

COURSE DAT	٩			
Data Subject				
Code	43094			
Name	Master's final project			
Cycle	Master's degree			
ECTS Credits	15.0	A A A A A A A A A A A A A A A A A A A		
Academic year	2021 - 2022			
Study (c)				
Study (S)				
Degree		Center		Acad. Period year
2141 - M.U. en Fisio	ología 12-V.2	Faculty of Medicir	ne and Odontology	1 Annual
Subject-matter				
Degree	<b>496 38</b> 4	Subject-matter	2000	Character
2141 - M.U. en Fisiología 12-V.2		6 - Final project		End Labour Studies
Coordination				
Name		Department		
SALVADOR PALMI	ER, MARIA ROSARIO	190 - Phy	siology	

# SUMMARY

In this subject the student is trained to know and develop the experimental bases on which current research in Physiology is based. That is why it has an eminently practical character and focuses on the techniques, methodologies and applications of Physiology.

The work will be carried out in one of the research lines that are developed in the Department of Physiology of the University of Valencia, offered by the research groups of the Physiology Department, in collaboration with other Departments. from the Universitat de València, as well as with other research centers, such as the La Fe Health Research Institute of Valencia or the Príncipe Felipe Research Center. These lines cover an important part of the topics of greatest impact in the scientific bibliography in Physiology.



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# **PREVIOUS KNOWLEDGE**

#### Relationship to other subjects of the same degree

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

### **Other requirements**

There are no prerequisites for taking the subject.

## OUTCOMES

#### 2141 - M.U. en Fisiología 12-V.2

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- To acquire basic skills to develop laboratory work in biomedical research.
- Be able to make quick and effective decisions in professional or research practice.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Know how to work in multidisciplinary teams reproducing real contexts and contributing and coordinating their own knowledge with that of other branches and participants.
- Have a proactive attitude towards possible changes that may occur in their professional and/or investigative work.
- Be able to integrate new technologies in their professional and/or research work.
- Know how to write and prepare presentations to present and defend them later.
- Be able to access to information tools in other areas of knowledge and use them properly.
- To prepare a clear and concise memory of the results of your work and the conclusions obtained.
- Use the different exhibition techniques oral, written, presentations, panels, etc., to communicate the knowledge, proposals and positions.
- Project the knowledge on specific problems and know how to summarize and extract the most relevant arguments and conclusions for their resolution.



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- Design the objectives of a research work, propose the experimental study to carry it out, use the appropriate data treatment and draw up its conclusions.
- To acquire a critical attitude that allows you to make reasoned judgments and defend them with rigor and tolerance.
- Critically analyze both his/her work and that of the colleagues.
- Search, order, analyze and synthesize scientific information (databases, scientific articles, bibliographic repertoires), selecting the pertinent to focus current knowledge on a topic of scientific interest in Physiology.
- Assess the need to complete the scientific training, in languages, computer science, ethics, etc., attending conferences or courses and/or carrying out complementary activities, self-evaluating the contribution that the performance of these activities implies for their comprehensive training.
- To acquire basic skills to develop laboratory work in biomedical research.
- To manage the use of laboratory techniques taking into account the basic principles of quality control, risk prevention, safety and sustainability.
- Select the appropriate commercialized instrumentation for the study to be carried out and apply the knowledge to use it correctly.
- Employ the basic tools for the treatment of experimental data in biomedical research.
- Differentiate between the statistical methods to carry out the correct data analysis and handle them in a practical context of an investigation, as well as adequately present the results.

# LEARNING OUTCOMES

Carry out a research work on some aspect of Physiology that is part of a broader line of research, with the necessary coordination.

Work as a team, contributing their ideas and listening to those of the other colleagues with a critical and cooperative attitude.

Use scientific databases, abstracts, complete articles, documentation, etc. necessary to have a clear vision of the background, originality, interest and feasibility of a specific study.

Use the materials and work equipment with maximum safety for the operator and for the environment.

Apply the most appropriate calibration methods and data treatment to a specific study, to obtain results of scientific interest.

Prepare a clear and concise memory of the results obtained in a research work.

Present and defend, before a specialized public, the background, objectives, material and method used, results and conclusions of a research work carried out.



Explain clearly and concisely the conclusions of a research work carried out that may be of interest to a non-specialized audience.

Demonstrate by carrying out the tasks of a research work and its presentation and defense, the ability to apply the research experience acquired in the approach and execution of future studies to be carried out in different settings, within the field of Physiology or related.

# **DESCRIPTION OF CONTENTS**

### 1. Research on topics related to Physiology

The Master's Thesis will consist of:

an original experimental research work

and/or:

a systematic review work,

related to the master, of 15 credits (ECTS), carried out by the student.

# WORKLOAD

ACTIVITY	Hours	% To be attended
Graduation project		100
Attendance at events and external activities	2,00	0
Readings supplementary material	2,00	
Preparation of evaluation activities	6,00	0
Development of a final project	70,00	0
тот	AL 80,00	

# **TEACHING METHODOLOGY**

Use of individualized methodology and adapted to the student for the completion of the Master's Thesis. The director, through discussion of topics, recommendation of readings, participation in support activities, in forums for debate and presentation of contributions, coordinates and guides the student's training to acquire the tools of the research activity.



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# **EVALUATION**

- Activities evaluable by the Tutor through the completion of the Master's Thesis (report of the Tutor).

- Evaluation of the Final Master's Project, memory, presentation and oral defense of the same.

EVALUATION OF THE WRITTEN MEMORY: The scientific value of the topic will be evaluated, -the scientific argument of the work: correct and complete description of the contents, the way in which the student has presented and discussed the results obtained and the validity of the conclusions obtained., - the statistical analysis, where appropriate, -the bibliography and -the academic rigor: structuring and presentation of the manuscript with an adequate use of written language. Evaluation up to 7 points.

EVALUATION OF THE ORAL EXHIBITION: The clarity of the exposition, the adequate distribution of time between the presentation of the topic and the presentation of the results and conclusions, the correct use of language, the adequacy of the visual presentation and the scientific knowledge of the topic and precision in the answers to the questions asked. Evaluation up to 3 points.

Minimum passing grade: 5 points.

## REFERENCES

#### Basic

- Las recomendadas por los/las directores/as según el trabajo de investigación.

### Additional

- Las recomendadas por los/las directores según el trabajo de investigación.

# **ADDENDUM COVID-19**

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

## ONLY IF FACE-TO-FACE TEACHING AND EVALUATION IS NOT POSSIBLE:

### 1. Contents

The contents collected in the teaching guide are maintained.

### 2. Workload and temporary planning of teaching

The weight of the various activities that add up the hours of dedication in ECTS credits marked in the teaching guide is maintained.



### 3. Teaching methodology

Students must communicate with tutors, preferably through official telematic means, such as the virtual classroom (forums, chats, etc.) or University email.

If the student is developing a TFM through a research project that requires face-to-face activity in a health center or of another nature, this activity is suspended and the tutors responsible for the TFM will be the ones to replace the face-to-face activity for a telematic activity.

### 4. Evaluation

The teaching guide evaluation system is maintained, but with the oral presentation and defense by videoconference. Priority will be used the platforms for videoconferencing available to the University of Valencia.

### 5. Bibliography

The bibliography recommended in the teaching guide is maintained.

