1. BASIC INFORMATION

Course	Behavioural biology
Degree Program	Degree in Psychology
School	Facultad de Ciencias Biomédicas y Deporte
Year	1st
Credits (ECTS)	6 ECTS
Credit type	Basic
Language(s)	English and Spanish
Delivery mode	On campus
Semester	S1
Academic year	2025-2026
Coordinating professor	

2. PRESENTATION OH THE COURSE

The Behavioural Biology course provides students with the biological foundations of the nervous system and its functioning. Throughout the course, concepts of cellular biology and genetics will be addressed, which are fundamental for understanding the elements that make up our nervous system and explain how our genetic information and environment shape our biology and behaviour. Finally, an overview of the methodology that allows us to conduct basic, preclinical, and clinical research to understand the nervous system is provided.

3. LEARNING OUTCOMES

Knowledge:

CON05. Describe the basic laws, biological foundations, brain or neuroendocrine substrates of behaviour, functions and psychological processes.

- Describe the fundamentals of cell signalling and communication and the fundamental principles of molecular biology.
- Identify the mechanisms of cell division and gamete formation.
- Describe the basic principles of the laws of heredity and the principles of epigenetics.
- Describe the concept of evolutionary process and the influence of biological evolution on human behaviour.

Skills:

HAB04. Apply research designs, formulation procedures, hypothesis testing and interpretation of results in psychological research.

HAB06. Analyse relevant data relating to human behaviour, individual and social, and the context in which it occurs, in order to make informed judgements on social, scientific or ethical issues.

- Analyse the biological bases of behaviour and their relationship to the influence of the environment.
- Practice the main basic techniques of lab work.

Competences:

CP02. Apply assessment tools and techniques for psychological and clinical analysis in different contexts, group processes, and organizations.

CP03. Design, implement and evaluate psychological interventions aimed at health promotion, disease prevention and improvement of well-being, through the understanding and modification of psychological, behavioral and social factors that affect health and disease processes from a biopsychosocial perspective.

CP04. Describe and measure variables (personality, intelligence and other aptitudes, attitudes, etc.) and cognitive, emotional, psychobiological and behavioural processes.

CP19. Use information and communication technology to search for and analyse data, as well as to research, communicate and learn.

CP21. Work with others to achieve a shared academic or professional objective, making active, empathetic contributions while demonstrating active listening and respect for all involved.

CP22. Combine analysis with critical thinking in the evaluation of different professional ideas or opportunities and their potential for error, based on objective evidence and data leading to effective and valid decision-making.

4. CONTENTS

The contents of the course are listed below:

- Block I: Genetics, environment and evolution.
- Block II: Evolutionary theory and default behaviour.
- Block III: Genetic selection or gene-environment relationships.
- Block IV: Early development, critical periods and developmental plasticity.
- Block V: Effects of maternal care on human gene expression.
- Block VI: Development of malleability in adulthood.

This subject will be complemented by practical work in the Health Sciences laboratories. The ratio professor-student will be 1/20 for workshop/laboratory activities.

5. TEACHING-LEARNING METHODOLOGIES

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

- Lecture
- Case studies
- Collaborative learning
- Problem-based learning

- Learning based on workshop teaching

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	12
Practical seminars	18
Case studies	10
Report writing	10
Research work and projects	10
Workshops/lab work	12
Independent working	68
Debates and discussions	8
In-person assessment tests	2
TOTAL	**150**

7. CONTINOUS ASSESSMENT

Each assessable learning activity represents an opportunity for the student to make progress, receive feedback, and consolidate knowledge, skills, and competences. The Learning Outcomes outlined in this guide provide direction for this process and serve as benchmarks for their achievement.

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

Campus-based mode:

Assessment Systems	Weight (%)
In-person assessment tests	30-50%
Case study/problem scenario	10-20%
Learning portfolio	10-20%
Research work and projects	10-20%
Workshops/lab work	10-20%

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.

7.1. Ordinary exam call

In order to pass the course/module in the ordinary call, the student must obtain a grade greater than or equal to 5.0 (out of 10), in all the evaluation systems proposed in this guide. The final grade will be calculated from the weighted average of all the evaluation systems described.

