| | | Teaching Guide | | | |
|-------------------------|---|---------------------------------|----------------------------|------------------------------------|--|
| | Identifying | g Data | | 2023/24 | |
| Subject (*) | Biopsychology Code 65243 | | 652438010 | | |
| Study programme | Mestrado Universitario en Psicoloxía Aplicada | | | | |
| | | Descriptors | | | |
| Cycle | Period | Year | Туре | Credits | |
| Official Master's Degre | e 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 | rosa.fernandez@udc.es | |
| Web | | | | | |
| General description | 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 proces | os mentais dos individuos ate | ndendo aos seus compo | nnentes biolóxicos. Este | |
| | achegamento ao estudo do compo | ortamento humano non preten | de explicar por si só a to | otalidade do mesmo, nin obviar o | |
| | papel que desempeñan outros fac | tores. Pola contra, pretende d | lar unha visión do compo | ortamento que ha de ser entendida | |
| | dentro dunha perspectiva máis glo | obal. Esta materia impártese e | n español pero os estud | antes internacionais recibirán | |
| | titorías en inglés. O material didác | tico estará dispoñible en inglé | s. | | |

| | Study programme competences |
|------|---|
| Code | Study programme competences |
| 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. |
| А3 | 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. |
| В3 | 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.

| Learning outcomes | | | |
|--------------------------------|-------|----------|------|
| Learning outcomes | Study | y progra | amme |
| 3 1011 11 | | mpeten | |
| G1, G2, G3, G6, G8, G10 | AR1 | BR1 | ССЗ |
| | 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 | BR1 | CC1 |
|--------------------------------|------|------|-----|
| | AR12 | BR2 | CC3 |
| | AR18 | BR3 | CC6 |
| | | BR6 | CC8 |
| | | BR8 | |
| | | BR10 | |
| N1, N3, N4, N6, N7, N8 | AR1 | BR1 | |
| | AR8 | BR2 | |
| | AR12 | BR3 | |
| | AR13 | BR6 | |
| | | BR8 | |
| N1, N3, N4, N6, N7, N8 | AR1 | BR1 | |
| | AR12 | BR2 | |
| | AR13 | 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 | Ordinary class | Student?s personal | Total hours |
| | | hours | work hours | |
| Oral presentation | A1 A2 A3 A7 A8 A12 | 9 | 18 | 27 |
| | A13 A18 A19 B1 B2 | | | |
| | B3 B6 B8 C4 | | | |
| 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 fo | r guidance only and does not t | ake into account the | heterogeneity of the stud | lents. |

| | 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 / | Master classes accompanied by means and didactic resources | | |
| keynote speech | | | |



| Objective test | Objective test with 50 test questions, true-false type |
|----------------|--|
|----------------|--|

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

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

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). Biopsicologia. PEARSON EDUCACION SA |
| | - Kolb Whishaw (2006). Neuropsicologia humana. panamericana |
| | - P J Corr (2008). Psicologia Biologica. 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.