

NEUROPSYCHOLOGICAL AND PSYCHOPHARMACOLOGICAL INTERVENTION AND TREATMENT– Code 800172

Academic Year 2022-23

COURSE INFORMATION

Undergraduate Studies: 0812 – Degree in Psychology (Studies Plan 2009-10)

Type: Compulsory

ECTS: 6.0

Module: Basic psychological training

Area: Intervention and psychological treatment

Year: Fourth

Semester: 1

INSTRUCTOR INFORMATION

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SYNOPSIS

COMPETENCIES

The development of the capacity to integrate knowledge from distinct areas of Psychology and to work within an interdisciplinary team in the field of rehabilitation of neurological and psychiatric patients. To understand the neuroplasticity of the brain applied to different disorders. To know the neurobiological basis and psychopharmacological tools to treat neuropsychological disorders.

TEACHING ACTIVITIES

Theory:

Teaching lessons of the program contents. These represent 50% of the final course evaluation.

Practice:

To deepen and clarify complex issues of the program contents. Analysis of clinical cases of neuro- and psychopharmacological intervention in neurological and/ or psychiatric diseases.

Other:

Obligatory reading activities. The corresponding articles will be announced in the course. These activities compose 20% of the final course evaluation.

ECTs break-down

TEACHING ACTIVITIES	Hours	% of total credits	Attendance
Lectures Theory	30	20%	100%
Practical Lessons	15	10%	100%
Tutorials	5	3%	50%
Students' work (class assignments and time of study)	77	51%	0%
Theoretical Report	15	10%	0%

Assessment activities	8	6%	100%
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BRIEF DESCRIPTION:

Study of the principles of neuro- and psychopharmacological interventions based on neuroscientific knowledge about the inter-relationship between the brain, behaviour, and cognitive processes and its applications to the treatment of major neurological or psychiatric pathologies.

PRE-REQUISITES

Knowledge about the contents of the Psychology Grade such as the principal psychological processes in human behaviour, basic brain functions, effects of cerebral damage, and psychological assessment of cognitive processes. Good English level (at least fluent reading abilities).

OBJECTIVES

- 1) To provide recent knowledge about neuro – and psychopharmacological intervention strategies in diseases that affect cognitive and emotional processes.
- 2) To provide a theoretical and practical base in order to critically assess intervention strategies with respect to their effectiveness.
- 3) To guide the student through the relevant international scientific publications (in English)
- 4) To learn to receive and express the contents of the course using the English language.

TOPICS

- 1) Neural basis of cognitive functions and neuro- and psychopharmacological intervention strategies.
- 2) Principles of Neuropsychopharmacology: How do psycho-pharmacological substances act on the nervous system?
- 3) Psychopharmacological Intervention in major psychiatric diseases
- 4) Neuropsychological Intervention in neurological disorders
- 5) Evaluation of intervention strategies

ASSESSMENT

The course evaluation is based on an exam (theory (50%) and obligatory articles (20%)) and the practical activities (30%; that can be in-class or home based activities). It is mandatory to obtain at least a score of 4.0 (over 10) in each part (Neuropsychology and Psychopharmacology) in order to pass the final exam.

As one of the objectives of this course is to learn and practice the usage of the English language to express the contents of this course, the exam consists of open questions.

RESOURCES

- BRUNA, O.; ROIG, T.; PUYUELO, M.; JUNQUÉ, C.; RUANO, A. (2011). Rehabilitación neuropsicológica: Intervención y práctica clínica. Barcelona: Elsevier-Masson.
- FERNANDEZ TERUEL, A. (2008). Farmacología de la conducta. De los psicofármacos a las terapias psicológicas. UAB. Barcelona.
- GOMEZ JARABO G.A. (2012). Bases Farmacológicas de la conducta I y II. Síntesis. Madrid.
- HALLIGAN, P., KISCHKA, U., MARSHALL, J. (2003). Handbook of clinical neuropsychology. Oxford University Press.
- KOLB, B., & WISHAW, I. (2009). Fundamentals of Human Neuropsychology (6th Ed.) Worth Pub.
- MUÑOZ CÉSPEDES, J.M.; TIRAPU USTÁRROZ, J. (2001). Rehabilitación neuropsicológica. Madrid: Síntesis.
- MUSE, M. & MOORE, B. (Eds.) (2012). Handbook of Clinical Psychopharmacology for Psychologists. Wiley,
- PONSFORD, J. (2004). Cognitive and behavioral rehabilitation: from neurobiology to clinical practice. New York: Guilford Press.
- RANG, H.P. (2008). Farmacología. (6ª edición). Ed. Elsevier.
- SCHATZBERG, A. & NEMEROFF, CH. (2006). Essentials of Clinical Psychopharmacology (2nd Ed.) American Psychiatric Publishing.
- SEMRUD-CLIKEMAN, M., TEETER-ELLISON, P.H. (2011). Neuropsicología infantil. Evaluación e intervención en los trastornos neuroevolutivos (2ª ed.). Madrid: Pearson Educación.
- SOHLBERG, M.M., MATEER, C. (2001). Cognitive rehabilitation: an integrative neuropsychological approach. New York: Guilford Press.
- SOHLBERG, M.M., y TURKSTRA, L.S. (2011). Optimizing Cognitive Rehabilitation: Effective Instructional Methods. New York: Guilford Press.
- STAHL, S.M. (2012). Psicofarmacología esencial: bases neurocientíficas y aplicaciones prácticas. Madrid: Aula Médica. 3ª edición.
- STUSS, D.T., WINOCUR, G., ROBERTSON, I.H. (2009). Cognitive Neurorehabilitation: Evidence and Application. Cambridge University Press, 2nd edition.
- WILSON, B.A.; GRACEY, F.; EVANS, J. J.; BATEMAN, A.: Neuropsychological rehabilitation: theory, models, therapy and outcome. Cambridge, Cambridge University Press, 2009.