

## 26776 - Locomotion Apparatus and Nefrourology

### Información del Plan Docente

Academic Year	2017/18
Faculty / School	104 - Facultad de Medicina
Degree	304 - Degree in Medicine
ECTS	9.0
Year	4
Semester	Second semester
Subject Type	Compulsory
Module	---

### 1.General information

#### 1.1.Introduction

#### 1.2.Recommendations to take this course

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

#### 1.4.Activities and key dates

<https://medicina.unizar.es/cuarto-curso>

### 2.Learning goals

#### 2.1.Learning goals

#### 2.2.Importance of learning goals

### 3.Aims of the course and competences

#### 3.1.Aims of the course

#### 3.2.Competences

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

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

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

#### 5.1.Methodological overview

These contents are expressed and designed in the next way:

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**Locomotor System** (Traumatology and Rheumatology) 4,5 ECTS

**Urinary Sytem** (Urology and Nephrology) 4,5 ECTS

**Locomotor System** (Traumatology and Rheumatology) 4,5 ECTS

**Traumatology and Orthopaedic Pathology** . 3 ECTS (75 hours)

45% correspond to presential learning. 17 Magistral Lessons for 16 items

Workshops: 20-25 students per group.

Everyone of the students could dispose around 2 hours for tutorial advices

**Rheumatology** 1,5 ECTS

17 hours are presential dedication. 9-10 lessons and the rest in Seminars and Workshops.

**Urinary System** (Urology and Nephrology) 4,5 ECTS

**Urology** 2,5 ECTS. 62,5 hours, 28 h presential subjects. 17 Magistral Lessons and Seminars and workshops for the rest

**Nephrology** (2 ECTS) 50 hours in total, being around 22,5 presential activities divided in 12 hours with Magistral Lessons for 8 items and the rest of the contents in small groups

### 5.2.Learning tasks

All contents are divided in Magistral lessons and Workshops. In the workshops the learning will be the most practical as possible using clinical Cases, virtual and visual tools

"We must remind all students that if activities exercises include data related to the medical history or personal data of the patient strict confidentiality is required"

### 5.3.Syllabus

#### UROLOGY

#### LESSONS

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Lesson 1: Abnormalities of the kidney and ureter.

Lesson 2: Vesico ureteral anomalies and the mail male genital tract.

Lesson 3: Obstructive uropathy.

Lesson 4: Vascular kidney diseases, renal extraction, and kidney transplant.

Lesson 5: Urinary tract trauma and mail male genital tract trauma.

Lesson 6: Parenchymal and urinary tract infections.

Lesson 7: Specific and parasitic urethral and periurethral infections.

Lesson 8: Urolithiasis.

Lesson 9: Kidney and mail male genital tract tumors.

Lesson 10: Urothelial tumors.

Lesson 11: Benign Prostatic Hyperplasia and prostate adenocarcinoma.

Lesson 12: Bladder disorders, urinary incontinence and vesico sphincteric dysfunction.

Lesson 13: Andrology. Male infertility. Erection and ejaculation disorders. Penoscrotal pathology.

### WORKSHOPS

1. Urological semiology. Physical exploration. Medical record.

2. Obstructive uropathy (except prostatic diseases).

3. Urologic trauma. Urologic emergencies.

4. Kidney transplant.

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5. Prostatic disease: Benign Prostatic Hyperplasia.
6. Prostatic disease: Prostate Adenocarcinoma.
7. Urolithiasis.
8. Andrology, practical themes.
9. Urologic emergency: hematuria, renal colic, anuria, acute scrotum.
10. Parenchymal urinary tract infections.
11. Urinary tract infections. (Cystitis and urethritis).
12. Urothelial tumors.
13. Kidney tumors and Testicular tumors.
14. Images in urology.
15. Vesico sphincteric dysfunction.

