



Teaching Guide

Identifying Data					2023/24
Subject (*)	Biopsychology			Code	652438010
Study programme	Mestrado Universitario en Psicoloxía Aplicada				
Descriptors					
Cycle	Period	Year	Type	Credits	
Official Master's Degree	1st four-month period	First	Obligatory	3	
Language	Spanish				
Teaching method	Face-to-face				
Prerequisites					
Department	Psicoloxía				
Coordinador	Fernandez Garcia, Rosa Maria	E-mail	rosa.fernandez@udc.es		
Lecturers	Fernandez Garcia, Rosa Maria	E-mail	rosa.fernandez@udc.es		
Web					
General description	<p>O estudo da biopsicología supón un nexo de unión entre dúas disciplinas: a psicoloxía e a bioloxía. Neste sentido, supón o estudo da conduta e dos procesos mentais dos individuos atendendo aos seus compoñentes biolóxicos. Este achegamento ao estudo do comportamento humano non pretende explicar por si só a totalidade do mesmo, nin obviar o papel que desempeñan outros factores. Pola contra, pretende dar unha visión do comportamento que ha de ser entendida dentro dunha perspectiva máis global. Esta materia impártese en español pero os estudantes internacionais recibirán titorías en inglés. O material didáctico estará dispoñible en inglés.</p>				

Study programme competences / results

Code	Study programme competences / results
A1	To recognize and respect human diversity and to understand that psychological explanations may vary across populations and contexts.
A2	To identify the personal, psycho-social and / or educative factors that may put human health at risk.
A3	Being able to elaborate a scientific report which involves defining a research problem, the hypotheses and variables, and defining the design, the sample and its method of selection, the tools for collecting data and their subsequent analysis and discussion.
A7	Knowing to track on a case by choosing appropriate and realistic objectives.
A8	To know the basis for hypotheses establishment with respect to a particular case, and from them to deduce contrastable statements.
A12	To acquire a basic theoretical knowledge about the state of the art in the different areas involved in applied psychology.
A13	Knowing and being able to use the different models, theories, methods and assessment and intervention techniques that are specific of the different areas of research in Applied Psychology, and developing a critical attitude typical of the scientific spirit.
A18	To show an ethical and professional compromise with respect to civic, social and global responsibilities.
A19	Knowing and complying with the deontologic obligations of Applied Psychology.
B1	Capacity for analysis and synthesis.
B2	Capacity for organization and planning.
B3	Teamwork.
B6	Critical thinking.
B8	Autonomous learning.
B10	Motivation for quality.
B11	Troubleshooting.
C1	To express oneself, both orally and in writing, in the official languages of the autonomous region.
C2	To dominate the expression and understanding of a spoken and written foreign language.
C3	Using the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for lifelong learning.
C4	To develop for the exercise of an open, educated, critical, committed, democratic and supportive citizenship, capable of analyzing reality, diagnose problems, develop and deploy solutions based on knowledge and oriented to common good.
C6	To critically assess the knowledge, technology and information available to solve the problems they face.
C7	To assume as professionals and citizens the importance of lifelong learning.



C8	Assessing the importance of research, innovation and technology development in the socio-economic and cultural progress of society.
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Learning outcomes			
Learning outcomes	Study programme competences / results		
G1, G2, G3, G6, G8, G10	AR1	BR1	CC3
	AR2	BR2	CC6
	AR3	BR3	CC7
	AR7	BR6	
	AR12	BR8	
	AR18	BR11	
G1, G2, G3, G6, G8, G10	AR1	BR1	CC1
	AR2	BR2	CC2
	AR3	BR3	CC3
	AR7	BR6	CC4
	AR8	BR8	CC6
	AR12	BR10	CC7
	AR13	BR11	CC8
	AR18		
	AR19		
G1, G2, G3, G6, G8, G10	AR1	BR1	CC1
	AR2	BR2	CC2
	AR3	BR3	CC3
	AR7	BR6	CC4
	AR8	BR10	CC6
	AR12	BR11	CC7
	AR13		CC8
	AR18		
G1, G2, G3, G6, G8, G10	AR1	BR1	CC1
	AR12	BR2	CC2
	AR13	BR3	CC3
	AR18	BR6	CC6
		BR11	CC7
			CC8
E1,E2,E3,E7,E8,E12,E13,E18,E19	AR1	BR1	CC1
	AR2	BR2	CC2
	AR3	BR3	CC3
	AR7	BR6	CC6
	AR12	BR8	CC8
	AR18	BR11	
E1,E2,E3,E7,E8,E12,E13,E18,E19	AR1	BR1	CC1
	AR2	BR2	CC2
	AR3	BR3	CC3
	AR12	BR6	CC6
	AR18	BR8	CC7
			CC8



