

Psychological Processes: Learning and Conditioning

Code: 102605
ECTS Credits: 6

2025/2026

Degree	Type	Year
Psychology	OB	2

Contact

Name: Tomás Blasco Blasco

Email: tomas.blasco@uab.cat

Teachers

Tomás Blasco Blasco

Francesc Xavier Borras Hernandez

Eva Parrado Romero

Teaching groups languages

You can view this information at the [end](#) of this document.

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-Behavioural Therapy in Adults" and "Cognitive-Behavioural Therapy in Children and Adolescents".

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.

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

Block I: Non-associative learning: Habituation and sensitisation

- Concept, properties and variables of habituation.
- Concept, properties and variables of sensitisation.

Block II: Associative learning I: Classical conditioning

- Paradigm and terms of classical conditioning.
- Basic phenomena of classical conditioning: acquisition, extinction, generalisation.
- Methodology for the study of classical conditioning.
- Quantification of the strength of CR.
- Procedures for temporal presentation of stimuli.
- Experimental control.

- Experimental procedures.
- Classical inhibitory conditioning.
- Variables involved in acquisition of classical conditioning.
- Other phenomena in classical conditioning (sensory preconditioning, second-order conditioning, counterconditioning, compound conditioning)

Block III: Associative learning II: Operant conditioning

- Introduction.
- Basic procedures of operant conditioning.
- Procedures, measures and variables of positive reinforcement.
- Schedules of reinforcement.
- Extinction of positively reinforced responses.
- Theoretical analysis of positive reinforcement.
- Procedures, measures and variables of negative reinforcement (escape and avoidance).
- Theoretical analysis of negative reinforcement.
- Extinction of discriminated avoidance behaviour.
- Punishment procedures, measures, and variables.
- Paradoxical and emotional effects of punishment.

Activities and Methodology

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

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%):

- Resolution 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.

Moodle will be used as the information platform to communicate any change at schedules during the season

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.

Assessment

Continuous 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

The subject competences will be assessed through different procedures (Table 1):

- Ev1: Report on the results of Practice 1. The report is a group report (4 persons). It will be presented in person, in writing and on paper, at the end of the practice session (consult the schedule of sessions established for each group). It is necessary to attend the practical session in order to be able to present the report. It has a weight of 4%.

- Ev2: Report on the results of Practice 2. The report is a group report (4 people). It will be presented in person, in writing and on paper, at the end of the practice session (consult the schedule of sessions established for each group). It is necessary to attend the practical session in order to be able to present the report. It has a weight of 4%.

- Ev3: Report on the results of Practice 3. The report is individual. It will be presented at the end of the practice session (consult the schedule of sessions established for each group). It is necessary to attend the practical session in order to present the report. It has a weight of 4%.

- Ev4: Report on the results of Practice 4. The report is individual. It will be presented at the end of the practice session (consult the schedule of sessions established for each group). It is necessary to attend the practical session in order to be able to present the report. It has a weight of 4%.

- Ev5: Report on the results of Practice 5. The report is individual. It will be presented at the end of the practice session (consult the schedule of sessions established for each group). It is necessary to attend the practical session in order to be able to present the report. It has a weight of 4%.

- Ev6: Exam 1. In the first evaluation period there will be a theory exam (including the Domjan reference manual and the contents of Seminar 1) with a format of 30 multiple-choice questions and duration of 1h, on the topics taught up to week 9. This exam will be corrected for the effect of chance (each wrong answer subtracts 0.33 from the total number of correct answers). It has a weight of 40%.

- Ev7: Exam 2. In the second evaluation period there will be a theory exam (including the Domjan reference manual and the contents of Seminars 2 and 3) with a format of 30 multiple-choice questions and duration of 1 hour, on the topics taught between weeks 10 and 18. This exam will be corrected for the effect of chance (each wrong answer subtracts 0.33 from the total number of correct answers). It has a weight of 40%.

Table 1. Summary with the characteristics of the different Learning Evidence

Code	Designation	Weight	Format (Oral, written or both)	Autorship (individual, collective or both)	Via (Attended, virtual or both)
EV1	Report Practice 1	4%	Written	Group	Attended
EV2	Report Practice 2	4%	Written	Group	Attended
EV3	Report Practice 3	4%	Written	Individual	Attended
EV4	Report Practice 4	4%	Written	Individual	Attended
EV5	Report Practice 5	4%	Written	Individual	Attended
EV6	Examination 1 (contents given until week 9)	40%	Written	Individual	Attended
EV7	Examination 2 (contents given between weeks 10 and 18)	40%	Written	Individual	Attended

Model responses of EV6 and 7 will be not published. The results will be published on the virtual campus within a maximum period of 10 working days after their completion.

