



## Teaching Guide

Identifying Data				2024/25	
Subject (*)	Congenital Disorders		Code	652G04013	
Study programme	Grao en Logopedia				
Descriptors					
Cycle	Period	Year	Type	Credits	
Graduate	1st four-month period	Second	Obligatory	6	
Language	Spanish				
Teaching method	Face-to-face				
Prerequisites					
Department	Psicoloxía				
Coordinador	Laffon Lage, Blanca	E-mail	blanca.laffon@udc.es		
Lecturers	Laffon Lage, Blanca	E-mail	blanca.laffon@udc.es		
Web					
General description	The main objective of this course is to learn the mechanisms that may cause alterations in cells, tissues and organs with consequences on communication skills, with particular attention to causes of genetic origin.				

## Study programme competences / results

Code	Study programme competences / results
A1	Coñecer e integrar os fundamentos biolóxicos da Logopedia: a Anatomía e Fisioloxía.
A6	Coñecer a clasificación, a terminoloxía e a descrición dos trastornos da comunicación, a linguaxe, a fala, a voz e a audición e as funcións orais non verbais.
A7	Coñecer, recoñecer e discriminar entre a variedade das alteracións: os trastornos específicos do desenvolvemento da linguaxe, trastorno específico da linguaxe, retrasos da linguaxe, trastornos fonéticos e fonolóxicos; os trastornos da comunicación e a linguaxe asociados a déficit auditivos e visuais, o déficit de atención, a deficiencia mental, o trastorno xeneralizado do desenvolvemento, os trastornos do espectro autista, a parálise cerebral infantil e as plurideficiencias; os trastornos específicos da linguaxe escrita; as discalculias; as alteracións no desenvolvemento da linguaxe por privación social e as asociadas a contextos multiculturais e plurilingüismo; os trastornos da fluidez da fala; as afasias e os trastornos asociados; as disartrias; as disfonías; as disglosias; as alteracións da linguaxe no avellentamento e os trastornos dexenerativos; as alteracións da linguaxe e a comunicación en enfermidades mentais; o mutismo e as inhibicións da linguaxe; as alteracións das funcións orais non verbais: deglución atípica, disfagia e alteracións tubáricas.
A10	Realizar a avaliación das alteracións da linguaxe nos trastornos específicos do desenvolvemento da linguaxe: trastorno específico da linguaxe, retrasos da linguaxe, trastornos fonéticos e fonolóxicos; os trastornos da comunicación e a linguaxe asociados a déficit auditivos e visuais, o déficit de atención, a deficiencia mental, o trastorno xeneralizado do desenvolvemento, os trastornos do espectro autista, a parálise cerebral infantil e as plurideficiencias; os trastornos específicos da linguaxe escrita; as discalculias; as alteracións no desenvolvemento da linguaxe por privación social e as asociadas a contextos multiculturais e plurilingüismo; os trastornos da fluidez da fala; as afasias e os trastornos asociados; as disartrias; as disfonías; as disglosias; as alteracións da linguaxe no avellentamento e os trastornos dexenerativos; as alteracións da linguaxe e a comunicación en enfermidades mentais; o mutismo e as inhibicións da linguaxe; as alteracións das funcións orais non verbais: deglución atípica, disfagia e alteracións tubáricas.
A26	Adquirir un coñecemento práctico para a avaliación logopédica.
A32	Utilizar tecnoloxías da información e da comunicación.
B12	Comunicarse de maneira efectiva nun contorno de traballo.
B17	Saber expresarse en público.
C3	Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida.
C6	Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
C8	Valorar a importancia que ten a investigación, a innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da sociedade.

## Learning outcomes



Learning outcomes	Study programme competences / results		
To know the modes of genetic information, the mechanisms for inheritance transmission, and the typos of cell products related to cognitive functions	A1 A6		C3 C6 C8
To learn the fundamentals of the methodologies for determination of language congenital disorders	A10 A26 A32		C3 C6 C8
To know the stages of embryonic development and neurodevelopment, and their relationship with the risk of malformations	A1 A6 A26		C3 C6 C8
To know the aetiology of the main language disorders of congenital origin, both exogenous and those caused by specific point genetic alterations and chromosomal abnormalities	A1 A6 A7 A26		C3 C6 C8
To understand the changes that occur in language as a result of neurogenetic alterations, cerebral palsy and mental retardation	A1 A6 A7 A26		C3 C6 C8
To master the discipline scientific language and to communicate efficiently		B12	
To know how to express yourself in public		B17	

Contents	
Topic	Sub-topic
1. Genetic information	
2. Mechanisms of inheritance	
3. Study methods	
4. Embryonic development and dysmorphology	-
5. Teratogenesis	
6. Numeric and structural chromosomopathies	
7. Inborn errors of metabolism	
8. Neurogenetics	
9. Cerebral palsy and intellectual disability	

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A10 A26 A32 C3 C8	24	72	96
Workshop	B12 B17 C6	6	18	24
Multiple-choice questions	A7 A10	2	0	2
Problem solving	A1 A6 A10 B17 C8	9	18	27
Personalized attention		1	0	1

(\*)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 introduce the programme contents with the aid of multimedia stuff. She will answer the questions raised by the students



Workshop	Formative modality in which several methodologies (guided practices, presentations, debates, watching multimedia contents, etc.) can be combined. The students conduct tasks about a particular topic, with the aid of the teacher.
Multiple-choice questions	At the end of the programme, an exam consisting of a test-type questionnaire will be conducted.
Problem solving	Solving problems about topics related to the programme.

