



Information about the subject

Degree: Bachelor of Science Degree in Medicine

Faculty: Faculty of Medicine and Health Sciences

Code: 344601 **Name:** Bachelor's Thesis

Credits: 12,00 **ECTS Year:** 6 **Semester:** 1/2

Module: Supervised work and final project

Subject Matter: Final project **Type:** Final Degree Project

Field of knowledge: Ciencias de la Salud

Department: Medical Specialities

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Supervised work and final project

Subject Matter	ECTS	Subject	ECTS	Year/semester
Clinical practice	54,00	Clinical Practice for hospital emergencies	6,00	6/2
		Clinical practice of family medicine	6,00	6/2
		Clinical Practice of General Pathology	3,00	3/2
		Clinical Practice of Minor Surgery	3,00	3/1
		Clinical practice of Specialities I (Psychiatry/Dermatology)	3,00	5/2
		Clinical practice of specialities II (obstetrics/paediatrics/allergy)	6,00	6/2
		Clinical practice of specialities III (cardiovascular/ENT/respiratory)	6,00	6/2
		Clinical practice of specialities IV (infectious/nervous system/nephrology)	6,00	6/2
		Clinical practice of specialities VI (Ophthalmology/oncology/palliative)	6,00	6/2
		Clinical practice of specialties V (musculoskeletal/rheumatology/rehabilitation)	6,00	6/2



Clinical practice		Geriatric clinical practice	3,00	6/2
Final project	12,00	Bachelor's Thesis	12,00	6/2

Recommended knowledge

In order to be able to take the subjects of this course it will be essential to have passed all the subjects of Module 1: Morphology, structure and function of the human body.

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Cross-cutting matter whose work will be carried out associated with different subjects, Demonstrate the competencies of the scientific method for research, as well as the ability to search and filter the necessary information and know how to transmit it clearly and rigorously.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB1	Students have demonstrated to possess and understand knowledge in a study area that starts from the base of the general secondary education, and is usually found at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study			X	
CB2	Students know how to apply their knowledge to their job or vocation in a professional way and possess the competences that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study				X
CB3	Students have the ability to collect and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical topics				X
CB4	Students can pass on information, ideas, problems and solutions to both a specialized and non-specialized audience				X
CB5	Students have developed the learning skills needed to undertake further studies with a high degree of autonomy				X
GENERAL		Weighting			
		1	2	3	4
CG8	Recognize the basis of normal human behavior and its disfunctions	X			
CG9	Understanding and recognizing the effects, mechanisms and manifestations of the disease on the structure and function of the human body			X	
CG10	Understanding and recognizing the causative agents and risk factors that determine health and disease development	X			
CG11	Understanding and recognizing the effects of growth, development and aging on the individual and their social environment	X			



CG12	Understanding the basis of action, indications and efficacy of therapeutic interventions, based on available scientific evidence	X			
CG13	Getting and writing a medical history containing all relevant information	X			
CG31	Knowing, critically valuing and knowing how to use the sources of clinical and biomedical information to obtain, organize, interpret and communicate scientific and health information				X
CG32	Knowing how to use information and communication technologies in clinical, therapeutic, preventive and research activities				X
CG33	Maintaining and using records with patient information for further analysis, preserving data confidentiality				X
CG34	Having, in professional activity, a critical, creative point of view, with constructive and research-oriented skepticism				X
CG35	Understanding the importance and limitations of scientific thinking in the study, prevention and management of diseases			X	
CG36	Being able to formulate hypotheses, critically collect and evaluate information for problem solving, following the scientific method			X	
CG37	Acquiring basic training for research activity			X	

SPECIFIC		Weighting			
		1	2	3	4
CE87	Thesis work: Cross-cutting subject whose work will be done in relation to different subjects				X

TRANSVERSAL		Weighting			
		1	2	3	4
CT1	Analytical and synthesis capacity				X
CT2	Planification and organization capacity				X
CT3	Oral and written communication in mother language				X
CT5	Informatics knowledge				X



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	1	2	3
Personal action and know your own skills and			
and maintain relationships with other			
ons			
ant information from personal interviews			



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1	35,00%	Presentations
R1	60,00%	Work
R1	5,00%	Participation in class

Observations

Breakdown of the percentage given to each evaluation system:

- **Exhibition (35%):** Poster (Poster evaluated by the tribunal) 5% and Oral presentation (Defense evaluated by the tribunal) 30%.
- **Work (60%):** Written report (Report evaluated by the examining board) 50% and Evaluation by the director (Evaluation by the director) 10%.
- **Class participation (5%):** Attendance to seminars (Evaluation made by the professors responsible for the TFG subject) 5%.

The student will not be able to access the oral defense of his/her TFG if he/she has not obtained, at least, 50% of the grade in the evaluation system Works.

Those students who have pending to pass more than 18 ECTS from previous courses will not be able to present themselves for the oral defense.

The oral presentation of the TFG will take place in a public act, and will consist of:

- 10 minutes of oral defense.
- 5 minutes for questions from the examining board.

