



Information about the subject

Degree: Bachelor of Science Degree in Podiatry

Faculty: Faculty of Medicine and Health Sciences

Code: 470402 **Name:** Introduction to research and sanitary documentation

Credits: 6,00 **ECTS Year:** 4 **Semester:** 1

Module: GENERAL PODOLOGY AND BIOMECHANICS

Subject Matter: Research and management **Type:** Compulsory

Field of knowledge: Health Sciences

Department: Biostatistics, Epidemiology, and Public Health

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

GENERAL PODOLOGY AND BIOMECHANICS

| Subject Matter | ECTS | Subject | ECTS | Year/semester |
|------------------|-------|------------------------------------|------|---|
| General Podiatry | 21,00 | Evolutionary Podiatry | 3,00 | This elective is not offered in the academic year 24/25 |
| | | Expertise in podiatry | 3,00 | This elective is not offered in the academic year 24/25 |
| | | General Podiatry | 6,00 | 1/2 |
| | | Preventive Podiatry | 3,00 | 4/1 |
| | | Social Morality. Deontology | 6,00 | 3/1 |
| Biomechanics | 27,00 | Biomechanics | 6,00 | 2/2 |
| | | Ergonomics and footwear | 3,00 | 4/1 |
| | | General Intervention Procedures | 6,00 | This elective is not offered in the academic year 24/25 |
| | | Physiotherapy Assessment | 6,00 | This elective is not offered in the academic year 24/25 |
| | | Sports Podiatry | 6,00 | 3/2 |
| Radiology | 6,00 | Radiology and Radiation Protection | 6,00 | 3/1 |



| | | | | |
|-------------------------|-------|---|------|-----|
| Research and management | 12,00 | Introduction to research and sanitary documentation | 6,00 | 4/1 |
| | | Planning and management of the podiatric clinic | 6,00 | 4/2 |

Recommended knowledge

None required.

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 The student acquires criteria to select the sources of information in Podiatry and Health Sciences.
- R2 The student performs a critical reading of scientific articles.
- R3 The student develops a scientific research protocol.



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 demonstrate knowledge and understanding in an area of study that is at the core of general secondary education, and is often at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study. | | | | X |
| CB3 | Students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant social, scientific or ethical issues. | | | | X |
| CB4 | Students convey information, ideas, problems and solutions to both specialized and non-specialized audiences. | | | | X |
| CB5 | Students develop those learning skills necessary to undertake further studies with a high degree of autonomy. | | | | X |
| GENERAL | | Weighting | | | |
| | | 1 | 2 | 3 | 4 |
| CG9 | Students critically assess the terminology, clinical trials and methodology used in podology-related research. | | | X | |
| SPECIFIC | | Weighting | | | |
| | | 1 | 2 | 3 | 4 |
| CE35 | Students know, critically evaluate and know how to use technologies and sources of biomedical information, to obtain, organize, interpret and communicate scientific and health information. To know the basic concepts of biostatistics and its application. Use search and retrieval systems of biomedical information and understand and critically interpret scientific texts. Know the principles of the scientific method, biomedical research and clinical trials. | | | | X |



CE43 Students identify and analyze foot health problems in the different environmental, biodynamic and social aspects, as well as learning about the evaluation of scientifically proven facts and the analysis of data in general, in order to apply Podiatry Based on Scientific Evidence.

X

| TRANSVERSAL | | Weighting | | | |
|-------------|------------------------------|-----------|---|---|---|
| | | 1 | 2 | 3 | 4 |
| CT1 | Analytical capabilities | | | X | |
| CT7 | Problem solving | | | X | |
| CT8 | Decision making | | | X | |
| CT9 | Teamwork | | | X | |
| CT10 | Interdisciplinary teamwork | | | X | |
| CT14 | Critical Reasoning | | | X | |
| CT15 | Ethical commitment | | | X | |
| CT16 | Autonomous learning | | | X | |
| CT17 | Adaptation to new situations | | | X | |
| CT22 | Motivation for quality | | | X | |



Assessment system for the acquisition of competencies and grading system

| Assessed learning outcomes | Granted percentage | Assessment method |
|----------------------------|--------------------|--|
| R1, R2, R3 | 15,00% | Open questions |
| R1 | 30,00% | Tests |
| R1, R2, R3 | 30,00% | Oral presentation |
| R1, R2, R3 | 5,00% | Class participation |
| R1 | 20,00% | Practice exam- technical proficiency testing |

Observations

To pass the course it will be compulsory to obtain a minimum of 5 out of 10 in each of the theoretical and practical tests and in the proposed research project which will be deposited in the teaching platform and exhibited in poster format.

