1. BASIC INFORMATION

Course	Sensation, Perception and Attention
Degree program	Psychology
School	Biomedical and Health Sciences
Year	1st
ECTS	6
Credit type	Basic
Language(s)	Spanish and English
Delivery mode	Face to face classes
Semester	2nd
Academic year	2025-2026
Coordinating professor	Margarita Gómez Márquez
Professor	Margarita Gómez Márquez, Raquel Santos.

2. PRESENTATION

"Sensation, Perception, and Attention" is a subject taught in the first year of the Psychology Degree.

In this subject, students will gain a general and introductory understanding of the basic biopsychological processes of sensation, perception, and attention. Mastering these processes is essential for comprehending and understanding psychology, making this subject a key gateway to the discipline. It offers an introduction to psychology, covering basic sensory processes from both a psychophysical and neurological perspective, as well as the perceptual process and attention according to the main neurocognitive models.

This course will run in parallel with others, and the integration of content among them will be essential for full comprehension. Students will gradually discover the connections between the various basic psychological processes that form the foundation for learning in other areas of the discipline.

3. LEARNING OUTCOMES

Knowledge

KN0 6: Identify the methodology of the most commonly used types and designs of studies in research.

- Describe the different mechanisms of color perception, depth perception, size perception, brightness perception, contrast perception, and motion perception, as well as perceptual constancies.
- Describe the different phases of the sensory-perceptual process in its various modalities (visual,

auditory, olfactory, gustatory, and somatosensory).

Skills

SK0 7: Analyze the contribution of biological, cultural, and psychosocial foundations in the development of psychological differences in both individuals and groups.

- Characterize the different attentional networks, their neuroanatomical bases, the experimental paradigms used for their evaluation, and the different neuropsychological diagnoses associated with them.
- Analyze the different methodologies of sensation, perception, and attention processes (psychophysical approach, neurobiological approach).
- Analyze the different theoretical approaches to the study of perception (Gestalt theory, Gibson's ecological perspective) and the principles of perceptual organization.
- Critically analyze the most relevant models of selective, divided, and sustained attention.

Competences

COMP02: Understand the basic principles of different psychological processes in the field of Health Psychology.

COMP03: Understand the main processes and stages of psychological development throughout the life cycle in terms of normality and abnormality in the field of Health Psychology.

COMP04: Understand the biological foundations of human behavior and psychological functions.

COMP13: Be able to describe and measure variables (personality, intelligence and other aptitudes, attitudes, etc.) and cognitive, emotional, psychobiological, and behavioral processes.

COMP14: Be able to identify differences, problems, and needs.

4. CONTENT

The subject is divided into 4 large blocks that are listed below:

Block 1 - Introduction: Integrated aspects of sensation, perception and attention. Historical journey on sensation and perception: philosophy, psychophysics and physiology

Block 2 - Sensation:

- The sensory process: concept, features and functions.
- The senses: physiological bases of sensation.

Block 3 - Perception:

- The perceptual process: concept, features and functions.
- Physiological bases of perception: integrated functioning.
- Perceptual organization.
- Types of perception: basic perception (colour, brightness, contrast) and visual perception of shape, size, depth and motion.
- Auditory perception

Block 4 - Attention:

- The attention process. Types of attention: selective, divided and vigilance.
- Physiological bases of attention

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Master class

- Students presentations
- Practical activities
- Problem-based learning (PBL)

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

Learning activity	Number of hours
Lectures	20h
Asynchronous lectures	10h
Formative assessment	8h
Test of Knowledge	2h
Problem-solving	15h
Tutorials	5h
Practical exercises	10h
Research	10h
Conferences	20h
Autonomous work	50h
TOTAL	**150h**

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Assessment system	Weight
Test of knowledge: Knowledge assessment. Final multiple-choice exam with 40 questions, each with 3 answer options (accounting for 90% of the final grade), and 2 open-ended questions (accounting for 10% of the final grade, each question is worth 0.5 points).	50%
Case analysis and problem solving. Case analysis and problem solving. Guided activity in the classroom on mindfulness, involving the resolution of an ADHD case. Attendance at this activity is mandatory in order to pass.	10%
Reports and writings • Group oral presentation on the senses (12.5%)	25%

• Written report and group oral presentation of a perception research project (12.5%) Attendance and passing both the presentations and the written report are mandatory in order to pass the course.	
Student report on practicals. This assessed activity is individual and involves solving exercises carried out in the classroom. The student submits two assignments: one halfway through the course (5% of the final grade) and another at the end of the course (5% of the final grade).*	10%
Laboratory practices. Two practical activities are carried out in the classroom. In-person attendance at both sessions is mandatory. • Practical activity on sensation related to tactile discrimination in small groups. A brief empirical report must be submitted (2.5%). • Eye-tracking practical applied to a research paradigm on attention. A short report must be submitted (2.5%).	5%

*Within this module, there is an Integrated Curriculum activity involving Statistics and Physiology.

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

Attendance

According to Art. 1.4 of the Regulation for the Evaluation of Official Degree Degrees of the European University of Madrid (of the continuous evaluation): "The obligation to justify at least 50% attendance at classes is established as part of necessary for the evaluation process and to comply with the student's right to receive advice, assistance and academic follow-up from the teacher. For these purposes, students must use the technological system that the University puts at their disposal, to accredit their daily attendance to each of their classes. This system will also serve to guarantee objective information on the active role of the student in the classroom.

