT - SECOT, 2020 (www.secot.es) (no disponible al catàleg de la UAB)
- Essentials of Orthopedic Surgery 4th ed. 2011
- Campbell. Cirugía ortopédica 14 edition Frederick M Azar & James H. Beaty, 2022. (Disponible al catàleg de la UAB la 13Ed de 2013, en paper)
- Miller's Review of Orthopaedics E-Book (8th ed.) Mark D. Miller, Stephen R. Thompson.2019. (Disponible al catàleg de la UAB la 7Ed de 2016, en paper)
- Cirugía Ortopédica y Traumatología. Delgado, A. 5ª edición Editorial Medica PanamericanaS.A, 2021 (Disponible al catàleg de la UAB l'edició del 2008, en paper)
- KELLEY'S Textbook of Rheumatology. 11th edition. 2021. (Disponible al catàleg de la UAB la 10Ed de 2017, electrònica)

https://bibcercador.uab.cat/permalink/34CSUC_UAB/cugbhl/alma991007914819706709

- Tratado de enfermedades Reumáticas de la SER edicion 2022 (Disponible al catàleg de la UAB l'edició 2018, en paper)
- Enfermedades Inflamatorias reumatológicas 2 edición de 2022 (www.ser.es, sociedad española de reumatología) (no disponible al catàleg de la UAB)

Internet Resources

- Pubmed.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991000236199706709

- ARE+

<https://www.uab.cat/web/que-oferim/acces-als-recursos-electronics-1345727672556.html>

- Google Scholar: <http://scholar.google.es>
- Scielo

https://bibcercador.uab.cat/permalink/34CSUC_UAB/cugbhl/alma991056957079706706

- Sociedad Española de Geriátría y Gerontología: <https://www.segg.es/> En apartado publicaciones buscador por temas y además acceso en PDF al "Libro del Residente en Geriátría", 2011)

https://bibcercador.uab.cat/permalink/34CSUC_UAB/cugbhl/alma991032758589706706

- www.secot.es
- www.sccot.cat
- www.orthobullets.com
- www.ser.es
- www.screumatologia.org
- www.eular.org

www.rheumatology.org

Software

No software required

Language list

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