If in any of the evaluation systems proposed in this guide, a grade lower than 5.0 (out of 10) is obtained, the final grade of the course/module will be "fail" even if, in the result of the weighted average, a value higher than 5.0 (out of 10) is obtained. In the latter case, the course/module would still be "failed" obtaining a final grade of 4.0 (out of 10).

Delivery of activities

Compliance with deadlines is essential to ensure the fairness and planning of the training process.

In case of not submitting an evaluable formative activity in due time and form, and without prior justification, it will not be evaluated and, therefore, will be recorded as "not submitted".

The student is encouraged to communicate with sufficient time in advance to the teacher of the course/module, any difficulty that may affect their participation in any activity.

Attendance

Active participation in the training sessions is a key component of learning. In order to pass the course/module, at least 50% attendance is required. If this minimum percentage is not reached, the teacher may consider the course/module as "failed", according to the evaluation regulations of the Universidad Europea de Andalucía.

7.2. Extraordinary exam call

The extraordinary exam offers a new opportunity for students to demonstrate their learning. To pass it, it will be necessary to obtain a final grade (weighted average) equal to or higher than 5.0 (out of 10.0).

Delivery of activities

The student must submit and pass those mandatory training activities not delivered or not passed in the ordinary call, respecting the new deadlines established. In case of failure to comply with these new deadlines, the activity will not be evaluated and, therefore, will be recorded as "not presented".

8. SCHEDULE

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

Assessable activities	Date
In-person assessment tests	Week 17
Case study/problem scenario	Weeks 7, 13

Learning portfolio	Weeks 10, 17
Research work and projects	Week 12
Workshops/lab work	Week 14

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. REFERENCES

Recommended references are listed below:

- Cooper, G. M., Hausman, R. E. (2015). *The Cell. A Molecular Approach* (7th edition). Sinauer associates, Inc.
- Alberts, B., Hopkin, K., Johnson, A., Morgan, D., Raff, M., Roberts, K., Walter, P. (2021). *Introducción a la biología celular* (5ª edición). Editorial Panamericana.
- Benito Jiménez, C., Espino Nuño, F.J. (2013). *Genética: conceptos esenciales*. Editorial Médica Panamericana.
- Pierce, B. A. (2023). *Fundamentos de genética: conceptos y relaciones* (5ª edición). Editorial Médica Panamericana.
- Pinel, J.P.J. (2006). *Biopsicología* (6ª edición). Pearson Educación.

10. AREA OF GUIDANCE, DIVERSITY AND INCLUSION

The Area of Guidance, Diversity and Inclusion (ODI) offers support to students throughout their university career, with the aim of facilitating their academic and personal development and supporting them in achieving their goals. This Area focuses its work on three Core pillars: the inclusion of students with specific educational support needs, the promotion of universal accessibility in the educational community and the guarantee of equal opportunities for all.

Among the services offered are:

- **Academic accompaniment and monitoring**, through counselling and the development of personalised plans aimed at those who need to improve their academic performance.
- **Attention to diversity**, through the implementation of non-significant curricular adjustments - in methodological and Assessment aspects - for students with specific educational support needs, in order to guarantee equal opportunities.
- **Extracurricular training resources**, aimed at developing personal and professional Competencies that contribute to the integral growth of students.
- **Vocational guidance**, through the provision of tools and advice to those who have concerns about their choice of Degree or are considering a change in their educational path.

Students in need of educational support can contact the Area via the following email address: orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Participating in the Satisfaction Surveys is an enriching opportunity to contribute to the continuous improvement of the Degree as well as the institution. Thanks to them, it is possible to identify which aspects

of academics, teaching staff and the teaching-learning process are working well and which can be further improved.

With the aim of encouraging active participation in the completion of surveys among students, various channels of dissemination have been set up. The surveys are available in the space provided on the Virtual Campus and are also sent by email to facilitate access.

The responses collected allow decisions to be made that have a direct impact on the quality of the learning experience and on the day-to-day life of the university community.