Those students who have not achieved a 50% attendance rate in the first exam period may be graded as failing and must pass the corresponding objective exams in the second exam period for the subject, where they must obtain a grade equal to or higher than 5.0 out of 10.

7.1. First exam period

To pass the course in the regular exam session, you must obtain a final grade of 5.0 or higher out of 10.0 (weighted average) for the course.

It is necessary to achieve a grade of 5.0 or higher both on the exam and in the weighted average of the section corresponding to active methodologies. If the grade in any of these sections is below 5, the course will be considered failed.

To pass the course, it is essential to meet the following requirements related to active methodologies:

- Attend in person and pass the two presentations in the reports and writings section: oral presentation on the senses and oral presentation of the research project. In the case of the research project presentation, it must be accompanied by a brief written report that must be submitted and passed.

- Submit both parts of the student report on practicals and achieve an average grade above 5 in both.
- Attend in person the two laboratory practical sessions.
- Attend in person the case analysis and problem-solving activity.

PLAGIARISM AND USE OF AI

Any student who resorts to or uses illicit means during an evaluation test, or who improperly claims authorship of academic work required for assessment, will receive a failing grade ("0") in all evaluation tests for the exam period in said subject in which the violation occurred, and may also face disciplinary action following the opening of a disciplinary proceeding.

AI-Generated Content: AI-generated content tools (AIGC), such as ChatGPT and other language models (LLMs), cannot be used to generate assignments. These tools also cannot be responsible in any case for the written content in the assignment. The use of AI must be authorized by the instructor for each activity. If a student has used these tools to develop any part of their assignment, their use must be described in detail in the work. The student is fully responsible for the accuracy of the information provided by the tool and for correctly referencing any supporting work. Tools used for improving spelling, grammar, and general editing are not included in these guidelines. The final decision on the appropriateness of the reported use of an AI tool rests with the instructor, academic coordination, and program director.

The use of artificial intelligence tools is strictly prohibited in the student report on practicals and also in the case analysis and problem solving. If Turnitin detects a high percentage of matches or potential plagiarism, the teacher may assign a grade of 0 for the activities.

Delayed submission of mandatory activities

Late submissions of mandatory assignments will be penalized with a deduction of 0.5 points for each 24-hour period past the deadline established on the virtual campus, up to a maximum of 7 calendar days. After this period, the numerical grade will be 0 for this assignment.

7.2. Second exam period.

To pass the subject in the second exam period, the same guidelines as in the first exam period will be followed. It is necessary to submit the activities not passed in the first exam period, after having received the corresponding corrections from the professor, or those that were not submitted.

It is necessary to obtain a grade of 5.0 or higher both in the exam and in the weighted average of the section corresponding to active methodologies. If the grade in any of these sections is below 5, the subject will be considered failed.
To pass the subject, it is essential to meet the following requirements related to active methodologies:

- Attend in person and pass the two presentations of the reports and writings block: Oral presentation on the senses and oral presentation of the research project. In the case of the research project presentation, it must be accompanied by a brief written report that must be submitted and passed.
- Submit both parts of the student report on practicals and achieve an average grade higher than 5 in both.
- Attend the eye tracking laboratory practice in person.

Given the nature of the two laboratory practices, their recovery in the extraordinary exam period will be conducted in person for the eye tracking laboratory practice. For the other laboratory practice (tactile discrimination test), specific instructions will be provided on the virtual campus.

The two oral presentations will be held on a date agreed upon by the professor during the extraordinary exam period. Instructions for the rest of the practical activities will be the same as those for students in the ordinary exam period. In the case of the case analysis and problem-solving activity, the student will carry out the mindfulness activity independently and follow the instructions detailed on the virtual campus.

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8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Assessable activities	Deadline
Reports and writings. Oral presentation about the senses.	Week 4
Laboratory practices (1). Somatosensory system.	Week 5-6
Student report on practicals Part 1.	Week 7
Reports and writings. Research project on perception.	Week 9-10
Case analysis and problem solving	Week 14
Laboratory practices (2) Research paradigms on attention.	Week 14
Student report on practicals. Part 2.	Week 16-18
Final test	Week 16-18

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

The main reference work for this subject is:

- Goldstein, E. B. (2022). *Sensation and perception* (11th ed.). Cengage Learning.
- Kandel, E. R., Schwartz, J.H., & Jessell, T. M. (2000). *Principles of neural science.* Prentice Hall International.

- Styles, E. A. (2006). *Attention Perception and memory: an integrated introduction.* Psychology Press.

The recommended Bibliography is:

- Kandel, E. R., Schwartz, J. H., & Jessell, T. M. (2000). *Principles of neural science*. Prentice Hall International.
- Posner, M. I. & Rothbart, M. K. (2007). Research on attention networks as a model for the integration of psychological science. *Annual Review of Psychology, 58,* 1-23.
- Rose, D. (2006). *Consciousness.* Oxford: Oxford University Press.
- Styles, E. A. (2006). *The Psychology of Attention (2nd Ed*.). Hove: Psychology Press.

Some specialized journals:

- Trends in Cognitive Science
- Cognitive Psychology
- Cognition
- Cognitive Science
- Attention, Perception & Psychophysics

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify thestrengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation