25430 -

Información del Plan Docente

Academic Year	2016/17
Academic center	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 561 - Degree in Nursing 560 - Degree in Nursing
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

The learning process is based on the following:
The program has a basic orientation, so the activities proposed are focus on understanding the main general principles of microbiology, genetics and biology and its application in the study of human beings. For this reason, the knowledge acquired in lectures, are complemented by practical laboratory activities and problem-based learning. The proposed methodology allows students to achieve skills, develop transferable skills that integrate knowledge from various

disciplines of the degree and motivate learning.
The program (60h) is distributed between lectures (50h) and practical classes (10h)
As support we will hang in the Moodle suplementary material and the teaching guide, schedule for practical sessions and exam dates.

5.2.Learning activities

The program helps students to achieve expected results and includes the following activities:
Lecture or theoretical class (50h)
Practical sessions: Laboratory practices and seminars (10h).

Tutorship: Personal attention to student. Identification of learning problems.

5.3.Program

MICROBIOLOGY IN HUMANS
1. Introduction to microorganisms.
2. Disinfection, sterilization and asepsis.
3. Morphology and physiology of bacteria. Main pathogenic bacteria for human.
4. Morphology and physiology of viruses. Main pathogenic virus for human.
5. Morphology and physiology of parasites. Main parasitism for human.

6. Action against the microorganisms
MOLECULAR BIOLOGY OF THE CELL AND HUMAN GENETICS
7. Cell membrane . Transport of Substances through the cell membrane

8. Cell adhesion a nd cellular communication
9. Cytoplasm. Nucleus
10. Nucleic acids and chromosomes
11. Synthesis and processing of nucleic acids and proteins
12. Regulation of gene expression
13. The cell cycle. Cell aging and death. Molecular biology of cancer

5.4.Planning and scheduling

Schedule sessions and presentation of works:
Weekly lectures and practices
The work will be presented in the last weeks of the semester

5.5.Bibliography and recomended resources

- Rosa Fraile, Manuel de la, Prieto Prieto, José, Navarro Marí, José María:. Microbiología en ciencias de la salud : conceptos y aplicaciones. 3ª ed. Barcelona, Elsevier, 2011
- Murray, Patrick R., Rosenthal, Ken S., Pfaller, Michael A.: Microbiología médica. 7ª ed. Barcelona, Elsevier, 2013
- Cooper, Geoffrey M., Hausman, Robert E.: La célula. 6ª ed. Madrid, Marbán, 2014
- Introducción a la biología celular. Bruce Alberts [et al.] 3ª ed. Buenos Aires, Editorial Médica Panamericana, 2011
- Passarge, Eberhard: Genética : Texto y atlas. 3ª ed. rev. y amp. Madrid, Editorial Médica Panamericana, 2009
- Solari, Alberto Juan: Genética humana : fundamentos y aplicaciones en medicina. 4ª ed. Buenos Aires, Editorial Médica Panamericana, 2011
- Silverthorn, Dee Unglaub. Fisiología humana : un enfoque integrado. 6ª ed. Buenos Aires, Editorial Médica

Panamericana, 2014
- Biología molecular de la célula. Bruce Alberts [et al.] 5ª ed. Barcelona, Omega, 2010