



Information about the subject

Degree: Bachelor of Science Degree in Psychology

Faculty: Faculty of Psychology

Code: 291102 **Name:** Biology of Human Behaviour

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

Module: BIOLOGICAL BASIS OF BEHAVIOR

Subject Matter: BIOLOGY **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

GENERAL GOALS

Cognitive:

· Understand and analyze the interactions between the nervous system, cellular communication and its relationship to human behavior.

Procedural:

- Learn proper use of terms and concepts of matter and expressed correctly and accurately.
- Derive, identify and describe the effects and central nervous phenomena involved in various behavioral processes.
- Derive, interpret and critically evaluate experimental results Know the main documentary sources of the discipline to develop the ability to complete and update knowledge in the future.

Attitudinal:

To determine the adaptive value of behavior adopt a scientific attitude according to the study and explanation of phenomena that belong to the realm of scientific knowledge



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 concepts of behavioral biology and expressing oneself correctly and precisely.
- R3 Deducing, identifying and describing the effects and nerve phenomena at central level involved in the different behavioral processes.



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
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	
CT7 Problem solving.			X	
CT10 Capacity to work in interdisciplinary teams.			X	
CT18 Capacity to produce new ideas (creativity).			X	
CT35 Being able to develop audio-visual presentations.			X	



Assessment system for the acquisition of competencies and grading system

In-class teaching

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

Observations

Students must complete a series of practical **exercises and training activities** both in the classroom and independently outside of class hours. All practical exercises must be submitted within the deadlines established for the assessment of the practical part of the course, and their marks will form part of the final grade. The **final exam** will consist of a written test in which students can demonstrate that they have achieved the learning outcomes of the course. This test may include multiple-choice questions, short essay questions, and graphs.

Attendance:

In justified cases where the student cannot meet the **minimum 40% attendance requirement**, they must consult the current regulations and request the single assessment option from the professor, in order to adapt activities and evaluation criteria accordingly.

Single Assessment:

Students who, for justified reasons, are unable to regularly attend in-person sessions must inform the professor at the beginning of the academic year. They will be offered a single assessment option, which will ensure the acquisition of the required competencies. This alternative assessment will consist of substitute activities with an equivalent workload and level of demand, designed to be completed remotely.

Use of Artificial Intelligence (AI):

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 must be indicated, along with the purpose of use (e.g., grammar correction, idea organization, writing example), and the part of the work in which it was used.

Responsible use of AI will be assessed as part of the originality and academic integrity criteria.

Criteria for Awarding Honors Distinction:

In accordance with the current UCV regulations on subject assessment and grading, the "Honors



Distinction" may be awarded to students who have achieved a grade equal to or higher than 9.0. The number of "Honors Distinctions" may not exceed five percent of the students enrolled in the group during the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case only one "Honors Distinction" may be granted.

Online teaching

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

Observations

Use of Artificial Intelligence (AI):

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 must be indicated, along with the purpose of use (e.g., grammar correction, idea organization, writing example), and the part of the work in which it was used.

Responsible use of AI will be assessed as part of the originality and academic integrity criteria.

Criteria for Awarding Honors Distinction:

In accordance with the current UCV regulations on subject assessment and grading, the "Honors Distinction" may be awarded to students who have achieved a grade equal to or higher than 9.0. The number of "Honors Distinctions" may not exceed five percent of the students enrolled in the group during the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case only one "Honors Distinction" may be granted.



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.



- 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, M3, M4	R1, R3	25,00	1,00
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, M3	R1, R2	12,50	0,50
SEMINAR Supervised monographic sessions with shared participation. M2, M3	R1, R2	5,00	0,20
GROUP WORK EXHIBITION Application of multidisciplinary knowledge. M1, M2	R1, R2	5,00	0,20
LABORATORY Activities carried out in spaces with specialized equipment. M1, M2	R1, R2, R3	5,00	0,20
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. M1, M2	R1, R3	5,00	0,20
ASSESSMENT Set of oral and/or written tests used in initial, formative or additive assessment of the student. M1, M2	R1, R2, R3	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 M1, M2	R1, R3	40,00	1,60
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. M1, M2	R1, R3	50,00	2,00
TOTAL		90,00	3,60



ON-LINE LEARNING

SYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Virtual session (distance learning) M11	R1, R2, R3	25,00	1,00
Virtual practical session (distance learning) M12, M13	R1, R2	12,50	0,50
Seminar and virtual videoconference (distance learning) M13	R1, R2	5,00	0,20
In-person or virtual assessment (distance learning) M11, M16	R1, R2, R3	2,50	0,10
Individual tutoring sessions (distance learning) M16	R1, R2, R3	5,00	0,20
Discussion forums (distance learning) M11, M14, M16	R1, R3	5,00	0,20
Continuous assessment activities (distance learning) M11, M12, M13, M14	R1, R3	5,00	0,20
TOTAL		60,00	2,40

ASYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Individual work activities (distance learning) M11, M14, M16	R1, R3	50,00	2,00
Teamwork (distance learning) M11, M13, M14	R1, R2, R3	40,00	1,60
TOTAL		90,00	3,60



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
DIDACTIC UNIT 1	INTRODUCTION TO BEHAVIORAL BIOLOGY Unit 1. Homeostasis and Control Systems Unit 2. Organization of the Human Body Unit 3. Expression of Genetic Information
DIDACTIC UNIT 2	NERVOUS SYSTEM Unit 1. Organization of the Nervous System. Central Nervous System (CNS) Unit 2. Peripheral Nervous System (PNS). Sensory Nervous System Unit 3. Peripheral Nervous System (PNS). Efferent Nervous System
DIDACTIC UNIT 3	ENDOCRINE SYSTEM Unit 1: Introduction to the endocrine system Unit 2: Hormones of the hypothalamic-pituitary axis Unit 3: Other Hormones

Temporary organization of learning:

Block of content	Number of sessions	Hours
DIDACTIC UNIT 1	10,00	20,00
DIDACTIC UNIT 2	10,00	20,00
DIDACTIC UNIT 3	10,00	20,00



References

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- IRAFOX, S. (2017). **Fisiología humana**. 14ª edición. Editorial Mc Graw Hill.
- CARLSON, N.R. (2014). **Fisiología de la conducta**. Madrid: Prentice Hall.
- CLARK, D.L., BOUTROS, M.F. y MENDEZ, M.F. (2012). **El cerebro y la conducta. Neuroanatomía para Psicólogos**. 2ª edición. México: Manual Moderno.
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- PINEL, J.P.J. (2007). **Biopsicología (6ª ed.)**. Madrid: Pearson Educacion.
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