

#### Course Guide 33327 Psychobiological bases applied to social intervention

## **COURSE DATA**

Data Subject					
Code	33327				
Name	Psychobiological bases applied to social intervention				
Cycle	Grade				
ECTS Credits	4.5				
Academic year	2023 - 2024				
Study (s)					
Degree		Center	Acad. year	Period	
1319 - Degree in Psychology		Faculty of Psychology a Therapy	and Speech 4	Second term	
Subject-matter					
Degree		Subject-matter	Chara	octer	
1319 - Degree in Psychology		26 - Psychobiological battle to social intervention	ases applied Optior	Optional	
Coordination					
Name		Department		1	
MARTINEZ ORTIZ, MANUELA		268 - Psychobiology			
MOYA ALBIOL, LUIS		269 Developi	268 - Psychobiology		

### SUMMARY

The subject Psychobiological Bases Applied to Social Intervention is optional.

It is developed in four parts: 1) The relationship between physical exercise and mental health, 2) The psychobiological bases of aging, 3) addictive processes and 4) violent behavior.

Although there are no prerequisites for enrollment at the content level, it is recommended to have taken previous compulsory subjects such as Bases of Psychobiology, Physiological Psychology I, Physiological Psychology II, Psychoendocrinology and Psychopharmacology for optimal use of the subject.

The objective of the subject is to incorporate an applied aspect adjusted to the field of social intervention to the psychobiological knowledge already acquired.



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# **PREVIOUS KNOWLEDGE**

#### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

#### **Other requirements**

# COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

#### 1319 - Degree in Psychology

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Be able to describe and measure variables (personality, intelligence, attitudes, aptitudes, etc.) and cognitive, emotional, psychobiological and behavioural processes.
- Be able to identify differences, problems and needs.
- Know how to choose the appropriate psychological intervention techniques to achieve the intended goals.
- Be able to measure and obtain relevant data for the assessment of interventions.
- Be able to prepare oral and written reports.
- Know and comply with professional ethics of Psychology.
- Value the contributions made by scientific research to knowledge and professional practice.
- Promote and contribute to the health, quality of life and well-being of individuals, groups, communities and organisations.
- Know the basics of the application of psychobiological knowledge to social intervention.
- Be able to describe and identify the psychobiological processes underlying violent behaviour and their applications in social intervention.
- Be able to describe and identify the psychobiological processes underlying aging processes and their applications in social intervention.



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- Be able to describe and identify the psychobiological processes underlying addictive processes and their applications in social intervention.

# LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

Identify, evaluate and design applications in social interventions based on the knowledge acquired on the psychobiological bases of 1) physical activity and its impact on physical health, 2) aging processes, 3) addictive processes and 4) violence.

### **DESCRIPTION OF CONTENTS**

#### 1. Physical activity and mental health

- 1-Concept of physical activity, physical exercise and its relationship with mental health.
- 2-Effects of physical activity on mood and happiness.
- 3-Anxiolytic and antidepressant effects of physical activity. Explanatory hypotheses.
- 4-Dependence on physical exercise. The endorphin hypothesis.

#### 2. Psychobiological bases of aging

- 1-Concept and theories of aging
- 2-Nutrition and aging
- 3-Physical activity and aging
- 4- Happiness, healthy aging and longevity
- 5-Brain plasticity and cognitive reserve: Implications in psychosocial intervention

#### 3. Addictive processes

- 1-Basic concepts of addiction.
- 2-Neurobiology of addiction. Brain reward system. Dopamine and reinforcement.
- 3-Main drugs of abuse. Mechanism of action and main effects.
- 4-Behavioral and relational addictions.

#### 4. Neurocriminology

- 1-Concept and applications of Neurocriminology.
- 2-Neurobiological bases of violence.
- 3- Neurocriminological profiles.
- 4- Impact of violence on victims.
- 5 -Positive neurocriminology: Implications in psychosocial intervention.



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## WORKLOAD

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	45,00	100
Development of group work	7,50	0
Development of individual work	7,50	0
Preparation of evaluation activities	22,50	0
Preparing lectures	15,00	0
Preparation of practical classes and problem	15,00	0
TOTAL	112,50	

## **TEACHING METHODOLOGY**

M1. Lectures given by the teacher developing the various contents of the subject, while promoting participatory involvement of students by solving of the issues that arise throughout the exhibition.

M4. Theoretical and practical classes with audiovisual support, links to different websites with content related to the subject, textbooks and scientific articles and other readings and materials.

M6. Scheduled individual or group tutoring for supervising practical work, guidance and resolution of doubts.

M23. Practical sessions in laboratories and seminars aimed at applied issues in which the student work, individually or in group, with the provided material (tests, articles, scientific equipment for recording variables) to achieve a goal.

