

# 2023/2024

# Psychological Processes: Learning and Conditioning

Code: 102605 ECTS Credits: 6

Degree	Туре	Year	Semester
2502443 Psychology	OB	2	1

# Contact

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## Teaching groups languages

You can check it through this <u>link</u>. To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

## Teachers

Tomas Blasco Blasco Francesc Xavier Borras Hernandez Adrián Pérez Aranda Eva Parrado Romero

## Prerequisites

There are no prior prerequisites. However, it is recommendable that students should revise the contents from previous courses on psychological processes, undertaken during the previous year.

## **Objectives and Contextualisation**

This subject belongs to the group of Psychological Processes Courses (Motivation and Emotion, Memory, Attention and Perception, and Thought and Language). Contents provide students with the main features and research strategies used in this field of knowledge.

The primary aims of this subject are:

a) To make students aware of the fundamental aspects of the psychological processes related to learning and conditioning.

b) To enable students to address questions about learning, as well as to identify learning phenomena in human and animals both on laboratory and natural settings.

This course gives students the framework required to follow subsequent courses addressed to professional practice such as "Cognitive and behavioural treatments in childhood and adolescence".

### Competences

- Apply knowledge, skills and acquired values critically, reflexively and creatively.
- Identify, describe and relate the structures and processes involved in basic psychological functions.
- Prepare and write technical reports on the results of the evaluation, research or services requested.
- Take decisions in a critical manner about the different research methods in psychology, their application and the interpretation of the results deriving from them.
- Use different ICTs for different purposes.

### **Learning Outcomes**

- 1. Analyse the results of experiments on conditioning and learning.
- 2. Apply knowledge, skills and acquired values critically, reflexively and creatively.
- 3. Design experiments in conditioning and learning.
- 4. Distinguish between the main non-associative learning processes.
- 5. Identify the main processes of classical and instrumental conditioning.
- 6. Use different ICTs for different purposes.
- 7. Write reports using the results of experiments on conditioning and learning.

## Content

#### Introduction.

- Innate behaviours.
- Definition of learning.
- Learning and execution
- Learning and other causes of behaviour change.
- Types of learning.

Part I: Non-associative learning: Habituation and sensitization

- Definition, characteristics, and variables of habituation.
- Definition, characteristics, and variables of sensitization.

#### Part II: Associative learning (I): Classical conditioning

- Classical conditioning paradigm and terms.
- Basic phenomena in classical conditioning: acquisition, extinction, generalization.
- Methodology in classical conditioning research.
- Conditioned response measures.
- Temporal procedures in classical conditioning.

- Experimental control in classical conditioning.
- Experimental procedures in classical conditioning.
- Inhibitory classical conditioning.
- Variables involved in acquisition in classical conditioning.

- Other phenomena in classical conditioning (sensory preconditioning, second-order conditioning, counterconditioning, compound conditioning)

#### Part III: Associative learning (II): Operant conditioning

- Introduction.
- Basic procedures in operant conditioning.
- Procedures, measures and variables in positive reinforcement.
- Schedules of reinforcement.
- Extinction procedures of operant responses.
- Theoretical analysis of positive reinforcement.
- Procedures, measures and variables on negative reinforcement (escape and avoidance).
- Theoretical analysis of negative reinforcement.
- Procedures, measures, and variables in punishment situations.
- Paradoxical and emotional effects of punishment.

### Methodology

Directed Activities (30%):

- Lectures: face-to-face sessions of 1.5h hours
- Seminars: 3 face-to-face sessions of 2 hours
- Laboratory and practical classes: 5 face-to-face sessions of 2 hours.

Supervised Activities (15%):

- Solution of questions about the subject using the Moodle application
- Simulation of classical and instrumental conditioning phenomena with the software "Sniffy".

Autonomous Activities (55%):

• Reading and study of reference manuals.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory and practical classes	10	0.4	1, 2, 3, 4, 7, 5, 6
Lectures	28.5	1.14	1, 2, 4, 5
Seminar	6	0.24	1, 2, 4, 5
Type: Supervised			
Moodle exercises	11	0.44	2, 4, 5, 6
Simulation of classic and instrumental conditioning phenomena with Sniffy software	10	0.4	1, 3, 6
Type: Autonomous			
Reading and study of manuals	81.5	3.26	4, 5

### Assessment

The competences of the subject will be assessed by different procedures:

- Ev1: Peer group Report about results of Practice 1. The report will be presented at the end of the session (see the calendar of sessions established for each group). It has a weight of 4%.
- Ev2: Peer group Report about results of Practice 2. The report will be presented at the end of the session (see the calendar of sessions established for each group). It has a weight of 4%.
- Ev3: Individual Report about results of Practice 3. The report will be presented at the end of the session (see the calendar of sessions established for each group). It has a weight of 4%.
- Ev4: Individual Report about results of Practice 4. The report will be presented at the end of the session (see the calendar of sessions established for each group). It has a weight of 4%.
- Ev5: Individual Report about results of Practice 5. The report will be presented at the end of the session (see the calendar of sessions established for each group). It has a weight of 4%.
- Ev6: Written examination 1. A multiple-choice test will be undertaken in the first assessment period. Contents of the subject given until week 9 (including Domjan's Handbook and Seminar 1) will be assessed (attended). A statistical correction for chance will be applied (each wrong question subtracts 0.33 from the total of the right questions). The global weight of this exam will be 40%.
- Ev7: Written examination 2. A multiple-choice test will be undertaken in the second assessment period. Contents of the subject given between weeks 10 and 18 (including Domjan's Handbook and Seminar 2 and Seminar 3) will be assessed (attended). A statistical correction for chance will be applied (each wrong question subtracts 0.33 from the total of the right questions). The global weight of this exam will be 40%.

Table with the main characteristics of the different Learning Evidences

Code	Designation	Weight	Format (Oral, written or both)	Authorship (individual, collective or both)	Via (Attended, virtual or both)
EV1		4%	Written	Group	Attended

Written Report Practice 1

EV2	Written Report Practice 2	4%	Written		Group	Attended
EV3	Written Report Practice 3	4%	Written		Individual	Attended
EV4	Written Report Practice 4	4%	Written		Individual	Attended
Ev5	Written Report Practice 5	4%			Individual	Attended
Ev6	Written Examination Contents given until week 9	40%	Written		Individual	Attended
Ev7	Written Examination 2 Contents given between weeks 10 and 18	40%	Written	Individual		Attended
TABLE OF SINGLE ASSESSMENT ACTIVITIES						
Description of the activities Weigh			Weight	Duration in hours (of the face-to-face event)	Date of completion	
Ev6. Written Examination 1 (1h30m)			(1h30m)	40%	4h40m	Second assessment period
Ev7. Written Examination2 (1h30m)			(1h30m)	40%		

Ev1-5. Resolution of situations that will 20% involve the planning and interpretation of experiments equivalent to those carried out in the practices. (1h40min)

### **Assessment Activities**

Title	Weighting	Hours	ECTS	Learning Outcomes
EV1. Written Report: Practice 1.	4%	0	0	1, 2, 3, 4, 7, 6
EV2. Written Report: Practice 2	4%	0	0	1, 2, 3, 7, 5, 6
EV3. Written Report: Practice 3	4%	0	0	1, 2, 3, 7, 5, 6
EV4. Written Report: Practice 4	4%	0	0	1, 2, 3, 7, 5, 6
EV5. Written Report: Practice 5	4%	0	0	1, 2, 3, 7, 5, 6
EV6. Written examination 1	40%	1.5	0.06	1, 2, 3, 4, 5
EV7. Written examination 2	40%	1.5	0.06	1, 2, 3, 4, 5

## Bibliography

Basic bibliography (reference manual):

Domjan, M. (2010) The principles of Learning and Behavior (6<sup>a</sup> ed.). Traducció: Principios de aprendizaje y conducta. Mèxic: Wadsworth, Cengage Learning, 2010.

You can get a digital version of this book in the next link: https://www.academia.edu/29486933/Principios\_de\_aprendizaje\_y\_conducta\_Domjan\_9th?auto=download

Complementary bibliography:

Cándido, A. (2000) Introducción a la psicología del aprendizaje asociativo. Madrid: Biblioteca Nueva.

Domjan, M. (2000) The essentials of conditioning and learning (2<sup>a</sup> ed). Traducció: Bases del aprendizaje y el condicionamiento. Jaén: Del Lunar, 2002.

Froufe, M. (2004). Aprendizaje asociativo. Principios y aplicaciones. Madrid: Thomson.

### Software

Alloway, T., Wilson, G. i Graham, J. (2005) *Snifffy. The virtual rat, pro version 2.0.* Traducció: Sniffy. La Rata Virtual. Pro Versión 2.0. Madrid: Thomson Editores, 2006.