

**COURSE DATA****Data Subject**

<b>Code</b>	33302
<b>Name</b>	Perception and attention
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2023 - 2024

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1319 - Degree in Psychology	Faculty of Psychology and Speech Therapy	1	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1319 - Degree in Psychology	5 - Psychology	Basic Training

**Coordination**

<b>Name</b>	<b>Department</b>
ROSA MARTINEZ, EVA MARIA	300 - Basic Psychology

**SUMMARY**

“Perception and attention” is a core course within the Psychology curriculum offered by the University of Valencia, taken by all the students in their 1st year, 1st term. For most students, “Perception and attention” implies the first exposure to cognitive mechanisms and processes we use to adapt to the environment. Further, the course introduces students to scientific methodology applied to psychological problems and to procedures which are used in this area. The outcomes of learning of this course are complementary to those provided by other core courses in Psychology curriculum, such as “Psychology of Learning”, “Psychology of Memory”, “Psychology of Thinking”, “Psychology of Language” and “Motivation and Emotion”.

“Perception and attention” describes, on the one hand, sensory and perceptual processes which are involved in taking information from the environment, and on the other hand, the attentional functions involved in selecting only a part of this information, controlling mental and behavioural activity, and achieving and maintaining the alert state. This basic knowledge is fundamental to understand other psychological processes which are relevant in applied Psychology fields, such as those concerning health, social behaviour.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

## OUTCOMES

### 1319 - Degree in Psychology

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Know how to analyse the patient's needs and demands in different contexts.
- Be able set goals for psychological treatment in different contexts and in collaboration and agreement with those involved.
- 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.
- Be able to identify group and intergroup problems and needs.
- Know and comply with professional ethics of Psychology.
- Promote and contribute to the health, quality of life and well-being of individuals, groups, communities and organisations.
- Know the functions, characteristics and limitations of the different theoretical models of Psychology of Learning and of Perception and Attention.
- Know the basic laws of learning, perceptual and attentional processes.
- Know different research designs, the procedures for the formulation and testing of hypotheses and the interpretation of results.

## LEARNING OUTCOMES

The objectives are to identify which organs are involved in vision and to describe the main physiological aspects referred to those organs and to the visual processing.



The objectives are to identify which organs are involved in audition and to describe the main physiological aspects referred to those organs and to the auditory processing.

The objectives are to describe the attentional process and the factors which influence on it.

## DESCRIPTION OF CONTENTS

### 1. Introduction to human information processing

1. What is human cognition.
2. How to study human cognition.

This part intends to introduce students to cognitive sciences, and in particular, to perceptual and attentional processes. Basic concepts and methodology are explained with the aim to provide an initial understanding about human information processing.

### 2. Perception

Introduction to perception.

1. The perceptual process. Basics of the physiology of perception.
2. Theoretical approaches to perception.
3. Measuring perception.

Visual perception.

1. The stimulus for vision.
2. Physiology of vision.
3. Visual perception of objects and scenes.
4. Perceiving colour.
5. Perceiving depth and size.
6. The moving observer and motion perception.

Auditory perception.

1. The stimulus for hearing.
2. Physiology of hearing.
3. Sound perception.
4. Sound localization and the auditory scene.
5. Speech perception.

This Part presents the general principles of perception, considering the processes that begin with the stimulus and lead to the perceptual experience and action. Then students are introduced to studying the two main perceptual modalities in humans: vision and hearing.

**3. Attention**

Introduction to attention

1. Varieties of attention.
2. Attentional networks.
3. Models of attention.
4. Measuring attention.

Experimental studies on attention

1. Orienting and selection.
2. Executive control.
3. Alertness, vigilance and sustained attention.

Application of theories of attention

1. Attention in real-world tasks and environments.
2. Human attention development.
3. Deficits in attention.

This Part introduces students to human attention. Attention is explained as a central strategic mechanism which can control cognitive processes. From this point of view, applied topics in both normal and pathological cognitive functioning are discussed.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	60,00	100
Attendance at events and external activities	1,00	0
Development of group work	7,00	0
Development of individual work	13,00	0
Study and independent work	25,00	0
Readings supplementary material	8,00	0
Preparation of evaluation activities	7,00	0
Preparing lectures	10,00	0
Preparation of practical classes and problem	8,00	0
Resolution of case studies	8,00	0
Resolution of online questionnaires	3,00	0
<b>TOTAL</b>	<b>150,00</b>	



## TEACHING METHODOLOGY

In order to enhance the learning of significant knowledge and the development of related skills among students, active and participative didactic methods will be used, such as (1) Lectures and presentations on the contents, (2) Practical activities (demonstrations, experiments, data collection, analysis of results, case studies and essays on texts), (3) Tutorials, individually and / or in a group, (4) Students independent academic work, report writing, presentations, (5) Formative and summative evaluation.

## EVALUATION

### FIRST CALL: ASSESSMENT SYSTEMS, WEIGHTING AND MINIMUM REQUIREMENTS

- Assessment system 1-Exam: Assessment of theoretical and practical contents using a final individual exam on the official dates. As a general rule, the exam is a multiple-choice test. Only in some special cases such as those mentioned in Article 9 of the Regulations on Assessment and Marking for Bachelor's and Master's Degrees at the Universitat de València (ACGUV 108/2017), (<http://links.uv.es/36lQH6>), the Perception and Attention Teaching Unit can decide to administer other kinds of exam, for example, with open-ended questions. The exam contributes 70 % to the final mark. A minimum score of 3.5 is required to pass the course (exam scored from 0 to 7).
- Assessment system 2- Continuous assessment: oral or written presentation of reports, assignments, case analysis, problem solving, practical cases, tutorials, administration of diagnostic tests, demonstrations, replication of experiments, among other tasks. For each task, the teacher will specify whether it has to be done individually or in teams, and also the part of the task that has to be done in class and the part that has to be done out of class. The schedule and dates to deliver these tasks will be set by the teacher. The continuous assessment will contribute 30% to the final mark, and there is no minimum passing score in this assessment.

The continuous assessment score will be added to the exam score, provided that the exam score is 3.5 or higher.

To pass the course, the result from adding the continuous assessment score and the exam score has to be equal to or higher than 5.

### SECOND CALL: ASSESSMENT SYSTEMS, WEIGHTING AND MINIMUM REQUIREMENTS

A) Students who scored 1.5 or higher on continuous assessment or student progress, but failed the course or did not take the exam on the first call: In this case, students must take an exam on the second call that will be scored from 0 to 7. To pass the course, the requirements are: to obtain a score equal to or higher than 3.5 on this exam and a final mark equal to or greater than 5 (sum of the exam score and the continuous assessment score).

B) Students who scored less than 1.5 in the continuous assessment and failed the course or did not take the exam on the first call: In this case, it is not possible that the student retakes the tasks of the continuous assessment, because of the task characteristics and deadlines. Therefore, these students will have to take an exam in the second call, which contributes 100 % of their final mark. To pass the course the requirement is to obtain a score of 5 or higher on this exam.





Both in A) and B), the exam is a multiple-choice test, excepting special cases (see the 'Assessment system 1-Exam' subsection).

### **RATING SYSTEM**

Grades shall be subject to the provisions of the University of Valencia Regulations on Marks (ACGUV108/2017, on 30-05-2017)  
([http://www.uv.es/graus/normatives/2017\\_108\\_Reglament\\_avaluacio\\_qualificacio.pdf](http://www.uv.es/graus/normatives/2017_108_Reglament_avaluacio_qualificacio.pdf))

According to this, subjects are graded on a scale of 0 to 10 points to one decimal place, followed by a qualitative equivalence:

- From 0 to 4.9: fail.
- From 5 to 6.9: pass.
- From 7 to 8.9: good.
- From 9 to 10: excellent or excellent with distinction. In case of a tie, the excellent with distinction grade will be awarded to the student who obtains the best score on an additional exam on the contents of the course, as decided by the lecturer.