## **EVALUATION**

#### STUDENT ASSESMENT

The assessment of the subject consists of three evaluation systems in both the first and the second assessment periods:

**ES1**. Assessment of theoretical and practical content through oral, written or skill performance tests. Up to 70% of the note. The test will consist of an exam with multiple choice questions (3 alternatives) and short questions, including theoretical and practical content.

**ES2**. Oral or written presentation of reports, individual or group work, clinical cases, problem solving and management of diagnostic tests, and projects for the application of psychobiological bases in social intervention. Up to 20% of the note.



This 20%, equivalent to 2 points of the final grade (out of 10) for the subject, will be recoverable in the SECOND CALL through an exam.

**ES3**. Participation in class activities will be valued. 10%, equivalent to 1 point of the final mark (out of 10) of the subject will be non-recoverable work/activities that will be carried out in the classroom during classes. These notes of non-recoverable activities will be kept in the second call.

#### **Requeriments**:

To pass the subject, both in the first and second calls, a minimum of:

- 3.5 points out of 7 in SE1.
- 5 points out of 10 in the final qualification.

• The right of students to pass the subject in the second call is ensured.

• Those grades equal to or greater than 9.5 points may qualify for enrollment honorary. Given the possibility of a possible tie in the grade, the teacher may include an extra question in the exam, which may be taken into account when to award the corresponding registration.

#### WARNING

The manifest copying or plagiarism of any task that is part of the evaluation will mean the impossibility of passing the subject, subjecting themselves to the appropriate disciplinary procedures.

Keep in mind that, in accordance with article 13. d) of the University Student Statute (RD 1791/2010, of December 30), it is the duty of a student to refrain from the use or cooperation in fraudulent procedures in the evaluation tests , in the work carried out or in official documents of the university.

During tutoring hours, teachers may request individual or group interviews in order to verify the degree of participation and achievement of the objectives set for any task carried out. Not accepting said verification will mean failing the task or activity in question.

In the event of fraudulent practices, the procedure determined by the Protocol for action against fraudulent practices at the University of Valencia (ACGUV 23/2020): https://www.uv.es/sgeneral/Protocols/C83sp.pdf"

### REFERENCES



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#### Basic

- Carlson, N.R. (2018) Fisiología de la conducta (12a edición.). Pearson Educación, Madrid
- Lieberman D.E. (2021). Ejercicio. Editorial Pasado y Presente
- Marfany, M. y Soley, M. (2015). ¿Por qué envejecemos?. Ed. Universidad de Barcelona
- Moya-Albiol, L., y Romero Martínez, A. (2020). Neurocriminología. Ed. Pirámide.
- Pinel, J.P.J. (2007) Biopsicología (6a edic.). Pearson Addison Wesley, Madrid.
- Rubin M. y SafdiehA J.E. (2008) Netter. Neuroanatomía esencial. Elsevier-Masson, Barcelona.
- Stahl, S.M. (2021). Psicofarmacología esencial: Guía del prescriptor. Ed. Aula Médica.
- Waldinger R and Schultz M. (2023). Una Buena vida. Editorial Planeta.

#### Additional

- Arbinaga, F., & Cantón, E. (2013). Psicología del deporte y la salud: Una relación compleja. Ed. EOS.
- Blasco, M.A., & Salomone, M.G. (2016). Morir joven, a los 140: El papel de los telómeros en el envejecimiento y la historia de cómo trabajan los científicos para conseguir que vivamos más y mejor. Ed. Paidós
- Del Barrio Alba, A. (2018). El informe neuropsicológico. Ed. Síntesis, S.A.
- Fuster, V., & Corbella, J. (2016). La ciencia de la larga vida. Ed. Planeta.
- Ministerio de Cultura y Deporte, Gobierno de España (2021). Datos sobre la práctica de ejercicio físico en la población española. https://www.culturaydeporte.gob.es/dam/jcr:07b62374-bfe9-4a65-9e7e-03a09c8778c3/encuesta-de-habitos-deportivos-2020.pdf
- Organización Mundial de la Salud. (2019). Plan de acción mundial sobre actividad física 2018-2030: personas más activas para un mundo más sano.
  Organización Mundial de la Salud. https://apps.who.int/iris/handle/10665/327897
- Owens, B. (2015). Addiction. Nature, vol. 522, Issue Nº 7557, S45-S64.
- Ruiz-Sánchez de León, J.M., & Pedrero-Pérez, E.J. (2014). Neuropsicología de la Adicción. Madrid: Editorial Médica Panamericana.
- Sapolsky, R. (2017). Compórtate. La biología que hay detrás de nuestros mejores y peores comportamientos. Madrid: Capitán Swing.
- Steptoe A (2019). Investing in happiness: the gerontological perspective. Gerontology 65:634-639