

## 25424 - Image Diagnosis Techniques

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 25424 - Image Diagnosis Techniques

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

275 - Escuela Universitaria de Enfermería de Huesca

375 - Escuela Universitaria de Enfermería de Teruel

**Degree:** 559 - Degree in Nursing

560 - Degree in Nursing

561 - Degree in Nursing

**ECTS:** 6.0

**Year:** 4

**Semester:** First semester

**Subject type:** Optional

**Module:**

### 1. General information

The aim of this subject is that students deepen in the meaning of the benefit/risk of Diagnostic Imaging Techniques and their influence on health, applying the radiological protection criteria, as well as to recognize the indications and the diagnostic and therapeutic performance provided by Diagnostic Imaging tests as a source of relevant information for nursing care.

These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the 2030 Agenda of United Nations (<https://www.un.org/sustainabledevelopment/es/>), specifically, the activities of the subject contribute to the fulfilment of goal number 3 to ensure health and well-being in all people.

### 2. Learning results

To know the terminology used in the field of Diagnostic Imaging Techniques.

To know the different radiological diagnostic and treatment systems and their appropriate use according to the cases that arise in the clinic.

To know the advantages and adverse effects of ionizing radiation.

To know the appropriate preparations in patients for diagnostic imaging tests

To use the information from Diagnostic Imaging Techniques to perform a quality Nursing Process

To acquire the ability to work with the rest of the professionals of the health team of the Radio diagnostic Units

To know the relevance of Diagnostic Imaging Techniques in the prevention of diseases.

### 3. Syllabus

Module 1. Introduction to Diagnostic Imaging.

Module 2. Physical basis of Diagnostic Imaging.

Module 3. Radiological Protection.

Module 4. Use of Contrast Media in Diagnostic Imaging Techniques.

Module 5. Nursing Assistance in Diagnostic Imaging Techniques.

Contents of the practical laboratory program:

- Care plan for the patient undergoing ultrasound study.
- Care plan for the patient undergoing CT study.
- Care plan for the patient undergoing MRI study.
- Care plan for the patient undergoing Nuclear Medicine study.
- Utility of ultrasound in the cannulation of venous catheters.
- Preventive radiological protection measures for patients and professionals exposed to ionizing radiation.
- Radiological study in ICU.
- Mammography: Utility in breast cancer.

### 4. Academic activities

Master class: 35 hours. In this activity, the theoretical contents of the program are transmitted by means of a master class.

-Laboratory practices: 25 hours. The most relevant interventions are implemented in the nursing processes of diagnostic imaging techniques: Radiological protection measures, general ultrasound, ultrasound in venous catheter cannulation, mammography and breast cancer, CT, MRI, Nuclear Medicine and radiological studies in the ICU.

-The student's autonomous study represents: 84 hours.

Assessment tests. 6 hours.

## 5. Assessment system

The global evaluation of the subject is structured according to the criteria described below:

### - Characteristics of the evaluation of the theoretical contents

a) Description. Individual written test with short development questions on the contents of the theoretical program.

b) Criteria: The evaluation criteria will be: ability to express contents, correct use of terminology, accuracy of concepts, justification and development in the different diagnostic imaging techniques.

c) Level of demand. To pass the subject it is necessary to achieve a minimum grade of 50% of what is established, that is to say 3.5 out of 7 that weights 70% of the final grade.

There will be a voluntary midterm exam at the end of the theoretical program. If the partial theory test is passed, the result is saved for the next call.

The final exam of the theoretical contents will be mandatory for students who have not passed or have not taken the eliminatory midterm exam. It will have the same characteristics in terms of format and grading as described above.

### - Characteristics of the evaluation of the practical content (laboratory practices)

a) Description. Individual written test with short development questions on the contents of the practical program.

b) Criteria: The evaluation criteria will be: Development and acquisition of skills in the different Diagnostic imaging techniques through the resolution of cases related to the acquisition of learning results in laboratory practices. The attendance to the laboratory practices is compulsory and in the case of not being able to attend a maximum of 2 sessions without justification, the recovery will be carried out by means of an individual exam that evaluates the knowledge of the missed practices.

c) Level of demand. In order to pass the practical contents, 1.5 out of 3 points are required, which are weighted 30% of the final grade.

There will be an eliminatory midterm exam of voluntary character of the contents of the practices with the levels of demand mentioned above. If the student passes the midterm exam the result is saved for the next call.

The final exam of the practical contents will be mandatory for students who have not passed or have not taken the eliminatory midterm exam. It will have the same characteristics in terms of format and grading as described above.