

26702 - Biology

Información del Plan Docente

Academic Year	2016/17
Academic center	104 - Facultad de Medicina 229 - Facultad de Ciencias de la Salud y del Deporte
Degree	304 - Degree in Medicine 305 - Degree in Medicine
ECTS	6.0
Course	1
Period	First semester
Subject Type	Basic Education
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

5.2.Learning activities

5.3.Program

- Plasma membrane structure.

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- Cell junctions, cell adhesion and extracellular matrix.
- Membrane transport of small molecules.
- Membrane transport of large particles and macromolecules: endocytosis and exocytosis.
- Mechanisms of cell communication. Signal transduction.
- The cytoskeleton: Actin filaments. Intermediate Filaments. Microtubules.
- Cytosol. Ribosomes.
- Intracellular compartments and protein sorting. Endoplasmic reticulum. Golgi apparatus.
- Lysosomes. Peroxisomes.
- Mitochondria.
- Interphase nucleus. Cellular division.
- The cell cycle. Apoptosis. Cell differentiation. Stem cells.
- The structure and cycle of chromosomes.
- Basic genetics mechanisms: Types of heredity . Interaction between genes and environment.
- Genetic linkage and recombination. Haplotypes.
- DNA, chromosomes and genomes.
- Control of gen expression.
- Genic mutation. Polimorphisms.
- DNA repair.
- Oncogenes and cancer.

5.4.Planning and scheduling

5.5.Bibliography and recomended resources