1. Open questions: 4 short development questions (2 for research and 2 for documentation).
2. Test type: it will consist of an exam with 20 test type questions (15 of research and 5 of documentation),
3. Presentation: will consist of the elaboration of a research project, to be carried out in a group or individually (30%)
4. Participation in class: attendance and participation in class.

Maintaining the respective percentages, the evaluation systems set out above can be developed in continuous evaluation mode throughout the semester, informing students in advance and collecting this information on the UCVnet platform of the subject.



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:

- M1 Theoretical classes (TC). Training activity preferably oriented to the acquisition of knowledge skills. It is characterised by the fact that students are spoken to. Also called master class or expository class, it refers to the oral exposition made by the teacher, (with the support of a blackboard, computer and cannon for the exposition of texts, graphics, etc.).
- M2 Seminars (S). Training activity preferably oriented to obtain knowledge application and research competences. Knowledge is built through interaction and activity. Consisting of supervised monographic sessions with shared participation (Teachers, students, experts). The size of the group is variable, from a large group to small groups, no less than 6 students for interaction. The evaluation will be made by means of follow-up records by the teacher. Participation and development of problem-solving skills should be taken into account.
- M3 Problems practice (CPP). Training activity oriented to group work for problem solving under the supervision of a teacher. The size of the group is variable, in a range of 10-20 students, to avoid confusion with a master class.
- M4 Classroom practice (CPA). Training activity of work in groups that is developed in the classroom. It includes work with documents (e.g.: work with articles or documents, clinical case studies, diagnostic analyses, etc). The size of the group is variable, in a range of 10-20 students.



- M5 Computer Practice (CPI). Training activity of work in groups that is developed in the Computer Classroom where the learning is developed using the computer as a support. It includes the work with computer models, specific software, web queries, etc. The size of the group is variable, in a range of 10-20 students.
- M6 Laboratory Practice (CPL). Training activity of work in groups that is developed in the Laboratory. It includes the sessions where students actively and autonomously develop, supervised by the teacher, laboratory experiments. The size of the group is variable, in a range of 10-20 students.
- M7 Tutorials (T). Set of activities carried out by the teacher with personalised attention to the student or in small groups with the aim of reviewing and discussing the materials and topics presented in the classes, seminars, readings, completion of assignments, etc. The aim is to ensure that education is truly a comprehensive training of the student and is not reduced to a transfer of information. It is, therefore, a personalized relationship of help in which the teacher-tutor attends, facilitates and guides one or more students in the formative process.
- M8 Evaluation (Ev). It is the set of processes that try to evaluate the learning results obtained by the students and expressed in terms of acquired knowledge, capacities, developed skills or abilities and manifested attitudes. It covers a wide range of activities that can be developed for students to demonstrate their training (e.g. written, oral and practical tests, projects or assignments,). It also includes Official Calls.
- M10 Estudio del alumno: Preparación individual de lecturas, ensayos, resolución de problemas, seminarios



IN-CLASS LEARNING ACTIVITIES

| | LEARNING OUTCOMES | HOURS | ECTS |
|--------------------------------|-------------------|--------------|-------------|
| Theoretical lessons M1 | R1, R2, R3 | 33,50 | 1,34 |
| Seminar M2 | R1, R2, R3 | 3,50 | 0,14 |
| Practice lessons M3, M4, M5 | R1, R2, R3 | 17,00 | 0,68 |
| Office Hours M7 | R1, R2, R3 | 1,00 | 0,04 |
| Evaluation M8 | R1, R2, R3 | 5,00 | 0,20 |
| TOTAL | | 60,00 | 2,40 |

