Teaching Guide				
Identifying Data				2024/25
Subject (*)	Neurogenetics. dependence and disability		Code	652438011
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	Tratanse aspectos de base neuroxenética que poden afectar á discapacidade e a dependencia. Esta materia impártese en español pero os estudantes internacionais recibirán titorías en inglés. O material didáctico estará dispoñible en inglés.			

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.
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.
B2	Capacity for organization and planning.
C3	Using the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for 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 programme competences / results		
Know what neurogenetics is.	AR1 AR2 AR3 AR8 AR12 AR13		
Know the types of neurogenetic alterations	AR1 AR2 AR3 AR8 AR12 AR13		
Know how to apply critical, logical and creative thinking		BR2	

Assess the importance of research, innovation and technological development in the socioeconomic and cultural progress of society.			CC3 CC8

Contents	
Topic	**Sub-topic**
UNIT 1. HUMAN NEUROGENETICS	General explanation of the main contents of genetics. DNA, gene, allele
UNIT 2. STUDY OF CHROMOSOMES	human karyotype. type of chromosomes. Major elements of chromosomes.
UNIT 3. MAIN CHROMOSOMIC SYNDROMES IN HUMANS	Turner's syndrome. Klinefelter syndrome. Down's Syndrome.
UNIT 4. EPIGENETIC BASIS OF HUMAN BEHAVIOR	General explanation of Epigenetics. Bases and peculiarities related to human behavior.
UNIT 5. STUDY OF THE GENETIC AND EPIGENETIC BASIS OF SEXUAL DIMORPHISM IN HUMANS	Genetic and epigenetic bases related to sexual dimorphism. Transsexuality. Gender and gender incongruity.

Planning				
Methodologies / tests	**Competencies / Results**	**Teaching hours (in-person & virtual)**	**Student?s personal work hours**	**Total hours**
Guest lecture / keynote speech	A1 A2 A3 A8 A12 A13 C3	9	27	36
Laboratory practice	A1 A2 A3 A12 B2 C3 C8	4	16	20
Objective test	A1 C8	3	6	9
Personalized attention		10	0	10
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	**Description**
Guest lecture / keynote speech	The teacher will deliver a series of lectures on the four topics in the classroom.
Laboratory practice	1º Obtaining DNA from buccal mucosa. 2º Practice of dissection of the brain of a lamb. 3º Make a human karyotype from an image of the chromosomes (metaphase).
Objective test	Answer a questionnaire of 40 multiple-choice questions (true/false), related to the four topics presented by the teacher and to the laboratory practices carried out by the students.

Personalized attention	
Methodologies	**Description**
Objective test Laboratory practice	Resolution of issues

Assessment			
Methodologies	**Competencies / Results**	**Description**	**Qualification**
Objective test	A1 C8	Solve a questionnaire. To pass the course must be approved test or objective test.	80
Guest lecture / keynote speech	A1 A2 A3 A8 A12 A13 C3	Materiais en Moodle o Teams	10
Laboratory practice	A1 A2 A3 A12 B2 C3 C8	Prácticas no laboratorio de Psicobioloxía	10

Assessment comments

Students who have been granted recognition of their part-time dedication and academic dispensation of exemption from attendance will be required to pass the objective test, but will not be obliged to participate in the laboratory practicals.

Sources of information	
Basic	Calquera manual de xenética ou de xenética molecular que se atope na biblioteca da Facultade. Por exemplo:- COX, T.M. y SINCLAIR, J. (1998). Biología Molecular en Medicina. Madrid. Pannamericana.- PLOMIN, R., DEFRIES, J.C. (2002) . Genética de la conducta. Madrid, Alianza.
Complementary	

Recommendations
Subjects that it is recommended to have taken before
Subjects that are recommended to be taken simultaneously
Biopsychology/652438010
Subjects that continue the syllabus
Other comments
Coñecementos previos de contidos de Psicobioloxía, especialmente Xenética do comportamento

(*)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.