CRITERIA FOR THE AWARDING OF HONORS:

According to article 22 of the Regulatory Regulations for the Evaluation and Grading of UCV Subjects, the mention of "Matrícula de Honor" may be awarded by the professor responsible for the subject to students who have obtained the grade of "Outstanding". The number of "Matrícula de Honor" mentions that may be awarded may not exceed five percent of the students included in the same official transcript, unless this is less than 20, in which case only one "Matrícula de Honor" may be awarded.



MENTION OF DISTINCTION:

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- | | |
|-----|-------------------------------------|
| M11 | Personalised attention by professor |
| M13 | Written work |
| M14 | Online activity on e-learning |
| M15 | Personal study |
| M16 | Information research |



IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Practices in small groups M11, M13, M14, M15, M16	R1	25,00	1,00
Tutoring M11	R1	35,00	1,40
Evaluation M13, M14	R1	5,00	0,20
TOTAL		65,00	2,60

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
No attendance M13, M14, M15, M16	R1	235,00	9,40
TOTAL		235,00	9,40



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Block I: Bibliographic search	<ol style="list-style-type: none">1. Sources of information in Health Sciences.2. Methodology of the bibliographic search.3. Search in Medical Databases.4. Bibliographic references and citation systems: Vancouver style.
Block II. Statistics	<ol style="list-style-type: none">1. Using Excel to tabulate data2. Description of a continuous variable (fStats Continuous Variable). Numerical description: mean, standard deviation, percentiles, interval grouping, ... Graphical description: box plot, histogram, normal probability plot. Confidence intervals and hypothesis contrasts for mean, variance and standard deviation.3. Comparison of means. Two related populations (fStats Compares 2 Paired Means). Two independent populations (fStats Compares 2 Independent Means). More than two independent populations (fStats ANOVA 1 way, fStats ANOVA 2 ways with balanced replications).4. Multiple Linear Regression (fSLR).5. Study of qualitative variables (fStats A proportion, fStats 2 independent proportions, fStats Gi-2 Proportions, fStats Gi-2. Independence and Homogeneity, fStats Cases Controls. Independent, fStats Compares 2 treatments).6. Multiple Logistic Regression (fSLogistic Regression).7. Minimum sample size (fStats Size).
Block III: Research methodology	<ol style="list-style-type: none">1. The scientific method.2. Causality.3. The hypothesis.4. Study design.



Block IV: How to present results and speak in public

1. Elaboration of scientific reports and posters.
2. Presentation of results through oral communication.

Block V: TFG execution tutoring

1. Word processor for the realization of the TFG.
2. Text, figures and tables layout.

Block VI: Tutoring of the execution of the TFG

1. Conducting a literature search and preparing the introduction and bibliography.
2. Elaboration of a working hypothesis and objectives.
3. Collection of materials and execution of methods.
4. Compilation of results.
5. Interpretation of results and elaboration of a discussion.
6. Elaboration of conclusions.
7. Preparation of a summary.
8. Preparation of a final report of the TFG that contains all the previous sections.
9. Preparation of a poster on the TFG carried out.
10. Preparation of an oral presentation of the TFG.

Temporary organization of learning:

Block of content	Number of sessions	Hours
Block I: Bibliographic search	2,00	4,00
Block II. Statistics	8,00	16,00
Block III: Research methodology	3,00	6,00
Block IV: How to present results and speak in public	2,00	4,00
Block V: TFG execution tutoring	4,00	8,00
Block VI: Tutoring of the execution of the TFG	2,00	4,00



References

Fundamental bibliography:

Argimón Pallás, José M. Métodos de investigación clínica y epidemiológica. 5ª ed. Madrid: Elsevier; 2019.

García García JA, López Alvarenga JC, Jiménez Ponce F, Ramírez Tapia Y, Lino Pérez L, Reding Bernal A. Metodología de la investigación, bioestadística y bioinformática en ciencias médicas y de la salud. México D.F.: McGraw Hill; 2014.

Gil Santos L, Lloris Carsí JM, Barrios Pitarque C, Pérez Olmedilla M. Elaboración y presentación de tesis doctorales y trabajos de investigación biomédica. Valencia: UCV; 2013.

Serrano Gallardo P. Trabajo Fin de Grado en Ciencias de la Salud. Madrid: DAE; 2012.

Complementary bibliography:

Hernández Sampieri R, Fernández Collado C, Baptista Lucio P, García Espejo I, Limón Cano S. Metodología de la investigación. Mexico: MacGraw-Hill; 2010.

Serés E, Rosich L, Bosch F. Presentaciones orales en biomedicina. Barcelona: Fundación Dr. Antonio Esteve; 2010.



Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

☒ Kaltura



Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒ Microsoft Teams

☒ Kaltura

Explanation about the practical sessions:

The seminars will be given at the same time, telematically.



2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System:

In the case of not being able to take the evaluation tests in person, they will be done telematically through Microsoft Teams.