LEARNING ACTIVITIES OF AUTONOMOUS WORK

| | LEARNING OUTCOMES | HOURS | ECTS |
|------------------------|-------------------|--------------|-------------|
| Autonomous work M10 | R1, R2, R3 | 66,00 | 2,64 |
| Group work M10 | R1, R2, R3 | 24,00 | 0,96 |
| TOTAL | | 90,00 | 3,60 |



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

| Content block | Contents |
|--|--|
| UNIT I: Introduction to the scientific method | ·The scientific method as a basis for research in Health Sciences. |
| UNIT II: Planning of the research | ·Elements of the research project. ·Proposal of the research problem. ·Research hypothesis formulation. Types of hypotheses. ·Setting the primary and secondary objectives in a research. |
| UNIT III: Research design | ·Research design. Types of studies. ·Characteristics of quantitative studies. Types. ·Characteristics of qualitative studies. Types. ·Importance, viability of a research project. |
| UNIT IV: Research Methodology | ·Selection of the study population. Sampling techniques ·Variables and their types. ·Errors and biases in research ·Quantitative and qualitative data collection techniques. ·Biostatistics. Practical application in Health Sciences. |
| UNIT V: Ethical considerations in research | ·Up-to-Date ethics in research. ·Informed Consent. Guidelines for its elaboration. |
| UNIT VI: Structure and presentation of the research | ·Structure of the IMRD format in health sciences. Characteristics. ·Structure of the Bibliographic Review. Characteristics. |
| UNIT VII: The Communication in Scientific Research. Bibliographic References and Citation Systems in Health Sciences | ·Scientific communication. The scientific article: types and functions. ·Bibliographic references and citation systems in Health Sciences. |



UNIT VIII: Methodology for Bibliographic Search and Information within

·Methodology for the search for bibliographic information.

UNIT IX: Information Resources

·Information Resources.

UNIT X: Internet Search Tools

·Tools for searching information on the Internet.

UNIT XI: Health Sciences Database Search

·Search in national and international databases. Types. Methodology.

UNIT XII: Database searches: Ebscohost Platform and Web of Science

·Search in Ebscohost Platform and Web of Science. Methodology.

UNIT XIII: Information resources in Health Sciences

·Information resources in Health Sciences.

UNIT XIV: Scientific evidence in Podiatry. Sources of Information for Evidence-Based Podiatry

·Search for resources for Evidence-Based Podiatry.

UNIT XV: Critical reading of scientific articles

·Critical reading of scientific articles. Guidelines.



Temporary organization of learning:

| Block of content | Number of sessions | Hours |
|--|--------------------|-------|
| UNIT I: Introduction to the scientific method | 1,00 | 2,00 |
| UNIT II: Planning of the research | 2,00 | 4,00 |
| UNIT III: Research design | 4,00 | 8,00 |
| UNIT IV: Research Methodology | 5,00 | 10,00 |
| UNIT V: Ethical considerations in research | 1,00 | 2,00 |
| UNIT VI: Structure and presentation of the research | 2,00 | 4,00 |
| UNIT VII: The Communication in Scientific Research. Bibliographic References and Citation Systems in Health Sciences | 4,00 | 8,00 |
| UNIT VIII: Methodology for Bibliographic Search and Information within | 1,00 | 2,00 |
| UNIT IX: Information Resources | 2,00 | 4,00 |
| UNIT X: Internet Search Tools | 1,00 | 2,00 |
| UNIT XI: Health Sciences Database Search | 2,00 | 4,00 |
| UNIT XII: Database searches: Ebscohost Platform and Web of Science | 2,00 | 4,00 |
| UNIT XIII: Information resources in Health Sciences | 1,00 | 2,00 |
| UNIT XIV: Scientific evidence in Podiatry. Sources of Information for Evidence-Based Podiatry | 1,00 | 2,00 |



UNIT XV: Critical reading of scientific articles

1,00

2,00





References

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