



Information about the subject

Degree: Bachelor of Science Degree in Psychology

Faculty: Faculty of Psychology

Code: 291201 **Name:** Psychophysiology

Credits: 6,00 **ECTS Year:** 2 **Semester:** 1

Module: BIOLOGICAL BASIS OF BEHAVIOR

Subject Matter: PHYSIOLOGY **Type:** Basic Formation

Field of knowledge: Health Sciences

Department: Basic, Social, and Neuropsychology

Type of learning: Classroom-based learning / Online

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

BIOLOGICAL BASIS OF BEHAVIOR

Subject Matter	ECTS	Subject	ECTS	Year/semester
PHYSIOLOGY	12,00	Fundamentals of Neuroscience	6,00	1/2
		Psychophysiology	6,00	2/1
BIOLOGY	6,00	Biology of Human Behaviour	6,00	1/1

Recommended knowledge

It is recommended to have previously studied Human Behavioral Biology and Fundamentals of Neuroscience



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Knowing the interactions between nervous system, cell communication and their relationship with human behavior.
- R2 Using the specialized vocabulary of the field and expressing oneself adequately.
- R3 Understanding the neuronal communication processes that support the processing of information of the Nervous System.
- R4 Deducing, interpreting and critically assessing experimental results from scientific reading or informative science.
- R5 Using the documental resources available for the training in scientific knowledge as well as maintaining a scientific attitude as regards the presentation of questions and the search for answers.
- R6 Knowing and relating macroanatomy of the NS with its functionality and some physiological characteristics.
- R7 Knowing the basic relationships between physiology and human behavior.
- R8 Knowing and relating microanatomy and molecular biology of the NS with their functionality and some physiological characteristics.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

SPECIFIC		Weighting			
		1	2	3	4
CE4	Analyzing and measuring variables (personality, intelligence and other aptitudes) and cognitive, emotional, psychobiological and behavioral processes .				X
CE5	Identifying differences, problems and needs.				X
CE6	Diagnosing following professional principles.				X
CE12	Selecting and correctly using tools, products and services and identifying those people and group concerned.		X		
CE15	Defining objectives and devising action plans according to action goals. (prevention, treatment, rehabilitation, insertion, support).		X		
CE16	Choosing adequate psychological intervention techniques.		X		
CE18	Putting into practice direct intervention strategies and methods: psychological advice, therapy, negotiation mediation...		X		
CE24	Analyzing and interpreting assessment results.			X	
CE26	Writing oral and written reports.				X
TRANSVERSAL		Weighting			
		1	2	3	4
CT1	Capacity to analyze and synthesize.				X
CT2	Capacity to organize and plan.			X	
CT4	Command of a foreign language.	X			



CT7	Problem solving.				X
CT8	Decision making.		X		
CT10	Capacity to work in interdisciplinary teams.	X			
CT11	Capacity to work in multicultural environment.	X			
CT18	Capacity to produce new ideas (creativity).			X	
CT35	Being able to develop audio-visual presentations.		X		
CT36	Being able to collect information using different kinds of sources.				X



Assessment system for the acquisition of competencies and grading system

In-class teaching

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6, R7, R8	60,00%	Oral and/or written tests employed in initial, training and/or summative student assessment.
R1, R2, R3, R4, R5	30,00%	Presentation of practical activities.
R2	10,00%	Attendance and active participation: lessons, group assignments and tutoring sessions. It will be monitored and registered by the teacher.

Observations

Assessment Criteria

To pass the course, students must attend at least 40% of the teaching sessions in person and pass all evaluation components (theoretical-practical activities and the final exam) with a minimum score of 5 out of 10 in each part. A final assessment will be held on the date set by the Faculty's official exam calendar (60%), and will consist of objective questions and essay-type questions. The ordinary evaluation will include: 60% Final exam, 30% Theoretical-practical activities, 10% Active classroom participation

Criteria for Awarding "Matrícula de Honor" (Distinction)

The "Matrícula de Honor" will be granted to students with the highest final grades starting from 9.0, who demonstrate excellent performance in objective tests, practical activities, and active participation and attendance in class. Both formal aspects and content will be assessed in essay-type questions and submitted activities. According to university regulations, only one distinction can be awarded per every 20 students.

Other Relevant Aspects of Assessment

In cases where a student is unable to meet the minimum attendance requirement for justified and documented reasons, they may apply for single evaluation (alternative assessment). This option must be requested in writing from the course instructor within the first ten days of the course through the virtual tutorial system. The request will be answered through the same channel. The single evaluation will consist of: 60% Final exam, 30% Theoretical-practical activities, 10% Oral presentation of assignments. Submission deadlines will be adapted according to the student's continuous assessment schedule.

