

# Teaching guide

## IDENTIFICATION DETAILS

Degree:	Medicine		
Field of Knowledge:	Health Science		
Faculty/School:	Health Sciences		
Course:			
Type:	Compulsory	ECTS credits:	6
Year:	1	Code:	2715
Teaching period:	Second semester		
Area:	Biology		
Module:	Morphology, Structure and Function of the Human Body		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	150		

## SUBJECT DESCRIPTION

The main objective of the Genetics course is to provide future doctors with a diagnostic tool, based on knowledge of the structure, expression and variability of the human genome.

## 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 understand and recognise the causal agents and risk factors that determine health conditions and development of illness.

To understand the foundations underpinning action, indications and efficiency in therapeutic interventions based on the scientific evidence at hand.

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 cell structure and function: characteristics and properties of biomolecules; general organisation of cellular metabolism; metabolism of the main biomolecules; regulation and metabolic integration. To be familiar with the basic principles of human nutrition. To be familiar with the structures and processes of cell communication, structure and operation of excitable membranes, the cell cycle, cell differentiation and proliferation processes, genetic information transfer and gene expression and regulation mechanisms.

To know how to solve genetic problems, interpret family trees and use genetic maps.

To be familiar with the principles of heredity.

Diagnóstico y consejo genético.

Conocer los marcadores bioquímicos, citogenéticos y de biología molecular aplicados al diagnóstico clínico.

Saber usar los sistemas de búsqueda y recuperación de la información biomédica.

## DISTRIBUTION OF WORK TIME

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
64 hours	86 hours