

**COURSE DATA****DATA SUBJECT**

**Code:** 33324  
**Name:** Behavioral endocrinology  
**Cycle:** Undergraduate Studies  
**ECTS Credits:** 4.5  
**Academic year:** 2025-26

**STUDY (S)**

Degree	Center	Acad. year	Period
1319 - Degree in Psychology	Facultat de Psicologia i Logopèdia	4	First quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1319 - Degree in Psychology	Psychoendocrinology	COMPULSORY

**COORDINATION**

SALVADOR FERNANDEZ-MONTEJO OTILIA ALICIA

GONZALEZ BONO ESPERANZA

**SUMMARY**

Behavioral Endocrinology is a biopsychological discipline which focuses on the bidirectional relationship between activity of the neuroendocrine system and behavior, considered at observable, private, cognitive or emotional levels. This relationship is described in thematic blocks combining metabolic, developmental, social and experiential aspects of the individual. The knowledge and skills acquired in this course are essential along scientific training and research in Psychology, especially in the field of Neuroscience. Additionally, this course will provide a better understanding of the neuroendocrine substrate of human behavior in the different fields of applied Psychology, that will be helpful in order to improve the overall health of the individual. To achieve this goal, both social context of the individual (bonding, group dynamics) and its own individual development (issues of development, feeding behavior, sexual behavior, mood, cognitive function and stress management) will be considered. Finally, the course will allow students to acquire some skills that will be needed to work in multidisciplinary teams in the fields of health care and human resources management.

**PREVIOUS KNOWLEDGE****RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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



## OTHER REQUIREMENTS

It is recommended to have passed the subject 33296 - Fundamentals of Psychobiology and to have knowledge and skills from the previous subjects taught by the Department of Psychobiology. Likewise, it is recommended to have basic computer knowledge and skills, at the user level.

## COMPETENCES / LEARNING OUTCOMES

### 1319 - Degree in Psychology

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

Be able to prepare oral and written reports.

Know and comply with professional ethics of Psychology.

Know how to provide appropriate feedback to patients.

Know the main processes and stages of development throughout the life cycle within contexts of normality and abnormality.

Understand the biological foundations of human behaviour and of the psychological functions related to the processes of thinking and language.

## DESCRIPTION OF CONTENTS

### 1. Introduction to Psychoendocrinology

Concept of Behavioral Endocrinology. Brief historical notes of the discipline. Techniques. General organization of the endocrine system.

### 2. Hormones and metabolism

Introduction. The thyroid axis and metabolic aspects. Behavioral aspects and imbalances of the thyroid axis. Anabolism, catabolism and hormones involved. Behavioral implications of glucose metabolism.

### 3. Hormones, development and life cycle

Introduction. Dymorphism, prenatal development and birth. Sexual orientation and sexual identity. Growth hormone, functions and alterations. Puberty and adolescence. Aging and hormonal imbalances.



#### 4. Hormones and social behavior

Social interaction and hormones. Status and dominance. Hormones, conflict and interpersonal relationships. Anabolic and aggressive behavior.

#### 5. Stress and adaptation

The adaptive response to stress: adrenal medullary system and hypothalamus-pituitary-adrenal axis. Modulating factors of the stress response. Chronic stress and health. Psychobiological indicators of stress.

#### 6. Hormones and mood

Endocrine disorders and mood: glucocorticoids and thyroid hormones. Hormonal correlates of mood.

#### 7. Hormones and cognition

Sex hormones and cognitive aspects. Adrenal hormones and cognition.

### WORKLOAD

#### PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	45,00
<b>Total hours</b>	<b>45,00</b>

#### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	5,00
Individual or group project	20,00
Independent study and work	5,00
Preparation of lessons	12,50
Preparation for assessment activities	15,00
Resolution of case studies	10,00
<b>Total hours</b>	<b>67,50</b>

### TEACHING METHODOLOGY

Lectures given by the teacher in order to developed the contents. Participatory involvement of students through the resolution of the proposed issues will be promoted throughout the lecture.

Theoretical and practical classes will be carried out employing audiovisual support, links to different websites,



textbooks and scientific articles, as well as other readings and materials.

Individual or group scheduled tutoring will be performed to supervise practical work, guidance and resolution of doubts.

Practical sessions in laboratories and seminars are focused on applied aspects in which the student, individually or in groups, has to work with the materials provided (tests, articles, scientific equipment to record variables) in order to achieve specific goals.

## EVALUATION

### EVALUATION SYSTEMS

The student assessment includes:

1.- Examinations of theoretical and practical contents by means of multiple-answer tests, short questions, or skills acquisition questions (80%).

2.- Class participation. Students are expected to attend and actively participate in class. Assessment of academic works that imply that the student has developed competences of knowledge, comprehension and application of the contents, which will constitute 20% of the final grade. This percentage may include homework delivered at the end of the face-to-face session, homework delivered throughout the course, within the deadlines established for each case, and public presentations, individually or as a team. In the second call, the activities that consist of tasks to be carried out outside the classroom will be recoverable, and the activities that consist of tasks to be carried out in the classroom will be recoverable if the characteristics of the subjects do not allow it.

### REQUIREMENTS

To pass this course, students have to achieve at least 50% of the maximum score possible at the examination (first section of the assessment) as well as in the evaluation of the works. Therefore, to pass the subject you must obtain at least 50% of the total score.

### WARNING

Manifest copying or plagiarism of any task that is part of the evaluation entails the impossibility to pass the subject, and may involve immediate submission to the appropriate disciplinary procedures. It should be noted that, in accordance with Article 13. d) of the Statute of the University Student (RD 1791/2010, of 30 December), it is the duty of the student to refrain from using, or to cooperate in the use of fraudulent procedures in the tests of evaluation, in the assignments or in official university documents.

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>

During tutoring, the professor may require individual or group interviews, in order to verify the degree of participation and achievement of the objectives set for any task performed. Failure to accept this verification would imply failing



the task or activity in question.

## GRADING

The evaluation of the subject and the challenge of the grade obtained are subject to what is included in the Regulations of Evaluation and Qualification of the University of Valencia for titles of Degree and Master (A C G U V 1 0 8 / 2 0 1 7 d e 3 0 d e m a i g d e 2 0 1 7). [http://www.uv.es/graus/normatives/2017\\_108\\_reglament\\_avaluacio\\_qualificacio.pdf](http://www.uv.es/graus/normatives/2017_108_reglament_avaluacio_qualificacio.pdf)

## REFERENCES

### **Basic References:**

Nelson, R.J. & Kriegsfeld, L.L. (2022). *An Introduction to Behavioral Endocrinology*, Sixth Edition. Oxford University Press Inc.

Murphy, P.N. (2021). *The Routledge International Handbook of Psychobiology*. Routledge.

### **Supplementary References:**

Buss, D. M. (2016). *The evolution of desire: Strategies of human mating*. Basic books

Guillamón, A. (2022). *Identidad de género. Una aproximación psicobiológica*. Sanz y Torres.

Luck, M. (2014). (Vol. 394). *Hormones: A very short introduction*. Oxford University Press.