Students who have submitted evidence of learning with a weight equal to or higher than 4 points (40%), may not be recorded as "Not assessable".

In order to pass the course, the student must obtain a minimum overall grade of 5 points. The overall grade is the direct sum of the grades obtained in all the learning evidences (Ev1+Ev2+Ev3+Ev4+Ev5+Ev6+Ev7) and has a maximum value of 10 points.

Students with an overall grade equal to or higher than 3.5 and lower than 5 points and who have taken evidences with a weight equal to or higher than 2/3 of the overall grade will have the possibility of taking a final recovery assessment during the recovery period on the date established by the Faculty (and published on the website).

EXAMPLE 1: A student has taken only evidences 1, 2 and 6 and has obtained an overall grade of $0.4 + 0.4 + 2.8 = 3.6$. In this case, he/she is NOT eligible for the recovery assessment because, despite having an overall grade higher than 3.5, the weight of the evidences he/she has taken is $0.4 + 0.4 + 4 = 4.8$, which is less than 2/3 of the overall grade (6.6).

EXAMPLE 2: A student has taken only the evidences 1, 6 and 7 and has obtained an overall mark of $0.3 + 1.5 + 1.8 = 3.6$. In this case, he/she IS eligible for the recovery assessment because he/she has an overall grade of more than 3.5 and the weight of the evidences he/she has taken is $0.4 + 4 + 4 + 4 = 8.4$, which is more than 2/3 of the overall mark (6.6).

The recovery assessment will consist of a recovery of Ev6 and/or Ev7, exclusively. The grades obtained in Ev1, Ev2, Ev3, Ev4 and Ev5, corresponding to the practices, are excluded from the recovery test and will remain unchanged.

The student may decide at the time of the recovery assessment to retake only Ev6, only Ev7, or both. The grade(s) obtained in this recovery assessment will in any case replace the grade(s) previously obtained and the overall grade will be recalculated.

EXAMPLE 1: A student has obtained, before the recovery assessment, the following overall grade: $0.1+0.1+0.1+0+0+0+1.8+1.8 = 3.9$. In the recovery assessment he/she only takes Ev6 and obtains a mark of 2.2. The final overall grade will be: $0.1+0.1+0.1+0+0+2.2+1.8 = 4.3$.

EXAMPLE 2: A student has obtained, before the recovery assessment, the following overall grade: $0.1+0.1+0.1+0+0+0+1.8+1.8 = 3.9$. In the recovery assessment, he/she takes Ev6 and Ev7, obtaining, respectively, marks of 2.2 and 2.5. The final overall grade will be: $0.1+0.1+0.1+0+0+2.2+2.5 = 5$.

EXAMPLE 3: A student has obtained, before the recovery assessment, the following overall grade: $0.1+0.1+0.1+0+0+0+2.2+2.3 = 4.8$. In the recovery assessment he/she takes Ev6 and Ev7, obtaining, respectively, marks of 2.5 and 2.2. The final overall grade will be: $0.1+0.1+0.1+0+0+0+2.5+2.2 = 5$.

Students who do not enrol for the first time in the subject will be assessed with the same activities as those who enrol for the first time. A synthesis test is not contemplated.

Students who choose the single assessment option waive the continuous assessment and will be assessed on all the contents of the subject in a single assessment event, which will take place on the same day and in the same place as Ev7.

This assessment event will consist of two face-to-face exams (Exam 1 and Exam 2) which will follow the same format and will include the same contents as Ev6 and Ev7 of the continuous assessment (respectively). At the end of the two exams, and during this same assessment event, students who have taken the single assessment system will have to solve a total of 5 situations that will involve the planning and interpretation of experiments equivalent to those worked on in the practices carried out throughout the semester. Students will have to write and hand in a report corresponding to each of the 5 practices (which will include the same

contents as inEv1-5) in the same classroom. Under no circumstances may the student consult any type of subject material during the preparation of these reports.

The total duration of this single evaluative face-to-face event will be approximately 3h 20m (See Table 2).

The conditions for passing the subject, access to the recovery and the recovery assessment for students who take the single assessment will be the same as for students who follow the continuous assessment.

THE SINGLE EVALUATION IS REQUESTED TELEMATICALLY (E-FORM) IN THE SPECIFIC PERIOD (more information on the Faculty's website).

