UNIVERSIDADE DA CORUÑA

Teaching Guide				
Identifying Data				2017/18
Subject (*)	Psychopharmacology		Code	652438013
Study programme	Mestrado Universitario en Psicoloxía Aplicada			
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	First	Obligatoria	3
Language	SpanishGalician			
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	In this subject the student will learn the neurophysiological basis of psychopharmacotherapy, the pharmacokinetic and pharmacodynamic aspects underlying the pharmacological mechanisms of action, and the main groups of psychodrugs and their therapeutic use.			

Study programme competences / results	
Code	Study programme competences / results
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.
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.
A16	To acquire the knowledge and skills necessary for the exposition and defence of a research paper.
B1	Capacity for analysis and synthesis.
B2	Capacity for organization and planning.
B3	Teamwork.
B5	Skills in interpersonal relations.
B6	Critical thinking.
B8	Autonomous learning.
B15	Ability to work with an interdisciplinary team.
B16	Ability to communicate with non-experts in the field.
C1	To express oneself, both orally and in writing, in the official languages of the autonomous region.
C3	Using the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for lifelong learning.
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 programme competences / results		
Learning the neurophysiological basis of psychodrugs action.	AR12		
Learning the features and main factors affecting each of four pharmacokinetic processes.	AR12		

Learning the general action mechanisms of psychodrugs, the utility of the dose-response curves, and the factors involved in the interindividual variability to psychodrug response.	AR2 AR12		
Learning the main groups of psychodrugs, their action mechanisms and their clinical applications.	AR2 AR7 AR12		
Learning the stages in new psychodrug development.	AR12		CC7 CC8
Skills to express in scientific language and comunicate in an effective manner.	AR3 AR13		CC1 CC6
Working in group in a collaborative manner.		BR2 BR3 BR5 BR6 BR8 BR15	CC3
Skills for speaking in public.	AR16	BR1 BR2 BR16	

Contents	
Topic	**Sub-topic**
I. Introduction	1. Neurophysiological bases of psychopharmacology: cell neurophysiology, interneuron communication, psychopharmacotherapy principles.
II. Pharmacology	2. Essential concepts in Pharmacology. 3. Pharmacokinetics: absorption, distribution, metabolization and excretion processes. 4. Pharmacodynamics: drug mechanisms of action, dose-response curves, pharmacologic response variability.
III. Psychodrugs	5. Psycholeptic drugs: hipnotic drugs, anxyolitic drugs, neuroleptic drugs. 6. Psychoanaleptic drugs: antidepressant drugs, psychostimulating drugs, nootropes. 7. Psychodysleptic drugs.
IV. Advances	8. Development of new psychodrugs.

Planning				
Methodologies / tests	**Competencies / Results**	**Teaching hours (in-person & virtual)**	**Student?s personal work hours**	**Total hours**
Short answer questions	A2 A12 B1 B6 C1	0	2	2
Guest lecture / keynote speech	A2 A12 B6 B8 C6 C7 C8	16	28	44
Seminar	A16 B1 B3 B5 B6 B15 B16 C1	4	4	8
Supervised projects	A3 A16 B1 B2 B3 B5 B15 C1 C3 C8	0	15	15
Problem solving	A2 A7 A13 B1 B6 B8 C3 C6	2	2	4
Personalized attention		2	0	2
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	**Description**
Short answer questions	When the subject programme has been finished, the students will fill in a short answer questions questionnaire. When the provisional qualifications are published, a date for review several days later will be fixed.
Guest lecture / keynote speech	The professor will introduce the programme contents with the aid of multimedia stuff. She will answer the questions raised by the students.
Seminar	Bibliographic seminars: students will present their projects. Then a debate on each issue will be performed.
Supervised projects	Supervised projects in groups of students about an issue proposed by the professor. With this aim, personalized attention will be given in order to give orientation on the contents to be included in each project and provide with bibliographic stuff. The files corresponding to each project and its presentation will be delivered through the Moodle platform before the deadline fixed. Later, all projects will be available in Moodle.
Problem solving	Practical session dealing with solving problems related to different aspects addressed in this subject.

Personalized attention	
Methodologies	**Description**
Supervised projects	Part-time students: materials used in lectures, and any other useful material, will be available in Moodle platform. Deadlines for supervised projects and questionnaires will be the same than for regular students, and will be specified in Moodle. For carrying out the supervised projects, personalized attention will be given in order to give orientation on the points to be included in each project and provide with illustrative bibliographic stuff. Upon students' request, personalized attention will be given in order to answer questions, and provide with orientation and help for developing specific, basic and transversal study programme competencies.

