

**1. General information****Course:** ORTHOPODIATRY I**Type:** CORE COURSE**Degree:** 399 - PODIATRY DEGREE**Center:** 16 - FACULTY OF SCIENCES OF THE HEALTH OF TALAVERA**Year:** 2**Main language:** Spanish**Use of additional languages:****Web site:** <https://orcid.org/0000-0001-5693-8477>**Code:** 32512**ECTS credits:** 6**Academic year:** 2021-22**Group(s):** 60 61**Duration:** First semester**Second language:** Spanish**English Friendly:** Y**Bilingual:** N**Lecturer:** LAURA MARTÍN CASADO - Group(s): 60 61

Building/Office	Department	Phone number	Email	Office hours
Facultad de Ciencias de la Salud	ENFERMERÍA, FISIOTERAPIA Y TERAPIA OCUP.	926051680	Laura.MartinCasado@uclm.es	Monday from 8:00h to 11:00h and Tuesday from 13:30h to 16:30h. Prior appointment by email.

2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Orthopedology I is a basic subject in which the necessary knowledge is based to develop the therapeutic action that will be analyzed in Orthopedology II and that will be carried out in the Practicum. In addition, it is cross-related to other subjects of the module, complementing them and providing a global vision of the intervention of the podiatrist, particularly in the field of orthopedics.

4. Degree competences achieved in this course**Course competences**

Code	Description
CB01	Prove that they have acquired and understood knowledge in a subject area that derives from general secondary education and is appropriate to a level based on advanced course books, and includes updated and cutting-edge aspects of their field of knowledge.
CB02	Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and justify arguments and solve problems within their subject area.
CB03	Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant social, scientific or ethical issues.
CB04	Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.
CB05	Have developed the necessary learning abilities to carry on studying autonomously
CE23	Know and develop the techniques of exploration, to issue a diagnosis and prognosis, and design the orthopedological course of treatment for the pathology of the lower extremity. Bone and ligamentous-muscle trauma. Pathology of the forefoot and hindfoot. Congenital deformities. Neurological injuries. Amputations. Asymmetries
CE24	Develop the skill and dexterity in the use of instruments, material and device used for the preparation and application of orthopedological treatments. General concept of orthopedics. The orthopedological workshop. Technology of orthopedological therapeutic materials. Fundamentals and techniques for foot-leg molding.
CE25	Design, obtain and apply by different techniques and materials the plantar supports and digital orthoses, prostheses, splints. Plantar and digital orthotics. Study of footwear and footwear-based therapy. Prescription of orthopaedic treatments of the lower extremity.
GC01	Know and apply the theoretical and methodological foundations of Podiatry.
GC03	Obtain the capacity, skill and ability necessary to diagnose, prescribe, indicate, perform and/or develop and evaluate any type of podiatric, orthopedological, chiropodological, surgical, physical, pharmacological, preventive and/or educational treatment, based on the clinical history.
GC07	Know, design and apply preventive programs related to podiatry and the promotion of podiatric care in the population.

5. Objectives or Learning Outcomes**Course learning outcomes****Description**

- To design and develop orthotic prescriptions for the lower limb.
- To master protocols and skills to perform exploratory techniques.
- To determine the characteristics of footwear for children, adults and women, special footwear, etc.
- To determine the foundations and techniques for foot and leg shaping
- To analyze and describe the footwear characteristics and footwear therapy.
- To apply correctly the foundations and techniques of foot and leg shaping.
- To acquire theoretical knowledge to master the most frequent orthopedic techniques.
- To develop a global vision of orthopedology.
- To describe the orthopedic studio.
- To describe the therapeutic materials technology which most widely used in orthopedic.
- To use correctly the instrumental, material and equipment to prepare and apply orthopedic treatments.

To identify the instrumental, material and equipment to prepare and apply orthopedic treatments.

To apply and make different orthopedic treatments such as digital and plantar orthoses, lower limb orthoses and prostheses.

6. Units / Contents

Unit 1: INTRODUCTION TO THE SUBJECT.

Unit 1.1 Presentation and teaching plan of the subject.

Unit 2: FUNDAMENTAL PRINCIPLES OF THE ORTHOPODOLOGY

Unit 2.1 History of Orthopedics and Orthopodology. Definitions and basic concepts.

Unit 2.2 Medical history in Orthopodology.

Unit 2.3 Orthopedic Laboratory, instruments, equipment and protocols.

Unit 2.4 Risks prevention in the orthopodology laboratory, use of EPIS.

