Physiological Psychology I is a basic course. Here, basic should be understood as essential. The students will achieve the necessary knowledge to undertake the forthcoming courses in the field of Psychobiology (Physiological Psychology II, Psychopharmacology, Psychoendocrinology, Neuropsychology, Psychobiological Bases Applied to Social Intervention, Psychobiology of Stress).

Physiological Psychology I deals with three broad areas: the biological bases of perception and motricity, the biological basis of biological rhythms and sleep, and finally the biological bases of motivation. It is clearly connected with the course of Foundations of Psychobiology in which students have acquired the neuroscience knowledge needed to understand this subject properly. Although the basic character of the subject makes it difficult to establish a direct connection to the professional fields, the study of Physiological Psychology I gives the student scientific habits that will be very helpful when working as a professional in any area of Psychology.
PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree
There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements
Basic knowledge in Biology such as that acquired in the Bachiller of Health Sciences is considered convenient. Also the background obtained in the course Foundations of Psychobiology will be helpful. Being familiar with standard software packages is recommended.

OUTCOMES

1319 - Degree in Psychology
- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Be able to describe and measure variables (personality, intelligence, attitudes, aptitudes, etc.) and cognitive, emotional, psychobiological and behavioural processes.
- Know how to select and manage tools, products and services, and identify stakeholders.
- Be able to establish the goals of intervention and develop a basic work plan according to its purpose (prevention, therapy, rehabilitation, insertion, guidance, etc.).
- Be able to plan the assessment of programmes and interventions.
- Know how to analyse and interpret the results of assessment.
- Be able to prepare oral and written reports.
- Know and comply with professional ethics of Psychology.
- Understand the biological foundations of human behaviour and psychological functions.

LEARNING OUTCOMES

1. Students will be able to discern how the nervous system processes the sensory information and to identify primary sensory pathways on neuroanatomical diagrams.

2. Students will be able to describe the neurobiological mechanisms of attention.

3. Students will be able to describe the hierarchical organization of sensory-motor system and to mark the route of the main descending motor pathways on neuroanatomical diagrams.
4. Students will be able to describe the biological rhythms and their neural basis.
5. Students will be able to describe the different phases of sleep with their main characteristics.
6. Students will be able to describe the neurophysiological mechanisms of sleep and wakefulness.
7. Students will be able to identify the main sleep disorders and their causes.
8. Students will be able to describe the characteristics, phases and types of motivated behavior.
9. Students will be able to describe the water balance and its neurohormonal regulation.
10. Students will be able to explain the body's energy balance and describe the determinants of intake.
11. Students will be able to identify the neural mechanisms that control hunger and satiety and their involvement in eating disorders.
12. Students will be able to describe the different phases in sexual development and its biological mechanisms.
13. Students will be able to identify the neurohormonal mechanisms of sexual behavior and its disorders.
14. Students will be able to explain the neuroendocrine basis of parental and filial behaviors.
15. Students will be able to describe the brain structures and neurotransmitter systems involved in the addiction to the main drugs of abuse.

**DESCRIPTION OF CONTENTS**

**1. BIOLOGICAL BASES OF PERCEPTION AND MOTRICITY**

1. Biological mechanisms of perception and attention  
2. Biological bases of the sensoriomotor system.  
   Sensoriomotor function. Neural bases of motor control.

**2. BIOLOGICAL BASES OF BIOLOGICAL RHYTHMS AND SLEEP**

3. Biological bases of biological rhythms  
4. Psychophysiological bases of sleep  
   Sleep-wake cycle. Neurophysiological bases of sleep and wakefulness. Sleep disorders.
3. BIOLOGICAL BASES OF MOTIVATION

5. Introduction to Psychobiology of motivation
   Concept of motivation. Characteristics and phases of motivated behaviors.

