Universitat Autònoma de Barcelona

2020/2021

Psychological Processes: Learning and Conditioning

Code: 102605
ECTS Credits: 6

Degree	Type	Year	Semester
2502443 Psychology	OB	2	1

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

Tomas Blasco Blasco
F. Xavier Borràs Hernández
Saül Alcaraz Garcia
Eva Parrado Romero
Carmina Castellano Tejedor
Albert Feliu Soler

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

- Theories in classical 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 and virtual sessions of 1.25h-1.5h hours (total 31.5h)
- Seminars: 3 sessions of 2 hours
- Laboratory and practical classes: 4 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.

N.B. The proposed teaching and assessment methodologies may experience some modifications as a result of the restrictions on face-to-face learning imposed by the health authorities. The teaching staff will use the Moodle classroom or the usual communication channel to specify whether the different directed and assessment activities are to be carried out on site or online, as instructed by the Faculty.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory and practical classes	8	0.32	1, 2, 3, 4, 7, 5, 6
Lectures	31.5	1.26	1, 2, 4, 5

Seminar	6	0.24	1, 2, 4, 5
Type: Supervised			
Moodle exercises	12	0.48	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	80.5	3.22	4, 5

Assessment

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

- Non-associative learning assessment activity (EV1). Individual and virtual assessment activity with questions and problems of various types (multiple-choice, short open-ended questions, drop-down questions, completion) about topics 1-3 and Laboratory practice 1. It will be scheduled once all groups have done Laboratory 1. It has a weight of 5%.

- Classical conditioning assessment activity (EV2).Individual and virtual assessment activity with questions and problems of various types (multiple-choice, short open-ended questions, drop-down questions, completion) about topics 4-8, Laboratory practice 2 and Seminars 1 and 2. It will be scheduled once all groups have done Laboratory 2 and Seminars 1 and 2. It has a weight of 20%.

- Instrumental conditioning assessment activity (EV3).Individual and virtual assessment activity with questions and problems of various types (multiple-choice, short open-ended questions, drop-down questions, completion) about topics 9-15, Laboratory practices 3 and 4 and Seminar 3. It will be scheduled once all groups have done Laboratories 3 and 4 and Seminar 3. It has a weight of 25%.

- Written examination (EV4). A multiple-choice test will be undertaken in the second assessment period (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%.

Additionally, students will be able to realize 3 Moodle supervised learning activities (AAS)with aims of self-learning and self-evaluation (without weight in the assessment of the subject), corresponding to non-associative learning, classical conditioning and instrumental conditioning.

Students may be required by the teaching staff to conduct an individual interview in order to verify the knowledge they have shown in the virtual evidences of learning. In the event of any irregularity that may lead to a significant variation in the rating of the evidence, it will be rated with 0 points (Art 116, point 10 UAB Regulations). In the event of any irregularity in several evidences of learning, the final grade will be 0 and the degree coordination will be reported.

To pass the subject, students must obtain a minimum accumulated total score of 5 points and have obtained a minimum of 2.5 points (out of 5) in the exam (EV4). In the event of not meeting these requirements, the maximum grade to be included in the academic file will be 4.9 points (Fail).

The student who has submitted assessments with a weight equal to or greater than 4 points (40%) may not be classified in final results as "Not evaluable."

Students who at the end of the semester (week 18) have not passed the subject, but meet the double condition that they have submitted assessments with a weight equal to or greater than 2/3 of the total grade and have obtained a minimum accumulated overall score equal to or greater than 3.5 points, will have the possibility to undertake re-sits during the re-sit examination period. The re-sits will consist of 30 multiple choice questions on

the contents of the subject, both theory (including Domjan's manual), seminars, and laboratory practices. In this re-sit a statistical correction for chance will be applied (each wrong question subtracts 0.33 from the total of the right questions). The mark obtained in this exam will be the final grade of the subject.

Students who are not enrolled for the first time in the subject will be assessed by the same activities as in their first enrolment. No synthesis test is foreseen nor are notes from previous courses maintained.

Students who wish to take the exams in Spanish (instead of Catalan) will have to ask the subject Coordinator before the 4th week of the course and will have to prove that they are in one of two situations: a) Studying at the UAB on an exchange program; b) Have been residing in Catalonia for less than one year. Apart from these two cases, there will be no translation of the exams, although during the course, lecturers of the subject will answer if necessary, the possible doubts about translation.

You can check the faculty assessment guidelines at the following link:
https://www.uab.cat/web/estudiar/graus/graus/avaluacions-1345722525858.html

Code	Designation	Weight	Format (Oral, written or both)	Authorship (individual, collective or both)	Via (Attended, virtual or both)
EV1	Non-associative learning assessment activity	5%	Written	Individual	Virtual
EV2	Classical conditioning assessment activity	20%	Written	Individual	Virtual
EV3	Instrumental conditioning assessment activity	25%	Written	Individual	Virtual
EV4	Written examination	50º%	Written	Individual	Attended

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
EV1. Non-associative learning assessment activity	5%	0	0	1, 2, 3, 4, 7, 6
EV2. Classical conditioning assessment activity	20%	0	0	1, 2, 3, 7, 5, 6
EV3. Instrumental conditioning assessment activity	25%	0	0	1, 2, 3, 7, 5, 6
EV4. Written examination	50%	2	0.08	1, 2, 3, 4, 7, 5, 6

Bibliography

Basic bibliography (reference manual):

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

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.