

**Biopsychological Aspects of the Person**

Code: 105047  
ECTS Credits: 6

Degree	Type	Year	Semester
2500260 Social Education	FB	1	2
2500261 Education Studies	FB	1	2

### Contact

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### Use of Languages

Principal working language: spanish (spa)  
Some groups entirely in English: No  
Some groups entirely in Catalan: No  
Some groups entirely in Spanish: No

### Teachers

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Carmina Castellano Tejedor

### Prerequisites

As a subject of the first year, the course does not have formal prerequisites. However, it is recommended that students should revise their basic knowledge about biology that they have learnt throughout the previous courses (genetics, hominization, evolution, brain, nervous system and other issues related to those). Es concerned, it is desirable to revise issues such as structure, brain functioning, sensation, attention, perception, memory, reasoning, intelligence.

In addition, it is desirable among the students a high motivation, capacity to organize the information, strategies of synthesis, analysis and critical thinking.

### Objectives and Contextualisation

This course aims to bring closer students to the human reality, in terms of phylogenetic view and ontogenetic (life, development, mental processes, gender, culture, society...). The student is expected to understand and reflect critically about the psychological and biological bases, which allow describing the behavior and the mental processes of the human.

### Competences

- Social Education
- Contextualize educational action based on the different theoretical paradigms that have developed in science and education in accordance with the socio-historical context of individuals, groups and institutions.

- Master the theoretical and applied knowledge of Educational Sciences to develop the capacity for analysis and observation of the social and educational reality.
- Recognize and evaluate the social reality and the interrelation between factors involved as necessary anticipation of action.

## Learning Outcomes

1. Know and identify the main developmental and personality disorders, their impact on development and educational implications.
2. Understand and analyse the biological basis of psychological processes.
3. Understand and analyse the educational implications of learning theories and models.
4. Understand how biological and psychological aspects affect development throughout the life cycle.

## Content

### **1. Basic psychological processes applied to the education (2ECTS) (Block 1) / Unity of Basic Psychology**

- 1.1. The access to knowledge: the nature of sensation, perception and the conscious experience.
- 1.2. The construction of the knowledge: the learning (conditioning, cognitive learning) and the memory.
- 1.3. The activation of the conduct: the motivation (instinct, desire, activation, intrinsic and extrinsic motivation) and the emotion (basic emotions, theories, non verbal communication, gender and culture).

### **2. The nervous system and psychological processes (2 ECTS) (Block 2) / Unity of Systematic and Social Pedagogy**

- 2.1. Structural and functional aspects of the human brain.
- 2.2. The communication between neurons. Nerve nets.
- 2.3. Characteristics of the human brain (plasticity, functional asymmetry, closure, and self- organization, emergency, asynchronous maturation...)
- 2.4. Brain and mental processes.
- 2.5. Cognition, language and communication. The states of consciousness.

### **3. Genetic and socio-biological factors that determine the development and the learning (2 ECTS) (Block 2)/ Unity of Systematic and Social Pedagogy**

- 3.1. Life and evolution. The complexity of the living beings.
- 3.2. Genetic and evolution. Neo-Darwinism. The hominization process.
- 3.3. Phylogenetic aspects of the human behavior (motor activities, key stimulus, motivations and primary emotions, impregnation...)
- 3.4. Perceive, know and sense.
- 3.5. Ethics and evolution. Bioethics.

## Methodology

The teaching strategies in this course will be based on:

- Magistral lessons (30 hours): teacher presentations, students team presentations, video films, discussions, experts within others.

- Practices (15 hours): students teamwork, texts analysis and discussions, papers revision, discussions about note taking at class, map tools, organization and development of practices, focus group, searching information and oral discussion presentations.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Magistral lessons	15	0.6	
Practices	30	1.2	
Type: Supervised			
Supervised tasks	30	1.2	
Type: Autonomous			
Autonomus tasks	75	3	

## Assessment

This course has three points of contents (see section of contents) which are distributed in two thematic blocks. It is required that the students acquire a minimum basic training in all and each of them. Therefore, the students have to provide evidences of those minimums in the various thematic blocks, structured following the form:

Block 1 (34%): issues 1.

Block 2 (66%): issue 2 and 3.

The assessment will be based on written exams and some group practical tasks. In the BLOCK 1 there will be only one evaluative evidence at the end of the block. The BLOCK 2 will have an exam and individual paper at the end of the block. So, in general the result of the course is based on the individual effort.