### **NEPHROLOGY**

#### **LESSONS**

- 1.- Acute Renal Failure
- 2.- Chronic Kidney Diseases. Main Causes and complications
- 3.- Sustitutive Renal Therapy. Hemodialysys and Peritoneal Dialysis.
- 4.- Renal Transplantation
- 5.- Glomerular Pathology. Acute, Subacute and Chronic Glomerulonephritis
- 6.- Vascular Renal Diseases

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7.- Interstitial Renal Diseases. Chronic and Acute Pyelonephritis

8.- Quistic Renal Diseases. Autosomical Polycystic Kidney Disease

### **WORKSHOPS**

- Learning to understand the normal values of renal function in blood and urine samples. Chronic and Acute renal dysfunction. Clinical Cases

- Follow-up of patientes with End-Stage of Renal Disease. Peritoneal Dialysis

- Hemodialysis. Management of Acute Renal Failure with renal Replacement Techniques . Hypertension

- Renal Transplantation and Organ Transplant Coordination

### **TRAUMATOLOGY**

Content of theoretical classes

1. Fractures. General principles. Clinical and diagnostic aspects. Treatment. Bone healing. Characteristics of fractures in childhood and adolescence.

2. Muscle injuries. Compartmental Syndrome. Ligament injuries.

3. Traumatic injuries of tendon. Surgical conditions of bags and pods serous.

4. Neuromuscular disorders. Cerebral palsy. Peripheral nerve entrapment syndromes.

5. Bone infections.

6. Tumorlike lesions of bone. Benign bone tumours.

7. Malign bone tumours. Metastatic tumours.

8. Orthopaedic cervical spine pathology and painful shoulder.

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9. Orthopaedic pathology of the wrist and hand. Infections located in the hand.
10. Orthopaedic pathology of the paediatric hip. Developmental hip dysplasia, and dislocation, Legg-Calvé-Perthes Syndrome, and Slipped capital femoral epiphysis.
11. Orthopaedic pathology of the mature hip.
12. Orthopaedic pathology of the knee.
13. Traumatic ligament and meniscal injuries of the knee
14. Congenital and acquired deformities of the foot
15. The spine. Kyphosis, scoliosis, spondylolysis and spondylolisthesis
16. Fractures and dislocations of the spine

### Content of Seminars/ Workshops

1. Traumatic injuries of the shoulder. Fractures and dislocations.
2. Traumatic injuries of the arm and elbow. Fractures and dislocations.
3. Traumatic injuries of the forearm and wrist. Fractures and dislocations.
4. Traumatic injuries of the hand and fingers. Fractures and dislocations.
5. Traumatic injuries of the pelvic ring. Fractures and dislocations.
6. Fractures of the acetabulum.
7. Traumatic injuries of the hip. Fractures and dislocations.
8. Fractures of the femoral shaft and fractures of the distal femur
9. Fractures of the tibia and fibula.
10. Ankle fractures
11. Fractures and dislocations of the foot.

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12. The multiply injured patient.

13. Workshop: splinting and bandaging.

### **RHEUMATOLOGY**

#### **TOPICS IN RHEUMATOLOGY ( THEORY)**

1. ARTHRITIS ACUTE
2. RHEUMATOID ARTHRITIS AND OTHER CHRONIC ARTHRITIS
3. SPONDYLARTHROPATHIES
4. DEGENERATIVE ARTHROPATHY
5. VASCULITIS
6. SYSTEMIC AUTOIMMUNE DISEASES
7. SOFT TISSUE RHEUMATISM
8. OSTEOPOROSIS / OSTEOMALACIA
9. DISEASE PAGET / HYPERPARATHYROIDISM

#### **WORKSHOPS**

1. COLLECTION OF INFORMATION WITH PHYSICAL EXAMINATION. SEMIOLOGY RHEUMATOLOGY HIPOTESIS TO DIAGNOSED
2. ADDITIONAL EVIDENCE IN REUMATOLOGIA. RATIONALE AND INTERPRETATION REQUEST

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3. DIAGNOSIS AND INDIVIDUALIZED PROGNOSIS. CRITERIA FOR CLASSIFICATION OF DISEASES

4. TREATMENT DECISIONS. ROLLING UP

### 5.4.Course planning and calendar

<https://medicina.unizar.es/cuarto-curso>

### 5.5.Bibliography and recommended resources

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- Nephrology- Nefrología clínica / director, Manuel Arias Rodríguez ; coordinadores, Pedro Aljama García ... [et al.]. 4ª ed. Buenos Aires; Madrid: Editorial Médica Panamericana, D.L. 2013
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