6. Biological bases of intake behavior

7. Biological bases of sexual behavior

8. Biological bases of parental behavior

9. Biological bases of drug addiction

WORKLOAD

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<tr>
<th>ACTIVITY</th>
<th>Hours</th>
<th>% To be attended</th>
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<tr>
<td>Theoretical and practical classes</td>
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<td>100</td>
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<tr>
<td>Attendance at events and external activities</td>
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<tr>
<td>Development of group work</td>
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<td>Development of individual work</td>
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<tr>
<td>Study and independent work</td>
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<td>Readings supplementary material</td>
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<tr>
<td>Preparation of evaluation activities</td>
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<td>Preparing lectures</td>
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<tr>
<td>Preparation of practical classes and problem</td>
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<tr>
<td><strong>TOTAL</strong></td>
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TEACHING METHODOLOGY

Active and participative methodology, integrating different instructional methods to enhance the significant learning of the knowledge and the development involved the goals of the field.

Among the basic instructional techniques it is included (1) Exhibitions and presentations of the contents of the subject, (2) Performance of practical activities (anatomical models, use of optical microscopes), (3) scheduled group tutoring, (4) Preparation of papers independently, reports of the practical sessions (individual and grouped), (5) formative and summative evaluation.
EVALUATION

MINIMUM REQUIREMENTS

- To pass the course students must achieve a minimum score of 40% in the first element of assessment (theory and practical contents, separately).

Assessment systems

- Assessment of theory and practical contents through a written test about the level of theoretical and practical knowledge acquired by the student (50% and 20% respectively; weighting 70%).
- Written or oral presentation of reports, individual or group projects, delivered to the professor within the established deadline, implying that the student has acquired competencies of knowledge, comprehension and application of the subject’s content (weighting 30%).

GRADING SCHEME

Grades shall be subject to the provisions of the University of Valencia Regulations on Marks (ACGUV 12/2004).

(http://www.uv.es/graus/normatives/Reglament_qualificacions.pdf)

According to this, subjects are graded on a scale of 0 to 10 points to one decimal place, followed by a qualitative equivalence:

- From 0 to 4.9: fail.
- From 5 to 6.9: pass.
- From 7 to 8.9: good.
- From 9 to 10: excellent or excellent with distinction.

The different elements of assessment will only count towards the final aggregate mark if the minimum requirements established for each element are met.

Subject records will include the mark obtained at the first attempt according to the following rules:

- If the element of assessment with the highest weighting has not been assessed, the subject will be graded as ABSENT, irrespective of the rest.
- If the element of assessment with the highest weighting has been assessed but it does not meet minimum requirements, the subject will be given a mark of FAIL and the numerical mark on the 0-10 scale for that element.
- If the element of assessment with the highest weighting has been assessed and it does meet minimum requirements but any of the remaining elements does not, the subject will be given a mark of FAIL and the numerical mark on the 0-10 scale for the element failed.

For the second attempt, the following rules shall apply:
- The mark of ABSENT can only be awarded when more than one element of assessment including that with the highest weighting has not been assessed.

- If all the elements of assessment have been assessed but one of them does not meet minimum requirements, the subject will be given a mark of FAIL and the numerical mark on the 0-10 scale for the element failed. If more than one element of assessment has been failed, the element with the highest mark on the 10 point scale will be used.

- If one or more of the minimum requirements is not met and one element of assessment has not been assessed, the subject will be given a mark of FAIL and the numerical mark on the average numerical mark resulting from the two elements passed and the non-assessed element (which awards 0 points). The highest mark possible is 4.9.

With regard to the possibility that a student may request an advancement of an exam call, according to the current normative, the evaluation will consist of the performance of an exam about the theoretical and practical knowledge (which will represent a 70% of the final mark) and a final report (which will represent a 30% of the final mark).

Review of and appeals against assessment results shall be subject to the Regulations for Appealing against Marks (ACGUV of 29 April 2008).


**REFERENCES**

**Basic**


**Additional**


Es podran utilitzar per al desenvolupament de la docència:
Models animals de conducta
Tècniques de registre psicofisiològic
Models neuro