Final grades will be recorded on the student's academic record according to the following rules:

First call:

- If their exam score is equal to or greater than 3.5 (exam scored from 0 to 7): The numerical final grade will be equal to the exam score plus the continuous assessment score.
- If their exam score is lower than 3.5 (exam scored from 0 to 7): The final grade is 'FAIL' and the numerical grade is equal to the conversion of the exam score into the score from 0 to 10.
- In the students who did not take the exam: The final grade is 'Absent'.

Second call:

a) Students with a continuous assessment score equal to or greater than 1,5 in the first call:

a.1) If their exam score is equal to or greater than 3.5 (exam scored from 0 to 7): The numerical final grade will be equal to the exam score plus the continuous assessment score.

a.2) If their exam score is lower than 3.5 (exam scored from 0 to 7): The final grade is 'FAIL' and the numerical grade is equal to the conversion of the exam score into the score from 0 to 10.

a.3) In the students who did not take the exam: The final grade is 'Absent'.

b) Students with a continuous assessment score lower than 1,5 in the first call:

b.1) In the students who took the exam (scored from 0 to 10): The final grade will be equal to the exam score.



b.2) In the students who did not take the exam (scored from 0 to 10): The final grade is 'ABSENT'.

Review of and appeals against the assessment results shall be subject to the regulations for appealing against marks (ACGUV 108/2017, on 30-05-2017)

[http://www.uv.es/graus/normatives/2017\\_108\\_Reglament\\_avaluacio\\_qualificacio.pdf](http://www.uv.es/graus/normatives/2017_108_Reglament_avaluacio_qualificacio.pdf)

## **WARNING**

During tutorials, lecturers may require individual or group interviews in order to verify the degree of participation and achievement of goals for any given task. Failure to accept the verification will result in such task or activity being failed.

In the event of fraudulent practices, the Action Protocol for fraudulent practices at the University of Valencia will be applied (ACGUV 123/2020): <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>

## **REFERENCES**

### **Basic**

- Castillo, M.D. (2009). La Atención. Madrid: Pirámide.
- Fuentes-Melero, L. y García-Sevilla J. (2010). Manual de Psicología de la Atención. Una perspectiva neurocientífica. Madrid: Síntesis.
- Goldstein E.B. y Brockmole, J. (2017). Sensation and Perception. Cengage Learning. 10th edition.
- Goldstein E.B. (2011). Sensación y Percepción. Mexico: CENGAGE Learning (8ª edición).
- Pousada, M y de la Fuente, J. (2009). L'atenció. Barcelona: Editorial UOC (1ª Edició).
- Styles E.A. (2006). The Psychology of Attention. New York, NY (US): Psychology Press. 2nd edition.
- Styles, E.A. (2010). Psicología de la Atención. Editorial Universitaria Ramón Areces (1ª Edición).

### **Additional**

- Coren, S., Ward L. y Ens J. (2001). Sensación y Percepción. Ciudad de México: McGrawHill.
- Johnson, A. y Proctor, R. W. (2015). Atención. Teoría y práctica. Madrid: Centro de Estudios Ramón Areces (traducción adaptada y actualizada del original en inglés, publicado en 2004).
- Munar, E., Rosselló, J., Maiche, A., Travieso, D. y Nadal, M. (2011). Modelos teóricos y neurociencia cognitiva de la percepción. En Tirapu, J., Rios, M. y Maestú, F. (Eds.) Manual de Neuropsicología (pp. 59-95). Barcelona: Viguera Editores (2ª ed.).
- Sánchez-Cabaco A. y Arana J. Mª (1997). Manual de prácticas de percepción y atención. Salamanca: Amarú Ediciones.
- Tudela, P. (2015). Percepción y Atención. Madrid: CEF.
- Rueda, C. (2021). Educar la atención con cerebro. Alianza Editorial.
- Bajo, T., Fuentes, L., Lupiáñez, J. y Rueda, C. (2016). Mente y cerebro. Alianza Editorial