

## 25647 - Medical and Surgical Conditions

### Syllabus Information

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**Academic Year:** 2020/21

**Subject:** 25647 - Medical and Surgical Conditions

**Faculty / School:** 127 - Facultad de Ciencias de la Salud

**Degree:** 605 - Degree in Physiotherapy

**ECTS:** 9.0

**Year:** 2

**Semester:** Annual

**Subject Type:** Basic Education

**Module:** ---

## 1.General information

### 1.1.Aims of the course

### 1.2.Context and importance of this course in the degree

### 1.3.Recommendations to take this course

## 2.Learning goals

### 2.1.Competences

### 2.2.Learning goals

### 2.3.Importance of learning goals

## 3.Assessment (1st and 2nd call)

### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

## 4.Methodology, learning tasks, syllabus and resources

### 4.1.Methodological overview

The learning process that has been designed for this subject is based on the following: The combination of theoretical classes in a large group, seminars in a smaller group (half students), small group work (two to four students), individual or smaller group tutorial and special importance of personal study.

### 4.2.Learning tasks

The program offered to the student to help achieve the expected results includes the following activities:

1- Theory sessions in large group (60 hours). Explanation and orientation for the personal study of the different contents of the subject, aiming towards the acquisition of competences and learning outcomes. All the resources of the directivity and of the interaction, and the diverse multimedia support will be used.

2- Problems and cases: Seminars in two groups (15 hours each group), distributed in eight seminars for each student, applying the theoretical bases of the subject and the practice of communication

3- Group work (15 hours each student). Will be done in small groups (2 to 4 students). It aims to stimulate initiative and personal creativity, teamwork, the management of documentary sources, the structuring of a logical discourse and the search and achievement of the conclusive synthesis. All of this is a prerequisite for research. It will focus on a suggested topic subject in relation to the contents of the subject.

4- Individual or smaller group tutorial.

5- Personal study (135 hours): The student should be responsible in the creation of structured schemes and work programs and in the context of the time spent for other subjects. It must represent the step of motivation, fostered with the learning

activities described above, to the autonomous exercise of the will.

### 4.3.Syllabus

#### **Thematic block I: Basic concepts / General principles**

Introduction to Surgery.

Lesson 1- Complications and general care in surgical patients.

Lesson 2- Tegument trauma: Wounds. Contusion. Cicatrization. Pressure ulcers. Skin grafts.

#### **Thematic block II: Thoracic disorders and respiratory diseases**

Lesson 3- Chest wall deformities and thoracic trauma.

Lesson 4- Thoracic pain syndromes.

#### **Thematic block III: Traumatic and orthopaedic disorders in musculoskeletal system**

Lesson 5- Bone trauma. Repair process.

Lesson 6- Soft tissues and joint injuries (ligaments, muscles and tendons).

Lesson 7- Upper extremity trauma.

Lesson 8- Orthopedic pathology of the upper extremities.

Lesson 9- Lower extremity trauma.

Lesson 10- Orthopedic pathology of the lower extremities.Osteochondral dystrophies.

Lesson 11- Spinal contusion without spinal cord injury.

Lesson 12- Spine curvature disorders.

#### **Thematic block IV: Rheumatic disorders and pain syndromes of musculoskeletal system**

Lesson 13- Spinal pain.

Lesson 14- Regional musculoskeletal pain syndromes.

#### **Thematic block V: Central nervous system disorders**

Introduction: Medical-surgical nervous system disorders.

Lesson 15- Congenital craniocerebral abnormalities. Hydrocephaly. Increased intracranial pressure.

Lesson 16- Vascular brain disorders.

Lesson 17- Disturbances of consciousness. Traumatic brain injury.

Lesson 18- traumatic spinal cord injury.

Lesson 19- Neurological disorders in pediatric patient: cerebral palsy.

#### **Thematic block VI: Peripheral nerves disorders**

Lesson 20- Nerve injury basic concepts. Obstetric brachial plexus palsy.

Lesson 21- Traumatic peripheral nerve injury in the upper extremity.

Lesson 22- Traumatic peripheral nerve injury in the lower extremity.

Lesson 23- Nerve entrapment syndromes of extremities.

Lesson 24- Inflammatory radiculopathies and polyneuropathies (Guillain Barré syndrome). Metabolic polineuropathies. Mechanic Radiculopathy.

#### **Thematic block VII: Peripheral vascular and cardiac disorders**

Introduction Medical-surgical diseases of the cardiovascular system.

Lesson 25- Occlusive arterial diseases. Buerger's disease. Atherosclerosis.

Lesson 26- Other vascular conditions: vascular trauma, aneurysms, arteriovenous fistulas, functional arterial disease.

Lesson 27- Venous diseases. Chronic venous insufficiency. Deep vein thrombosis. thromboembolism. post-thrombotic syndrome.

Lesson 28- Lymphatic system diseases: lymphangitis, adenitis, adenophlegmon, lymphedema and venous - lymphatic edema.

Lesson 29- Heart disease and rehabilitation

Lesson 30- Cardiac transplant

#### **Seminars**

Seminar 1- Asepsis and surgical and nosocomial infections.

Seminar 2- Respiratory assist techniques. Determinations of respiratory function.

Seminar 3- Specific respiratory conditions.

Seminar 4- Joint rheumatism and special deformities.

Seminar 5- Seizures. Meningitis and encephalitis.

Seminar 6- Myelomeningocele and Other conditions of the spinal cord.

Seminar 7- Facial paralysis. Peripheral vertigo.

Seminar 8-Severe trauma patients.

#### **4.4.Course planning and calendar**

Calendar of face-to-face sessions and presentation of Works

- Theoretical classes in a large group: 2h / week throughout the academic year. .(presentiality 100%)
- Seminars in two groups: 15h /academic year for two groups, distributed in 8 seminars (for each group), frequency one a month (presentiality 100%). - Individual or small group tutotial (presentiality 100%).
- Individual work delivery: last school day of may.
- Seminar progress tests at the end of each semester
- Voluntary theory examination: (eliminates subject matter) half-term
- Final official examination of theory of the whole subject at the end of the second semester (date approved by the center at june).
- Final official examination of theory of the whole subject at the september (date approved by the center).

The planned training activities will be carried out in person in the classrooms and rooms designated by the Center. In case the conditions change, and if instructions are received from the academic authorities, the activities will be modified and adapted to be carried out in a non-face-to-face mode using the online resources of the University of Zaragoza, which will be notified in advance.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to theFaculty health Sciences at the Zaragoza University.

#### **4.5.Bibliography and recommended resources**