

## 25911 - Basic biology II

### Información del Plan Docente

Academic Year	2017/18
Faculty / School	301 - Facultad de Ciencias Sociales y Humanas
Degree	270 - Degree in Psychology
ECTS	6.0
Year	2
Semester	First Four-month period
Subject Type	Compulsory
Module	---

### 1.General information

#### 1.1.Introduction

#### 1.2.Recommendations to take this course

It is recommended that students have passed previous courses, particularly "Basic Biology I". In this course students acquire knowledge and skills about: the concept and methods of psychobiology; evolution and genetics; structure and function of cells of the nervous system; neuronal plasticity; neuroanatomy and nervous system development. In addition, students must have basic computer skills and know how to perform literature research.

It is essential to follow the course in the Moodle platform.

It is recommended to attend classes regularly.

#### 1.3.Context and importance of this course in the degree

#### 1.4.Activities and key dates

### 2.Learning goals

#### 2.1.Learning goals

#### 2.2.Importance of learning goals

### 3.Aims of the course and competences

#### 3.1.Aims of the course

#### 3.2.Competences

### 4.Assessment (1st and 2nd call)

#### 4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

## **5. Methodology, learning tasks, syllabus and resources**

### **5.1. Methodological overview**

The methodology followed in this course is oriented towards achievement of the learning objectives based on lectures and practice sessions.

### **5.2. Learning tasks**

The course includes 60 ECTS organized according to:

- Lectures (3 ECTS: 30 hours)
- Practice sessions (3 ECTS: 30 hours)

### **5.3. Syllabus**

The course will address the following topics:

- Neuroanatomy and functions of the cerebellum and basal ganglia.
- Neuroanatomy and functions of the diencephalon.
- Neuroanatomy and functions of the limbic system.
- Scope, method and techniques in Physiological Psychology.
- Sleep and biological rhythms.
- Ingestive behavior.
- The sexual and parental behavior.
- Emotion, aggressive behavior and stress.
- Learning and Memory.

### **5.4. Course planning and calendar**

The overall planning of the course corresponds to the following student dedication: total hours: 150; attendance hours: 56; non-attendance hours of student work: 90; Assessment hours: 4.

### **5.5. Bibliography and recommended resources**

- Fundamentos biológicos de la conducta / Águeda del Abril Alonso... [et al.] . [2a. ed., 2a. reimp.] Madrid : Sanz y Torres, 2005
- Bear, Mark F.. Neurociencia : la exploración del cerebro / Mark F. Bear , Barry W. Connors, Michael A. Paradiso . 3ª ed. Barcelona : Wolters Kluwer Health España : Lippincott Williams & Wilkins, cop. 2008
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- Hines, M. . Brain gender. Nueva York : Oxford University Press, 2004
- Pinel, John P. J.. Biopsicología / John P. J. Pinel ; Traducción y revisión técnica María José Ramos Platón ; Prólogo de Miguel Navarro García . - 6ª ed., última reimpr. Madrid [etc.] : Prentice Hall, 2009
- Rosenzweig, Mark R.. Psicobiología : una introducción a la neurociencia conductual, cognitiva y clínica / Mark R. Rosenzweig, S. Marc Breedlove y Neil V. Watson ; revisión científica a cargo de Ignacio Morgado Bernal ... (et al.) . - 2ª ed. act. Barcelona : Ariel, 2005
- Neurociencia / directores, Dale Purves ... [et al.] . - 3ª ed. Buenos Aires [etc.] : Médica Panamericana, D.L. 2010
- Alberstone, C.D. Anatomic basis of neurologic diagnosis / C.D. Alberstone... (et al). New York : Thieme, 2009
- Cardinali, Daniel P.. Neurociencia aplicada : sus fundamentos/ Daniel P. Cardinali . Buenos Aires [etc.]: Editorial Médica Panamericana, cop. 2007
- Clark, D.L.. El cerebro y la conducta Neuroanatomía para psicólogos / D.L. Clark. México : El Manual Moderno, 2007
- Cummings, J.L.. Neuropsychiatry and behavioral neuroscience / J.L. Cummings. New York :Oxford University, 2008

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- Felten, David .L.. Netter : Atlas de neurociencia / David L. Felten, Anil N. Shetty ; ilustraciones por Frank H. Netter. 2ª ed. Barcelona [etc.] : Elsevier Masson, cop. 2010
- Neurobiology of disease [Recurso electrónico] / edited by Sid Gilman. . Burlington, Mass. : Elsevier Academic Press, c2007
- Principios de neurociencia / editado por Duane E. Haines ; colaboradores M. D. Ard ... [et al.] ; [revisores de la ed. española, Enrique Saldaña Fernández, Silvano de las Heras López-Negrete] . 2ª ed., [reimpr.] Madrid [etc.] : Elsevier Science, D.L. 2009
- Kandel, Eric R.. Neurociencia y conducta / Eric R. Kandel, James H. Schwartz, Thomas M. Jessell ; traducción Pilar Herreros de Tejada ... [et al.] ; revisión técnica y coordinación Carlos Fernández Frías . Reimp. Madrid [etc.] : Prentice Hall, 2008
- Kolb, Bryan. Neuropsicología humana / Bryan Kolb, Ian Q. Whishaw . 5ª ed. , [1ª ed., 1ª reimpr.] Madrid [etc.] : Panamericana, 2008
- Nolte, John. El encéfalo humano en fotografías y esquemas / John Nolte , Jay B. Angevine . 3ª ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Elsevier, cop. 2009