

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	10.0
Course	1
Period	Annual
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 program has a basic orientation, so the activities proposed are focus on understanding the fundamental principles of human physiology and its application in the study of human beings. For this reason, the knowledge acquired in lectures are complemented by practical activities. The proposed methodology allows students to achieve skills, integrate knowledge from various disciplines of the nursing degree and motivate learning.

The lectures (100h) are distributed in theoretical (85h) and practical classes (15h)
As support we will hang in the Moodle supplementary teaching 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 (85h)

Practical classes: Laboratory practices, seminars, case studies and problem-based learning (15h).

Tutorship: Personal attention to student. Identification of learning problems

5.3.Program

MODULE I. CHEMICAL COMPOSITION OF HUMANS

1. Enzymology
2. Carbohydrates metabolism
3. Lipid metabolism
4. Protein metabolism

MODULE II

I. BLOOD AND CARDIOVASCULAR PHYSIOLOGY

1. Composition and function of human blood
2. Red blood cells
3. Leukocytes. Inflammation. Immunity
4. Platelet. Hemostasis and Blood Coagulation.
5. Mechanical heart activity
6. Rhythmical Excitation of the Heart. The Normal Electrocardiogram
7. Vascular physiology

II. RESPIRATORY PHYSIOLOGY

8. Pulmonary Ventilation
9. Exchange and transport of gases

III. THE BODY FLUIDS AND KIDNEYS

10. Kidney. General functions
11. Urine Formation by the Kidneys
12. Body fluids. Regulation of Acid-Base Balance

IV. GASTROINTESTINAL PHYSIOLOGY

13. Secretory Functions, Digestion and Absorption in the Gastrointestinal Tract

V. ENDOCRINE PHYSIOLOGY

14. Introduction to Endocrinology. Pituitary Hormones and Their Control by the Hypothalamus
15. Thyroid Metabolic Hormones
16. Calcium and Phosphate Metabolism
17. Pancreatic Hormones
18. Adrenal glands
19. Sex Hormones

VI. NEUROPHYSIOLOGY

20. General functions of the Nervous System.

21. Somatic and Autonomic Nervous System.

5.4.Planning and scheduling

Theoretical classes: 3 hours per week

Practical: 3 practical sessions in demonstration room, 2 seminars and 1 case integrated

5.5.Bibliography and recommended resources

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- Silbernagl, Stefan, Despopoulos, Agamemnon: Fisiología: texto y atlas. 7ª ed. Barcelona, Elsevier, 2009
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- Nelson, David L., Cox, Michael M.: Lehninger Principios de bioquímica. 6ª ed. Barcelona, Omega, 2014
- Stryer, Lubert, Berg, Jeremy M., Tymoczko, John L.: Bioquímica : con aplicaciones clínicas. 7ª ed. Barcelona, Reverté, 2013
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