In addition, the weight of the thematic blocks in the global qualification is also related to the ECTS weight. Thus, the Block 1 has an equivalent weight of 2 ECTS (34%), and the Block 2 corresponds to 4 ECTS (66%).

The assistance in the sessions of practical activities (seminars) is mandatory; in any case, few absences will be considered, as long as the total assistance may be at least the 80%.

To pass the course, it must be proved the acquirement of the minimum requirements in each Block (mentioned above). If the student does not pass any of the blocks, the final score corresponds to the average mark of the failed block/s, and it will be necessary to take the programed exam as a reexamination. If finally any block is not passed, means that the expected minimums are not achieved and it will fail the course with the corresponding mark of the fail block/s. The plagiarism will be reason for the suspension of the course.

The next college tuitions of this course will be able to consist in a synthesis assignment that allows the assessment concerning the expected learning outcomes.

The students who neither do not take part of any evaluation of one of two blocks throughout the academic year, nor the reexamination, they will obtain the qualification not attendance (NP). When, an evaluation is taken within one of those blocks, it will be considered attendance to the corresponding block. Therefore, the student must conduct the rest of the evaluations obligatory; otherwise, it will be calculated the average with the evaluation qualification, which the student has attended, and the corresponding "zeros" of the remaining evaluation not taken of that block. If one of those blocks is passed, the reexamination test will be to show the achievements of the contents and the remaining competencies of the others blocks.

The results of each evaluation evidences have to be published on Campus virtual in a maximum of one month after the realization of the evidence, and it has to offer a date to revise it within a period of 10 days after the publication. However, the reexamination test will be an immediately revision. The final qualification will be obtained from the pondered average of the achievements of each thematic block (34% and 66%).

The treatment of particular cases, doubts, suggestions..., it will be propounded to the corresponding professors of each block. The coordinator of the course will ensure that the final evaluation criteria may be adopted with consensus by the teaching team regarding the global score of the subject.

All this information, and the additional, which suits, it will be put on campus virtual of the course at the beginning of the academic year, which will be used as a communication tool.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Assessment: Cognitive processes	34	0	0	3, 1
Biology assesment	66	0	0	4, 2

## Bibliography

- Alonso Tapia, J. (1998). *Motivación y aprendizaje en el aula*. Madrid: Santillana. Aula XXI.
- Asensio, J. M. (2004). *Una educación para el diálogo*. Barcelona: Paidós.
- Asensio, J. M. (2013). *Educación y vida*. Barcelona: Octaedro.
- Bessel Van de Kolk. (2015). *El cuerpo lleva la cuenta. Cerebro, mente y cuerpo en la superación del trauma*. Barcelona: Olivella.
- Bueno, D. (2016). *Cerebroflexia. El arte de construir el cerebro*. Barcelona: Plataforma Editorial.
- Cotrufo. T. y Ureña, J.M. (2018). *El cerebro y las emociones. Sentir, pensar, decidir*. Madrid: EMSE EDAPP.
- Feldman, L. (2018). *La vida secreta del cerebro. Cómo se construyen las emociones*. Barcelona: Paidós.
- Gutiérrez Martínez, F. (2005). *Teorías del desarrollo cognitivo*. Madrid: McGraw Hill.
- Ferré, J. y Ferré, M. (2013). *Neuropsicopedagogía infantil. Bases neurofuncionales del aprendizaje cognitivo y emocional*. Barcelona: Lebón.

- LeDoux, J. (1999). *El cerebro emocional*. Barcelona: Ariel/Planeta.
- Martínez-Fernández, J. R., y Borràs, F. X. (comp., 2016). *Aspectos Biopsicológicos de la Persona: procesos psicológicos básicos, desarrollo y educación*. Madrid: Pearson Educación.
- Morgado, I. (2012). *Cómo percibimos el mundo. Una exploración de la mente y los sentidos*. Barcelona: Ariel.
- Morgado, I. (2014). *Aprender, recordar y olvidar: Claves cerebrales de la memoria y la educación*. Barcelona: Ariel.
- Mora, F. (2018). *Mitos y verdades del cerebro*. Barcelona: Paidós
- Williams, M. y Penman, D. (2013). *Mindfulness*. Barcelona: Paidós.