

# Teaching guide

## IDENTIFICATION DETAILS

Degree:	Medicine		
Field of Knowledge:	Health Science		
Faculty/School:	Health Sciences		
Course:			
Type:	Compulsory	ECTS credits:	6
Year:	3	Code:	2725
Teaching period:	Fifth semester		
Area:	Diagnostic Methods		
Module:	Diagnostic and Therapeutic Procedures		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	180		

## SUBJECT DESCRIPTION

This course involves the study and description of different types of imaging, as a necessary basis for diagnosis, evolution and treatment of different diseases. It is based on an understanding and adequate knowledge of images of the human body obtained by different types of imaging (conventional radiology, ultrasound, CT scan, magnetic resonance and nuclear medicine) and their correlation with pathology and application in clinical practice.

## SKILLS

### Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

## General Skills

To recognise the essential elements of the medical profession, including ethical principles, legal responsibilities and professional practice focussed on the patient. To acquire the values of professionalism:

- a. Altruism: looking for the best in patients.
- b. Responsibility: complying with the implicit agreement with the community.
- c. Excellence as a continuous search for knowledge.
- d. Obligation as a free commitment to serve.
- e. Honour and integrity: complying with personal and professional codes and undertaking not to breach them.
- f. Serving others.

To have the ability to prepare an initial diagnosis and to establish a rational diagnostic strategy.

To establish the diagnosis, prognosis and treatment, applying principles based on the best possible information and clinical safety conditions.

To understand the importance of these principles for the benefit of patients, society and the profession, particularly focussing on professional secrecy.

To listen carefully to, obtain and summarise relevant information about the problems of a patient and understand the content of said information.

To be familiar with, critically evaluate and know how to use sources of clinical and biomedical information to obtain, organise, interpret and communicate scientific and health-related information.

To be able to use information and communication technologies in clinical, therapeutic, preventive and research activities.

To keep and use the patient information records for subsequent analysis, maintaining the information confidential.

To have a critical, creative viewpoint in professional activity with constructive scepticism focussed on research.

To understand the importance and limitations of scientific thought in the study, prevention and management of illness.

To be able to formulate hypotheses and gather information and critically assess it in order to solve problems using scientific methodology.

To acquire basic training for conducting research.

To engage in professional practice with regard to the independence, beliefs and culture of the patient.

Students must be able to develop a profile conducive to the practice of medicine through activities specifically designed in all subjects of the syllabus.

To recognise one's limitations and the need to maintain and update professional skills, with particular emphasis on independent acquisition of new knowledge and techniques and a motivation to achieve quality.

To understand and recognise the structure and normal function of the human body at molecular, cellular, tissue, organ and system level in the various stages of life, in both men and women.

To understand and recognise the effects, mechanisms and manifestations of illness on the structure and function of the human body.

## Specific skills

To be familiar with the principles and indications of radiotherapy.

To be able to carry out systematic reading in order to interpret a radiological image. To be able to use various medications correctly.

To assess the risk/benefit ratio of diagnostic and therapeutic procedures.

To be familiar with the indications of biochemical, haematological, immunological, microbiological, anatomopathological and imaging tests.

To be familiar with the foundations of the interaction of radiation with the human body.

To acquire knowledge about radiological imaging and basic radiological semiology of the various systems. To be familiar with other techniques for diagnostic imaging. To assess the indications and contraindications of radiological studies.

To have capacity for applying radiation protection criteria in diagnostic and therapeutic procedures using ionising radiation.

## DISTRIBUTION OF WORK TIME

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
98 hours	82 hours