Table 2. Description of the activities, duration and dates for students taking the single assessment.

TABLE OF SINGLE ASSESSMENT ACTIVITIES			
Description of the activities	Weight	Duration in hours (of the face-to-face event)	Date of completion
Ev6. Written Examination 1 (1h)	40%	3h 20m	Second assessmentperiod
Ev7. Written Examination 2 (1h)	40%		
Ev1-5. Resolution of situations that will involve the planning and interpretation of experiments equivalent to those carried out in the practices. (1h40min)	20%		
RETURN	Activity and format	WEEK	
Written			
Digital Tool			
At classroom			
Tutor	EV 1 WRITTEN ATTENDED	7	
	EV 2 WRITTEN ATTENDED	8	
	EV 3 WRITTEN ATTENDED	10	
	EV 4 WRITTEN ATTENDED	14	
	EV 5 WRITTEN ATTENDED	15	

EV 6 WRITTEN ATTENDED	11
EV 7 WRITTEN ATTENDED	20

Use of AI and electronic devices:

On time assistance to the course sessions is required, and electronic devices such as mobile phones or computers must be used properly.

AI technologies are authorized only for activities other than those used for assessment of learning evidences. AI can be used for searching bibliography or informations, but always verifying that these records are according with the matherials provided by the course. Copy or plagiarism, as well as the use of any device not authorized by the professor, will imply that the course will be qualified with 0 points, and recovery will not be allowed.

Bibliography

Essential bibliography (reference manual):

Domjan, M. (2010). **Principios de aprendizaje y conducta. Sexta edición.** México: Wadsworth, Cengage Learning (Original English version, 2010).

(Comprehensive manual covering a vast majority of learning and conditioning phenomena with many examples and illustrations. It can be considered a key text for a thorough understanding of the contents of the subject.)

Complementary bibliography:

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

(Summarised manual that explains the phenomena of learning from the description and analysis of the conditions, mechanisms and contents that regulate them. It places more emphasis on theoretical analysis than on the description of learning phenomena.)

Domjan, M. (2002). **Bases del aprendizaje y el condicionamiento. Segunda edición.** Jaén: Del Lunar (Original English version, 2000).

(Short manual describing the main phenomena of associative learning and giving a brief introduction to the theoretical aspects. It can be considered an abridged and introductory version of Domjan's manual indicated in the basic bibliography.)

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

(Manual with similar characteristics to the previous one, although it follows different criteria when it comes toorganising the topics and basic concepts of learning.)

Software

Alloway, T., Wilson, G. and Graham, J. (2006). **Sniffy. La Rata Virtual. Pro Versión 2.0.** Madrid: Thomson Editores (Original English Version, 2005).

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	111	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	112	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	113	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	114	Catalan	first semester	morning-mixed
(PLAB) Practical laboratories	211	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	212	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	213	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	214	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	311	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	312	Catalan	first semester	morning-mixed
(PLAB) Practical laboratories	313	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	314	Catalan	first semester	morning-mixed
(PLAB) Practical laboratories	411	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	412	Catalan	first semester	morning-mixed
(PLAB) Practical laboratories	413	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	414	Catalan	first semester	morning-mixed
(PLAB) Practical laboratories	511	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	512	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	513	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	111	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	112	Catalan	first semester	morning-mixed
(SEM) Seminars	113	Spanish	first semester	morning-mixed
(SEM) Seminars	114	Spanish	first semester	morning-mixed
(SEM) Seminars	211	Catalan	first semester	morning-mixed
(SEM) Seminars	212	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	213	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	214	Spanish	first semester	morning-mixed

(SEM) Seminars	311	Spanish	first semester	morning-mixed
(SEM) Seminars	312	Catalan	first semester	morning-mixed
(SEM) Seminars	313	Spanish	first semester	morning-mixed
(SEM) Seminars	314	Catalan	first semester	morning-mixed
(SEM) Seminars	411	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	412	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	413	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	414	Catalan	first semester	morning-mixed
(SEM) Seminars	511	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	512	Catalan/Spanish	first semester	morning-mixed
(SEM) Seminars	513	Catalan/Spanish	first semester	morning-mixed
(TE) Theory	1	Spanish	first semester	morning-mixed
(TE) Theory	2	Catalan	first semester	morning-mixed
(TE) Theory	3	Catalan	first semester	morning-mixed
(TE) Theory	4	Catalan	first semester	morning-mixed
(TE) Theory	5	Catalan	first semester	morning-mixed