Assessment			
Methodologies	**Competencies / Results**	**Description**	**Qualification**
Guest lecture / keynote speech	A2 A12 B6 B8 C6 C7 C8	Regular attendance and participation will be evaluated, only when the student pass the short answer questions questionnaire.	8
Seminar	A16 B1 B3 B5 B6 B15 B16 C1	Regular attendance and participation will be evaluated, only when the student pass the short answer questions questionnaire.	1
Supervised projects	A3 A16 B1 B2 B3 B5 B15 C1 C3 C8	It is mandatory to carry out a supervised project in group (if there are enough students). The qualification will be the same for all group members. It will be evaluated only when the student pass the short answer questions questionnaire.	50
Short answer questions	A2 A12 B1 B6 C1	Short answer questions questionnaire. For the students not attending the lectures, this questionnaire will be marked 50% of the final qualification. Passing this questionnaire is mandatory to pass the whole subject.	40
Problem solving	A2 A7 A13 B1 B6 B8 C3 C6	Regular attendance and participation will be evaluated, only when the student pass the short answer questions questionnaire.	1

Assessment comments
Second oportunity evaluation: students must deliver a supervised project (in case they had not done it before) and do the short answer question exam.

Sources of information

Basic	Brunton, L.L.; Lazo, J.S.; Parker, K.L. (2007) Goodman & Gilman Las bases farmacológicas de la terapéutica. México D.F.: McGraw-Hill Interamericana. Cabrera Bonet, R.; Mencías Rodríguez, E.; Cabrera Forneiro, J. (1993) Toxicología de los psicofármacos. Madrid: Mosby. Flórez, J. (2001) Farmacología humana. Barcelona: Masson. Gómez-Jarabo, G. (2007) Farmacología de la conducta. Manual básico para psicoterapeutas y clínicos. Madrid: Síntesis. Janicak, P.G.; Davis, J.M.; Preskorn, S.H.; Ayd, F.J. Jr.; Marder, S.R.; Pavuluri, M.N. (2006) Principles and practice of psychopharmacotherapy, 4th edition. Philadelphia: Lippincott Williams & Wilkins. Pöldinger, W. (1984) Compendio de psicofarmacoterapia. Basilea: Roche. Rahola, J.G. (2012) Lo que siempre quiso saber de los psicofármacos... y nunca se atrevió a preguntar. Madrid: Aulamédica. Salazar, M.; Peralta, C.; Pastor, J. (2005) Tratado de psicofarmacología. Bases y aplicación clínica. Madrid: Panamericana. Schaztberg, A.F.; Nemeroff, C.B. (2006) Tratado de psicofarmacología. Barcelona: Masson Elsevier. Snyder, S.H. (1992) Drogas y cerebro. Barcelona: Prensa Científica. Stahl, S.M. (2002) Psicofarmacología esencial. Bases neurocientíficas y aplicaciones clínicas. Barcelona: Ariel. Zarranz, J.J. (2011) Neurofarmacología contemporánea. Barcelona: Elsevier.
Complementary	Bayés, R. (1977) Iniciación a la farmacología del comportamiento. Barcelona: Fontanella. Bear, M.F.; Connors, B.W.; Paradiso, M.A. (1998) Neurociencia. Explorando el cerebro. Baltimor: Williams & Wilkins. Bravo Ortiz, M.F. (2008) Psicofarmacología para psicólogos. Madrid: Síntesis. Carlson, N.R. (2006) Fisiología de la conducta (8ª Edición). Madrid: Pearson Educación. Mulder, G.J.; Dencker, L. (2006) Pharmaceutical Toxicology. Scarborough: Pharmaceutical Press. Pies, R.W. (2000) Manual de psicofarmacología básica. Barcelona: Masson. Pinel, J.P.J. (2007) Biopsicología. Madrid: Pearson Educación. Raviña Ruvira, E. (1987) Introducción al diseño de fármacos. Santiago de Compostela: Servicio científico Roche. Rosenzweig, M.R.; Leiman, A.L.; Breedlove, S.M. (2001) Psicología Biológica. Barcelona: Ariel. Salazar, M.; Peralta, C.; Pastor, J. (2005) Guía de estudio del Tratado de psicofarmacología. Madrid: Panamericana.

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
-Computer skills (user level) are recommended in order to use the Moodle platform and prepare the supervised project and its presentation. -English language is recommended, in order to read the bibliographic stuff.