Medicine and Surgery I

Code: 102945
ECTS Credits: 7.5

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**Contact**

Name: Vicent Fonollosa Pla
Email: Vicent.Fonollosa@uab.cat

**Use of languages**

Principal working language: **catalan (cat)**
Some groups entirely in English: **No**
Some groups entirely in Catalan: **Yes**
Some groups entirely in Spanish: **No**

**Teachers**

Alejandro Carballo García
Nayana Joshi i Jubert
José Antonio Hernández Hermoso
Claudia Mariana Lamas Gómez

**Prerequisites**

It is advisable that the student has achieved basic skills in Anatomy, locomotor system physiology, cell biology, biochemistry and histology.

It is convenient to have sufficient knowledge about the psychological bases of the states of health and illness, as well as an adequate level of knowledge in interpersonal communication.

It is absolutely necessary to have achieved sufficient knowledge in:

1. General and specific anatomy of the locomotor system.
2. General and specific physiology of the locomotor system.
3. Physiopathology and semiology of the locomotor system.

The student will acquire the commitment of preserving the confidentiality and professional secrecy of the data to which he / she may have access in the case of learning to the assistance services. Also to maintain an attitude of professional ethics in all its actions.

**Objectives and Contextualisation**

Development of semiology and complementary examination of the locomotor system and of the systemic autoimmune diseases.

General etiology of musculoskeletal diseases and of systemic autoimmune diseases. Pathophysiology and large locomotor system syndromes.
Distributive areas

A. Introduction to the pathology of the locomotor system: course distribution, bone patterns, pathophysiology of the locomotor system

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

C. Etiology, physiopathology, semiology, classification, diagnosis, prognosis and treatment of orthopedic disorders of the musculoskeletal system.

D. Systhemic autoimmune disorders and collagenopathies

Skills

• 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.
• 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.
• 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.

Learning outcomes

1. Demonstrate basic research skills.
2. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
3. 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.
4. Explain the mechanisms by which illness affects the structure and function of the human body.
5. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
6. Identify the pathologies of the immune system and the diagnosis and management of these.
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. 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

Theory classes
1. Introduction to the pathology of the locomotor System: course distribution, bone patterns, pathophysiology of the locomotor System

SUBJECT 1. Course distribution. Bone patterns
SUBJECT 2. Physiopathology of the joint.
SUBJECT 3 Physical structure and function of the bone
SUBJECT 4. General principles of fractures. Pathological fractures
SUBJECT 5. Fractures and dislocations. Clinic and Complications

1. Etiology, pathophysiology, semiology, classification, diagnosis, prognosis and treatment of the musculoskeletal system traumatisms.

SUBJECT 7. Children's skeletal trauma. Traumatic epiphysiodesis.
SUBJECT 8. Bone healing.
SUBJECT 10. Fractures of the scapular waist. Fractures of the upper limb of the humerus. Shoulder dislocation
SUBJECT 13. Pelvis and acetabular fractures.
SUBJECT 15. Meniscus and knee ligaments injuries. Patella fractures
SUBJECT 18. Physiology and injuries of muscles, tendons and ligaments. Enthesitis

1. Etiology, physiopathology, semiology, classification, diagnosis, prognosis and treatment of orthopedic disorders of the musculoskeletal system.

SUBJECT 23 Bone metastatic disease.
SUBJECT 24. Traumatic injuries of peripheral nerves. Compressive Neuropathies of peripheral nervous trunks. Brachial plexus injuries


SUBJECT 29. Painful hip. Painful knee

SUBJECT 30. Angular deviations of the lower limbs.

SUBJECT 31. Foot deformity. Clubfoot, equinus, cavus, talus, adducto

SUBJECT 32. Static-postural foot deformity. Flat foot. Painful foot of the adult.


SUBJECT 34. Spine deformities in the anteroposterior plane. Scoliosis

SUBJECT 35. Spine deformities in the sagittal plane.

D. Rheumatoly and systemic autoimmune diseases

SUBJECT 36. Rheumatoid arthritis.

