COURSE DATA

DATA SUBJECT

Code: 33304
Name: Physiological psychology I
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1319 - Degree in Psychology	Facultat de Psicologia i Logopèdia	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1319 - Degree in Psychology	Physiology I	BASIC

COORDINATION

VINADER CAEROLS CONCEPCION

SUMMARY

Physiological Psychology I is a basic subject that provides students with the necessary knowledge to take subsequent subjects in the psychobiology area.

Physiological Psychology I deals with three broad areas: the biological bases of perception and motricity, the biological bases of biological rhythms and sleep, and the biological bases of motivation. It is clearly connected with Foundations of Psychobiology, in which students acquire the neuroanatomical and neuroscientific knowledge necessary to correctly understand this subject, and with Physiological Psychology II, which continues the study of the biological bases of learning, memory and language. It is also strongly connected with Psychopharmacology and Psychoendocrinology, for which students are required to have acquired knowledge of chemical communication and motivated behaviour. Finally, the three Psychobiology electives also require the basic knowledge and skills developed in Physiological Psychology I.

While the fundamental nature of the subject makes it difficult to establish a direct connection with professional fields in psychology, Physiological Psychology I is essential for acquiring a scientific approach to thinking, which is crucial for developing work activities in various fields, such as clinical work, developmental psychology, occupational psychology, social intervention, and research.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

Recommendations:

Students should have good English language skills and a basic knowledge of Foundations of Biopsychology. User-level computer skills are also recommended.

COMPETENCES / LEARNING OUTCOMES

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Be able to describe and measure variables (personality, intelligence, attitudes, aptitudes, etc.) and cognitive, emotional, psychobiological and behavioural processes.

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.

Be able to prepare oral and written reports.

Know and comply with professional ethics of Psychology.

Know how to analyse and interpret the results of assessment.

Know how to select and manage tools, products and services, and identify stakeholders.

Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.

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.

Understand the biological foundations of human behaviour and psychological functions.

DESCRIPTION OF CONTENTS

1. BIOLOGICAL BASES OF PERCEPTION AND MOTRICITY

Theme 1. Biological mechanisms of perception and attention
Introduction. Vision. Audition. Chemical senses: olfaction and taste. Somatosenses. Attention.

Theme 2. Biological bases of the sensoriomotor system.
Sensoriomotor function. Neural bases of motor control.

2. BIOLOGICAL BASES OF BIOLOGICAL RITHMS AND SLEEP

Theme 3. Biological bases of biological rithms
Definition and classification. Neural bases. Cronobiology.

Theme 4. Psychophysiological bases of sleep
Sleep-wake cycle. Neurophysiological bases of sleep and wakefulness. Sleep disorders.

3. BIOLOGICAL BASES OF MOTIVATION

Theme 5. Biological bases of intake behavior
Liquid intake: hydric balance and its regulation, neural mechanisms of drinking behavior. Solid intake: energetic equilibrium in the organism, determining factors of food intake, mechanisms of satiety, neural mechanisms of hunger, eating disorders.

Theme 6. Biological bases of sexual behavior
Hormones and sexual development. Menstrual cycle. Neural control of sexual behavior. Sexual dysfunctions.

Theme 7. Biological bases of parental behavior
Description of maternal behavior in rodents. Neurobiological basis of parental behavior.

Theme 8. Biological bases of drug addiction
Basic concepts. Animal models in the study of addictions. Brain reward system. Mechanism of action of main street drugs.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	60,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours

Attendance at other activities	10,00
Individual or group project	25,00
Independent study and work	30,00
Preparation of lessons	15,00
Preparation for assessment activities	5,00
Resolution of case studies	5,00
Total hours	**90,00**

TEACHING METHODOLOGY

An active and participatory methodology is used, integrating different instructional methodologies to promote significant learning and the development of competences.

Instructions strategies include: (1) Presentations and content delivery. (2) Practical activities. (3) Scheduled group tutorials. (4) Autonomous preparation of work and preparation and presentation of reports on classroom activities (individual and group). (5) Formative and summative assessment.

EVALUATION

Requirements

To pass the subject students will have to reach 50% of the maximum mark. As a minimum, a grade of 4 (out of 10) will be required for both theoretical and practical examinations.

The different sections included in the assessment will be added only if the requirements established for each of them are met.

ASSESSMENT SYSTEMS

ES1- Exams

1. Assessment of theoretical content: tests on the level of theoretical knowledge acquired by the student through an exam that will constitute 50% of the final grade.

