



# Psychological Processes: Learning and Conditioning

Code: 102605 ECTS Credits: 6

Degree	Туре	Year	Semester
2502443 Psychology	ОВ	2	1

#### Contact

## **Use of Languages**

Name: Eva Parrado Romero

Principal working language: catalan (cat)

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Some groups entirely in English: No Some groups entirely in Catalan: No

Some groups entirely in Spanish: No

## Other comments on languages

If required, during the written exams (in Catalan; Ev6-7) you can request the assistance of a professor for translation consultations or, up to week 4, the translation of the exam if the conditions established by the Faculty are met.

#### **Teachers**

Tomas Blasco Blasco

F. Xavier Borras Hernandez

Judit Subirana Mirete

Adrian Pérez Aranda

Eva Parrado Romero

Melinda Gonzalez Concepcion

## **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.

- Definition and characteristics of learning.
- Learning, execution, and behavioural change.
- Types of learning.
- Reflexes and innate behaviours.

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: counterconditioning, second-order conditioning, sensory preconditioning, 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.

## 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. 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. 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. 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. 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. 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 8 (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 30%.
- Ev7: Written examination 2. A multiple-choice test will be undertaken in the second assessment period.
  Contents of the subject given between weeks 9 and 16 (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 50%.

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	Written Report Practice 1	4%	Written	Group	Attended
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 8	30%	Written	Individual	Attended
Ev7	Written Examination 2 Contents given between weeks 9 and 16	50%	Written	Individual	Attended

## **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	30%	1.5	0.06	1, 2, 3, 4, 5
EV7. Written examination 2	50%	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 (2ª 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.