E1,E2,E3,E7,E8,E12,E13,E18,E19	AR1 AR12 AR18	BR1 BR2 BR3 BR6 BR8 BR10	CC1 CC3 CC6 CC8
N1, N3, N4, N6, N7, N8	AR1 AR8 AR12 AR13	BR1 BR2 BR3 BR6 BR8	
N1, N3, N4, N6, N7, N8	AR1 AR12 AR13	BR1 BR2 BR3 BR6 BR8	

Contents	
Topic	Sub-topic
UNIT 1. Introduction to the nervous system	Cells of the nervous system: neurons and glia. Structure of the nervous system. General characteristics. Brain plasticity
UNIT 2. Cell biology of the nervous system	Neurophysiology of the neuron. Membrane potential. Action potential. Lead action potential.
UNIT 3. Neurochemistry of synaptic transmission	The synapse. Types of synapses, synapse elements, nerve impulse transmission, postsynaptic potentials, neuronal integration, autoreceptors.
UNIT 4: Neurotransmitters	Acetylcholine, monoamines, amino acids, lipids. Pharmacology of the synapse
UNIT 5: Development of the nervous system	Central nervous system and peripheral nervous system, parts and functions
UNIT 6: Alterations of the nervous system due to early stress	Effects of early experience on the development of the nervous system. Neural plasticity, consequences of early stress.

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Oral presentation	A1 A2 A3 A7 A8 A12 A13 A18 A19 B1 B2 B3 B6 B8 C4	9	18	27
Document analysis	A3 A18 B10 C1 C2	2	4	6
Workbook	A13 B11 C3 C6 C7	1	10	11
Guest lecture / keynote speech	A7 A8 C8	7	14	21
Objective test	A12	2	4	6
Personalized attention		4	0	4

(*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
Methodologies	Description
Oral presentation	Elaboration and exhibition of a work, individual or in group, related to the program
Document analysis	Analysis of the latest scientific advances through bibliographic research
Workbook	Bibliography related to the topics of the subject
Guest lecture / keynote speech	Master classes accompanied by means and didactic resources



Objective test	Objective test with 50 test questions, true-false type
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Personalized attention

Methodologies	Description
Document analysis Workbook Oral presentation	Doubt resolution, bibliographic guidance, preparation of works, etc

Assessment

Methodologies	Competencies / Results	Description	Qualification
Objective test	A12	preguntas tipo test	40
Document analysis	A3 A18 B10 C1 C2	Búsqueda e análise de traballo de investigación	20
Workbook	A13 B11 C3 C6 C7	Bibliografía recomendada	20
Oral presentation	A1 A2 A3 A7 A8 A12 A13 A18 A19 B1 B2 B3 B6 B8 C4	traballo persoal sobre un dos temas	20

Assessment comments

subject qualification:

- Attendance and participation in the theoretical and practical classes, and especially in the latter
- Quality of supervised work or research projects (planning, elaboration, writing and analysis of conclusions)
- Objective test
- Evaluation of other training activities used, until completing the total qualification

Sources of information

Basic	- J P J Pinel (2007). Biopsicología. PEARSON EDUCACION SA - Kolb Whishaw (2006). Neuropsicología humana. panamericana - P J Corr (2008). Psicología Biológica. McGraw-Hill Interamericana
Complementary	

Recommendations

Subjects that it is recommended to have taken before

Subjects that are recommended to be taken simultaneously

Subjects that continue the syllabus

Other comments

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.