2. Assessment of practical content: tests on the level of practical knowledge acquired by the student through an exam that involves solving problems similar to those raised in the face-to-face classes that will constitute 20% of the final grade.

ES2- Reports

Assessment of individual or group work that implies that the student has developed competences of knowledge, understanding and application of the contents of the course will constitute 30% of the final mark, distributed in two reports (15% each). This percentage is broken down into: work delivered in class at the end of the face-to-face session and work delivered throughout the course within the deadlines established for each case.

30% is equivalent to 3 points of the final grade (out of 10) for the course, of which 1 point will be nonrecoverable work/activities and that will be specified at the beginning of the course by the instructor.

GRADING

The grade obtained in the first call will be included in the course report with the following rules:

- If there is no qualification of the evaluation section with the highest weighting, the qualification will be NO PRESENTED.

- If there is a rating in the evaluation section with the highest weighting, and it does not meet the requirements, UNSATISFACTORY/FAIL and a numerical score out of 10 points will be recorded.

- If there is a grade in the evaluation section with the highest weighting, and it meets the established requirements, but these requirements are not met in any of the remaining sections, UNSATISFACTORY/FAIL and a numerical score out of 10 points will be recorded.

- The student will have to choose one of the two options: 1. Keep the score of the deliveries made (including both, recoverable and non-recoverable); 2. Be evaluated on the contents of the recoverable deliveries (2 points out of 10), by taking an examination on all of the recoverable contents (partial evaluation of these contents will not be available), while keeping the scores of the non-recoverable deliveries.

The second call will proceed according to the following rules:

- The NOT PRESENTED option will only fit, if the student has not submitted more than one of the sections evaluation, including the one with the highest weighting.

- If there are qualifications in all the evaluation sections and minimum requirements are not met in any of them, will include UNSATISFACTORY/FAIL and the score (out of 10 points) corresponding to the section that has not been overcome. If more than one section was not passed, the highest grade will be included.

- If one or several of the minimum requirements are not met and an evaluation section is missing, the grade UNSATISFACTORY/FAIL and a score out of 10 will be issued.

- The student will have to choose one of the two options: 1. Keep the mark of the performed deliveries (both, recoverable and non-recoverable); 2. Be evaluated on the contents of the recoverable deliveries (2 points out of 10), by carrying out an examination that will evaluate all the recoverable contents (partial evaluation of these contents will not be available), while keeping the scores of the non-recoverable deliveries if they have been submitted.

Review of and appeals against assessment results shall be subject to the Regulations for Appealing against Grades (ACGUV 108/2017).

(http://www.uv.es/graus/normatives/2017_108_Reglament_avaluacio_qualificacio.pdf)

If the instructor considers it necessary, students may have to take an additional test before awarding an Honours qualification.

In the event of fraudulent practices, the Action Protocol for fraudulent practices at the University of València will be applied (ACGUV 123/2020): https://www.uv.es/sgeneral/Protocols/C83sp.pdf

REFERENCES

BASIC REFERENCES

- CARLSON, N.R. y BIRKETT, M.A. (2018). *Fisiología de la Conducta* (12ª ed.). Pearson ¿ Addison Wesley.
- CARLSON, N.R. y BIRKETT, M.A. (2021). *Physiology of Behavior* (13th Edition). Pearson. (Manual específico para grupo AI en inglés)
- MONLEÓN VERDÚ, S., VINADER-CAEROLS, C., REDOLAT IBORRA, R. y MESA-GRESA, P. (2023). *Prácticas de Psicología Fisiológica I*. Tirant lo Blanch.
- PINEL, J.P.J. y BARNES, S. (2021). *Biopsychology* (11th Edition). Pearson. (Manual específico para grupo AI en inglés)

SUPPLEMENTARY REFERENCES

- BEAR, M.F., CONNORS, B.W. y PARADISO, M.A. (2016). *Neurociencia. La exploración del cerebro* (4ª ed.). LWW Lippincott Wolters Kluwer.
- COLLADO, P., GUILLAMÓN, A., CLARO, F., RODRÍGUEZ, M., PINOS, H., y VENERO, C. (2024). *Psicología Fisiológica*. UNED, Madrid.
- FOX, S. (2021). *Fisiología Humana* (15th edition.). McGraw Hill / Latinoamérica.
- KOLB B. y WHISHAW I.Q. (2016). *Neuropsicologia Humana*. Medica Panamericana.
- REDOLAR RIPOLL, D. (2023). *Neurociencia Cognitiva* (2ª ed.). Panamericana.
- It can be used for the development of teaching: -Animal behavior models.-Tècniques psicofisiològiques. -Neuro Models