## Personalized attention

Methodologies	Description
Workshop	Personalized attention, supervising and orienting the work carried out in the course activities.
Problem solving	Attention in group to solve doubts in face-to-face classes.
Multiple-choice questions	Attention out of the official class schedule can be carried out online.
Guest lecture / keynote speech	

## Assessment

Methodologies	Competencies / Results	Description	Qualification
Workshop	B12 B17 C6	The content of the workshops will be evaluated by the test-type questionnaire.	0
Problem solving	A1 A6 A10 B17 C8	The exam will include a part about problem solving.	20
Multiple-choice questions	A7 A10	The exam will include a multiple-choice questionnaire about the content of the lectures and workshops.	80
Guest lecture / keynote speech	A10 A26 A32 C3 C8	The content of the lectures will be evaluated by the test-type questionnaire.	0
Others		Un examen al finalizar el programa que deberá aprobarse para superar la asignatura. Dicho examen podrá realizarse antes del programado por la Facultad La nota de la asignatura se complementará con los trabajos correspondientes a los créditos ECTS y el trabajo práctico.	

## Assessment comments

The fraudulent performance of the tests or evaluation activities, once it is verified, will imply directly a failure grade '0' in the subject in the corresponding call, independently of the fact that the fraud is committed in the first or second opportunity. For that, in case it is necessary, the grade in the first opportunity will be modified.

In the different activities, plagiarism and use of non-original material, including that obtained from internet, without explicit indication of its origin, will be considered cause of failure (grade 0) in the activity. In addition to the disciplinary responsibilities that may derive from the corresponding procedure.

Second opportunity evaluation: the same criteria than in the first opportunity will be followed.

In case of discrepancies among the teaching guides in the different languages, the Spanish version will prevail.

## Sources of information



<b>Basic</b>	<p>Carlson, N.R. (2006) Fisiología de la conducta (8ª Edición). Madrid: Pearson Educación. del Abril Alonso, A.; Flores, E.A.; de Blas Calleja, M.R.; Caminero Gómez, A.A.; García Lecumberri, C.; de Pablo González, J.M.; Sandoval Valdemoro, E. (2001) Fundamentos biológicos de la conducta (2ª Edición). Madrid: Sanz y Torres. Fuentes, X.; Castiñeiras, M.J.; Queraltó, J.M. (1999) Bioquímica clínica y patología molecular. Barcelona: Reverte. Gil, R. (2007) Manual de Neuropsicología. Barcelona: Elsevier Massson. González, N.L.; Armas, M.H. (1998) Diagnóstico prenatal de las alteraciones congénitas: Investigación. Universidad de la Laguna, Secretariado de Publicaciones. Hübner, M.E. (2005) Malformaciones congénitas: Diagnóstico y manejo neonatal. Madrid: Editorial Universitaria. Jiménez Escrig, A. (2003) Manual de neurogenética. Madrid: Ediciones Díaz de Santos. Jones KL. (2007) Smith. Patrones reconocibles de malformaciones humanas. Madrid: Elsevier. Junqué, C.; Bruna, O.; Mataró, M. (2004) Neuropsicología del lenguaje: Funcionamiento normal y patológico. Rehabilitación. Barcelona: Elsevier España. Laffon, B.; Pásaro, E. (2012). Bases congénitas de las alteraciones del lenguaje. Bubok Publisher. Madrid. Love, R.J.; Webb, W.G. (1998) Neurología para los especialistas del habla y del lenguaje (3ª Edición). Madrid: Panamericana. Mora, F. (2009) Cómo funciona el cerebro. Madrid: Alianza Editorial. Pinel, J.P.J. (2007) Biopsicología (6ª Edición). Madrid: Pearson Educación. Plomin, R.; DeFries, J.; McClearn, G.; McGuffin, P. (2002) Genética de la conducta. Ariel Ciencia. Barcelona. Puyuelo, M.; Rondal, J.A. (2003) Manual de desarrollo y alteraciones del lenguaje. Aspectos evolutivos y patología en el niño y el adulto. Barcelona: Masson. Solari, A.J. (1999) Genética humana: fundamentos y aplicaciones en medicina (2ª Edición). Buenos Aires: Editorial Médica Panamericana. Strachan, T.; Read, A.P. (2006) Genética molecular humana (3ª Edición). México: McGraw-Hill.</p>
<b>Complementary</b>	

## 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

-Basic concepts of cytology, histology and genetics.-User level computer skills-English, to consult bibliographic and multimedia material.-In order to contribute to a sustainable environment and fulfil the objectives of the Faculty of Education Sciences Environmental Declaration, in the frame of the Green Campus, documents prepared for this subject must be delivered in digital format. In case of using paper:Plastics must not be used.Printing must be both sides.Recycled paper must be used.

Draft printing must be avoided.

(\*)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.