Ethical Use of Artificial Intelligence (AI): Students are not allowed to use AI tools to: Record or transcribe, in whole or in part, any classroom activity with the aim of generating AI-produced summaries or notes. Generate text for assignments submitted as part of class activities. Submit AI-generated work as their own. Feed prompts, exercises, or assessment tasks into AI tools to



obtain automated answers.

Citation and attribution criteria: Any use of AI tools must be explicitly declared in the submitted document (e.g., in a footnote or appendix). The name of the tool, purpose of use (e.g., grammar revision, idea organization, example drafting), and the specific section of the work in which it was used must be indicated.

Online teaching

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6, R7, R8	70,00%	Final evaluation consisting of essay questions and hypothetical scenarios.
R6, R7	5,00%	Submitted tasks
R4, R6, R7	5,00%	Periodical assessment through questionnaires
R2	20,00%	Attendance and participation in synchronic communication activities.

Observations

Assessment Criteria

To pass the course, students must attend at least 40% of the teaching sessions in person and pass all evaluation components (theoretical-practical activities and the final exam) with a minimum score of 5 out of 10 in each part. A final assessment will be held on the date set by the Faculty's official exam calendar, and will consist of objective questions and essay-type questions. The ordinary evaluation will include: 70% Final exam, 10% Theoretical-practical activities, 20% Active classroom participation

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Ethical Use of Artificial Intelligence (AI)

Students are not allowed to use AI tools to: Record or transcribe, in whole or in part, any classroom



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In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded.

Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Teacher presentation of contents, competency analysis, explanation and demonstration of capacities, abilities and knowledge in the classroom (presential modality).
- M2 Teacher-supervised groupwork sessions: case studies, diagnostic tests, problems, fieldwork, IT room, visits, data searches, libraries, web, Internet, etc. Building knowledge significantly through interaction and student activities (presential modality).
- M3 Supervised monographic sessions with shared participation.
- M4 Application of interdisciplinary knowledge.
- M5 Activities developed in spaces with specialized equipment.



- M6 Personalized attention in small groups. Training and/or orientation period by a teacher aimed at revising and discussing the materials and topics presented in the lessons, seminars, lectures, assignments, etc.
- M7 Set of oral and/or written tests employed in initial, training or summative assessment of the student.
- M8 Group preparation of readings, essays, problem resolution, seminars, assignments, reports, etc. to be presented or handed in during theory lessons, practical lessons and/or tutoring sessions in small groups. Tasks done on the platform or other virtual spaces.
- M9 Students' independent study: individual preparation of readings, essays, problem resolution, seminars, assignments, reports, etc. to be presented or handed in during theory lessons, practical lessons and /or small-group tutoring sessions. Tasks on the platform or other virtual spaces.
- M11 Teacher presentation of contents, competencies analysis, explanation and demonstration of capacities, abilities and knowledge on the virtual classroom.
- M12 Group work sessions via chat moderated by the teacher. Case studies –both real and fictional– aimed at building knowledge through interaction and students' activities. Critical analysis of values and social commitment.
- M13 Monographic sessions throughout the course, focused on current aspects and applications of the subject.
- M14 Set of oral and/or written tests employed in initial, training or summative assessment of the student.
- M15 Student's individual study: individual preparation of readings, essays, problem resolution, seminars, assignments, reports, etc. to be discussed or turned in in electronic format.
- M16 Individualized attention for the monitoring and orientation in the learning process, performed by a tutor in order to revise and discuss the materials and topics, seminars, readings and assignments, etc.
- M17 Group preparation of readings, essays, problem resolution, seminars, assignments, reports, etc. to be discussed or handed in.
- M18 Participation and contributions to discussion forums related to the subject and moderated by the module's teacher.
- M19 Problem resolution, comments, reports to be handed in according to the deadlines throughout the course.



