

26723 - Physical diagnostic and therapeutic procedures II

Syllabus Information

Academic Year: 2020/21

Subject: 26723 - Physical diagnostic and therapeutic procedures II

Faculty / School: 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

ECTS: 6.0

Year: 4

Semester: Second semester

Subject Type: Compulsory

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 methodology followed in this course is oriented towards the achievement of the learning objectives. It favors the acquisition of knowledge related to diagnostic imaging, rehabilitation, and radiotherapy. A wide range of teaching and learning tasks are implemented, such as lectures, seminars, and autonomous work.

Students are expected to participate actively in the class throughout the semester.

Classroom materials will be available via Moodle.

4.2.Learning tasks

The course includes the following learning tasks:

- Theoretical activities and planned to acquire the specific skills of the subject and the general and transverse graduation practices.
- The subject is structured in 30 sessions of teaching large groups of 1 hour and 10 teaching sessions to small groups of 4 hours (for student)
- The content of theoretical teaching sessions will be supported by the literature previously recommended.

"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"

4.3.Syllabus

The course will address the following topics:

Topics in Radiology block:

- 1.-Traumatic injuries of the head, face, and neck. Radiological semiology. Clinical guidelines for diagnostic use.
- 2.- Space-occupying lesions of the central nervous system. Brain tumors. Clinical guidelines for diagnostic use.
- 3.- Cerebral vascular pathology. Stroke and brain hemorrhage. Clinical guidelines for diagnostic use. Image-Guided Minimally Invasive Techniques.
- 4.-Thorax Pathology. Parenchymal disease. Differential diagnosis between alveolar and interstitial diseases. Diagnostic Clinical guidelines
- 5.-Tumors, nodules and pulmonary cysts. Differential diagnosis. Staging of lung cancer. Diagnostic Clinical guidelines
- 6.- Pleura and mediastinum diseases. Opaque thorax, pneumothorax. Mediastinal tumors. Diagnostic Clinical guidelines
- 7.- Emergency management in Pneumology. Hemoptysis and pulmonary embolism. CT value
- 8.- Radiology in space-occupying lesions of the abdomen (LOES). Diagnostic Clinical guidelines.
- 9.- Radiology of acute abdomen. Viscera perforation. Intestinal Occlusion. Acute peritonitis.
- 10- Radiology of liver and pancreatic diseases. Image diagnostic of Jaundice. Pancreatitis. Portal hypertension.
- 11.-Radiology of abdominal vascular diseases. Gastrointestinal bleeding. Diagnostic Clinical guidelines.
- 12.-Radiology of the urinary tract: pyelonephritis, obstructive uropathy, bladder, prostate and male gonads diseases, renal tumors. Diagnostic. Clinical guidelines
- 13.- Radiology of the vascular system. Diagnostic clinical guidelines.
- 14.-Radiology of the female genital tract. Breast cancer. Diagnostic Clinical Guide
- 15.- Radiology of bone diseases. Changes in bone density. Bone fractures. Arthrosis and arthritis. Bone tumors. Diagnostic Clinical Guidelines.

Seminars :

- 1.-Reading and interpretation of chest radiographs in different projections. Indications and limitations

Objective: The student must be able to identify RX normal

- 2.-Reading and interpretation of CT brain. " 5 slices of the brain CT ". Patterns of normality and more frequent diseases. Indications and limitations.

Objective: The student must know how to look at a CT brain at key anatomical points and recognize normal patterns

- 3.-Breast. Identifying normal patterns and descriptions of the main pathological changes. Screening program.

Objective. The student must know the significance of the discovery of mammographic abnormality diagnosis and the main clinical diagnostic guidelines.

- 4.-Osteoarticular pathology. Reading an X-ray bone and osteoarticular area.

Objective: The student must be able to recognize major traumatic and non-traumatic bone injuries

Topics block. Nuclear Medicine

- 1.-Skeletal scintigraphy in malignant bone diseases
- 2.-Skeletal scintigraphy in nonneoplastic osseous disorders
- 3.-Clinical applications of urinary nuclear medicine
- 4.-Metabolic therapy
- 5.-Radioguided surgery
- 6.-The role of PET-CT
- 7.-PET-CT. Applications in oncology

Seminars:

Nuclear medicine seminars in which the following issues will be analyzed: present clinical cases that may be related to the topic block or other current applications of nuclear medicine in pathologies that are already known

1. Pulmonary embolism. Role of V / P in diagnosis
2. Studies of myocardial perfusion. When do we use it?
3. Nuclear Medicine in thyroid diseases
4. Patient with a breast tumor. Role of Nuclear Medicine

The seminars will be held with the active participation of students through different systems of simulation. They will begin in the OSCE (objective structured clinical evaluation) by simulating these clinical cases. It will be provided with specific material and information for the active participation in these seminars.

Topics block: Radiotherapy

1. Gynecologic tumors (uterus and cervix). Indications of radiotherapy. Integration with other cancer therapies.
2. Tumors Otorrinolaringologic sphere. Indications of radiotherapy. Integration with other cancer therapies.
3. Lung Tumors. Indications of radiotherapy. Integration with other cancer therapies.

4. Rectum and gastrointestinal tumors. Indications of radiotherapy. Integration with other cancer therapies.

Seminars:

Radiation Oncology seminars in which will be analyzed and will present clinical cases that will arise.

The seminar topics are:

- 1.- Prostate tumors. Clinical Practice Guidelines
- 2. Breast tumors. Clinical Practice Guidelines.

Topics block of Physical Medicine and Rehabilitation:

1. Degenerative arthropathies rehabilitation
2. Fractures, dislocations, sprains and tendinitis rehabilitation
3. Pulmonary rehabilitation. Obstructive pulmonary disease rehabilitation
4. Physical exercise. Indications. Physical exercise prescription.

Seminars

- 1.- Ischemic heart disease rehabilitation
- 2.-Rehabilitation treatment of stroke
- 3.-Rehabilitation treatment of low back pain and lumbo-sciatica
- 4.-Rehabilitation treatment of scoliosis
- 5.-Painful shoulder rehabilitation
- 6.-Rehabilitation treatment of hip fracture in elderly

4.4.Course planning and calendar

Scheduled sessions and presentation of works

They appear in the Guide as the organization of 8th semester is planned

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

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 the "Facultad de Medicina" website and the Degree website

<http://medicina.unizar.es>, <http://moodle2.unizar.es>

4.5.Bibliography and recommended resources

The updated bibliography of the subject is consulted through the web page of the library:

http://biblos.unizar.es/br/br_citas.php?codigo=26723&year=2020