SUBJECT 37. Ankylosing spondylitis.

SUBJECT 38. Other spondyloarthropathies.


SUBJECT 40. Scleroderma - Mixed connective tissue disease.

SUBJECT 41. Idiopathic inflammatory myopathies - Sjögren syndrome.

SUBJECT 42. Vasculitis (I)

SUBJECT 43. Vasculitis (II).

SUBJECT 44. Osteoporosis.

SUBJECT 45. Arthrosis.

SUBJECT 46. Microcrystalline arthritis.

Seminars.

Seminar 1. Diagnosis of bone injuries.

Seminar 2. Neurological exploration of the locomotor system

Seminar 3. Clinical cases of the locomotor system.


Seminar 5. Clinical cases and interactive MIR questions.

Seminar 6. Auto-antibodies in systemic autoimmune diseases
Clinical case seminars

3 cases

Clinical care practice

Methodology

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 with regard to 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 Units (UDH), which will be explained through their web pages
and the first day of class of each subject, through the teachers responsible for the subject at UDH.

For the present year, the professors appointed by the Departments as responsible for the subject at the
Faculty level and the UDH are:

Teaching Unit Sant Pau

<table>
<thead>
<tr>
<th>Medicine and Surgery, I</th>
<th>Claudia Lamas Gomez</th>
<th><a href="mailto:clamas@santpau.cat">clamas@santpau.cat</a></th>
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<tr>
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<td>• Rheumatology</td>
<td>Ana Laiz Alonso</td>
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Teaching Unit Vall d'Hebron

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|                        | Vicent Fonollosa     | vfonollosa@vhebron.net |
| • Locomotor System disorders | Nayana Joshi | Nayana Joshi | --- |
|                           | njoshi@vhebron.net  | njoshi@vhebron.net | --- |
### Teaching Unit Germans Trias i Pujol

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### Methodology

**Teaching typologies:**

- **Theoretical classes:** TE: 46h
- **Seminars:** Specialized Seminars, SESP: 6h
- **Seminars of clinical cases:** SCC: 3 h
Clinical healthcare practices: PCA: 30 h (3h x day x 10 days)

CLINICAL HEALTHCARE PRACTICES

(8 students) (3-hour sessions / day) (2 weeks / 5 days)

Total: 30 hours

Practice

Tutored for 15 days by a member of the Service assigned to each student

At the end of each period of practice, the assessment will be evaluated with a clinical case presentation, and discussed with the rest of the group of practices

SEMINARS OF CLINICAL CASES

Total: 3 hours

Case 1: Beginning of the Second quarter

Case 2: half of the second quarter

Case 3: end of second quarter

Activities

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<th>Hours</th>
<th>ECTS</th>
<th>Learning outcomes</th>
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<td>CLINICAL CASES SEMINARS (SCC)</td>
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<td>0.12</td>
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<td>30</td>
<td>1.2</td>
<td>1, 2, 8, 5, 9</td>
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<td>THEORY (TE)</td>
<td>46</td>
<td>1.84</td>
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Type: Autonomous

PROJECTS ELABORATION / INDIVIDUAL STUDY / READING OF ARTICLES / INTEREST REPORTS 94 3.76 1, 3, 4, 5

Evaluation

Practical evaluation: open and descriptive registries and / or closed registers;

Narrative registries Seminars and / or problems and / or clinical cases: Written evaluation through objective tests. 30%

Theory. Written evaluation through objective tests: items of selection; test essay

(extended questions / restricted questions). Oral evaluation 35% 1st partial + 35% 2nd partial
Evaluation activities

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<td>0.18</td>
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Bibliography

APUNTS OFICIALS Lecciones traumatología y Ortopedia (Apunts oficilas). En versió PDF. (Proubasta I, Cáceres E, Majo J i colaboradors)-Laboratoris Jansen


KELLEY’S Textbook of Rheumatology. 8th edition. 2008

FARRERAS ROZMAN. Medicina Interna. 16ª edición, 2008

HARRISON’S Principles of Internal Medicine. 18th edition. 2011