IN-CLASS LEARNING

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
ON-CAMPUS CLASS Teacher presentation of contents, analysis of competences, explanation and in-class display of skills, abilities and knowledge. M1	R1, R2, R3, R4, R5, R6, R7, R8	40,00	1,60
PRACTICAL CLASSES Group work sessions supervised by the professor. Case studies, diagnostic tests, problems, field work, computer room, visits, data search, libraries, on-line, Internet, etc. Meaningful construction of knowledge through interaction and student activity. M2	R2, R3, R4, R5, R6	10,00	0,40
SEMINAR Supervised monographic sessions with shared participation. M3	R5	2,50	0,10
LABORATORY Activities carried out in spaces with specialized equipment. M5	R6	2,50	0,10
OFFICE ASSISTANCE Personalized and small group attention. Period of instruction and/or orientation carried out by a tutor to review and discuss materials and topics presented in classes, seminars, papers, etc. M5	R1, R2, R3, R4, R5, R6, R7, R8	2,50	0,10
ASSESSMENT Set of oral and/or written tests used in initial, formative or additive assessment of the student. M7	R1, R2, R3, R4, R5, R6, R7, R8	2,50	0,10
TOTAL		60,00	2,40



LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK Group preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or small-group tutoring sessions. Work done on the university e-learning platform M8	R1, R2, R3, R4, R5, R6, R7, R8	15,00	0,60
INDEPENDENT WORK Student study: Individual preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or small-group tutoring sessions. Work done on the university e-learning platform. M9	R1, R2, R3, R4, R5, R6, R7, R8	75,00	3,00
TOTAL		90,00	3,60



ON-LINE LEARNING

SYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Virtual session (distance learning) M11	R1, R2, R3, R4, R5, R6, R7, R8	25,00	1,00
Virtual practical session (distance learning) M12	R4, R5, R6, R7	12,50	0,50
Seminar and virtual videoconference (distance learning) M13	R5	6,25	0,25
In-person or virtual assessment (distance learning) M14	R1, R2, R3, R4, R5, R6, R7, R8	2,50	0,10
Individual tutoring sessions (distance learning) M16	R1, R2, R3, R4, R5, R6, R7, R8	7,50	0,30
Discussion forums (distance learning) M18	R7	5,00	0,20
Continuous assessment activities (distance learning) M19	R1, R2, R3, R4, R5, R6, R7, R8	6,25	0,25
TOTAL		65,00	2,60

ASYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Individual work activities (distance learning) M15, M19	R1, R2, R3, R4, R5, R6, R7, R8	50,00	2,00
Teamwork (distance learning) M17	R7	35,00	1,40
TOTAL		85,00	3,40



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
UNIT 1. INTRODUCTION TO PHYSIOLOGICAL PSYCHOLOGY	What is psychophysiology? Evolutionary bases of human behavior. Historical origins of psychophysiology. Evolution of species. Research methods in psychophysiology.
UNIT 2. SLEEP AND RHYTHMS BIOLOGICAL	Psychophysiology of Sleep Behavior. Physiological and behavioral description of sleep. Phases of sleep. Why do we sleep?
UNIT 3. SEXUAL BEHAVIOR, PARENTAL AND SUBSIDIARY	Sexual behavior. Neuroanatomy, hormones, motivational factors, sensory and cognitive processing Parental behavior. Neuroendocrine bases of caregiving. Neurocircuits involved in attachment and parental sensitivity. Differences between maternal and paternal behavior. Biological transitions during pregnancy, childbirth, and the postpartum period. Brain plasticity associated with the parental role Filial behavior. Attachment activation system and its emotional regulation.
UNIT 4. EMOTION and AGGRESSION	Theoretical foundations and neurophysiology of emotion. Neurobiology of aggression. Factors modulating aggression. Psychophysiological bases of emotional control.
UNIT 5. INTAKE BEHAVIOR. HUNGER AND THIRST	Neurobiological mechanisms involved in regulation from thirst. Neurobiological mechanisms involved in regulation of hungry
UNIT 6. PSYCHOPHYSIOLOGY OF THE STRESS	Anatomy and physiology of the Autonomous Nervous System. General Adjustment Syndrome. Effects of prolonged stress on health
UNIT 7. ADDICTIVE BEHAVIOR	Addiction. Neurobiological mechanisms linked to addiction. Action mechanisms



Temporary organization of learning:

Block of content	Number of sessions	Hours
UNIT 1. INTRODUCTION TO PHYSIOLOGICAL PSYCHOLOGY	4,00	8,00
UNIT 2. SLEEP AND RHYTHMS BIOLOGICAL	5,00	10,00
UNIT 3. SEXUAL BEHAVIOR, PARENTAL AND SUBSIDIARY	4,00	8,00
UNIT 4. EMOTION and AGGRESSION	5,00	10,00
UNIT 5. INTAKE BEHAVIOR. HUNGER AND THIRST	3,00	6,00
UNIT 6. PSYCHOPHYSIOLOGY OF THE STRESS	5,00	10,00
UNIT 7. ADDICTIVE BEHAVIOR	4,00	8,00



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RECOMMENDED BIBLIOGRAPHY

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