Unit 3: MOLDS

Unit 3.1 Concepts, tools and equipment for the realization of the mold.

Unit 3.2 Procedures for the realization of the mold in load, and rectify techniques.

Unit 3.3 Procedures for the realization of the mold in unload, and rectify techniques.

Unit 3.4 Realization of molds and new technologies.

Unit 4: MATERIALS

Unit 4.1 Concepts and properties of the materials used in Orthopodology.

Unit 4.2 Natural and synthetic leathers.

Unit 4.3 Plastics.

Unit 4.4 Metals.

Unit 4.5 Cork and Cork by-products.

Unit 4.6 Elastic materials: latex, rubber and viscoelastics.

Unit 4.7 Adhesives.

Unit 4.8 Resins.

Unit 4.9 Fibres

Unit 4.10 Silicones and Catalysts.

Unit 4.11 Materials for 3D printing.

Unit 5: ORTHOSES, SPLINTS AND PROSTHESES.

Unit 5.1 Basics concepts.

Unit 5.2 Orthosis: Design, classification and podiatry application.

Unit 5.3 Live adaptation technique tad.

Unit 5.4 Splints: Design, classification and podiatry application.

Unit 5.5 Prosthesis: Design, classification and podiatry application.

Unit 5.6 Technical support for walking.

Unit 6: FOOTWEAR

Unit 6.1 History, basics concepts and classification of footwear.

Unit 6.2 Characteristics of the footwear according to the activity and other conditions: infantile, sports, geriatric, rheumatic and risky foot.

Unit 6.3 Footwear as an orthopedic treatments; external and internal modifications of footwear.

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures	CB01 CB02 CB03 CB04 CB05 CE23 CE24 CE25 GC01 GC03 GC07	1.4	35	Y	N	Lessons are taught by the teacher of the subject. Evaluable in Final Test.
Workshops or seminars [ON-SITE]	Practical or hands-on activities	CB01 CB02 CB03 CB04 CB05 CE23 CE24 CE25 GC01 GC03 GC07	0.8	20	Y	Y	Seminars, workshops and/or group practices for case report solving and simulation work. Evaluable in Practical Exam. Can be re-evaluated but not repeated.
Writing of reports or projects [OFF-SITE]	Self-study	CB01 CB02 CB03 CB04 CB05 CE23 CE24 CE25 GC01 GC03 GC07	0.8	20	Y	N	Making reports, jobs or reports in a group. Evaluable in Practical Exam. Can be re-evaluated.
Study and Exam Preparation [OFF-SITE]	Self-study	CB01 CB02 CB03 CB04 CB05 CE23 CE24 CE25 GC01 GC03 GC07	2.8	70	Y	N	Independent work carried out by the student. Evaluable in Final Test or Practical Exam.
Final test [ON-SITE]	Assessment tests	CB01 CB02 CB03 CB04 CB05 CE23 CE24 CE25 GC01 GC03 GC07	0.2	5	Y	Y	Multi-response test. Evaluable in Final Test. Can be re-evaluated.
Total:			6	150			
Total credits of in-class work: 2.4			Total class time hours: 60				
Total credits of out of class work: 3.6			Total hours of out of class work: 90				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description

Final test	80.00%	80.00%	The final exam will be of the test type and the score will be calculated as follows: Final test =((right questions-(wrong questions/2))/(number of question)) x 10.
Practical exam	20.00%	20.00%	Evaluation will be according to the student's performance or exercises for continuous assessment.
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

The current grading system shall apply; currently, uclm student evaluation regulations, approved on May 28, 2014.

The Global evaluation will be carried out based on the average of the evaluation systems (final test and practices). The student must reach 40% from the final test.

Non-continuous evaluation:

The current grading system shall apply; currently, uclm student evaluation regulations, approved on May 28, 2014.

The Global evaluation will be carried out based on the average of the evaluation systems (final test and practices). The student must reach 40% from each evaluation system.

Specifications for the resit/retake exam:

The grade of the practices, which have been pass by the student up to a maximum of two academic years from the current course, will be kept, provided that the training activities are not modified

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	hours
General comments about the planning: The planning of the training activities during the course will be adapted to the needs of the students and may change depending on the criteria of the teacher of the subject. The official academic calendar will be followed at all times.	

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Levy Benasuly, Ana Esther. Cortés Barragán, José Manuel.	Ortopodología y aparato locomotor ortopedia de pie y tobillo	masson	Barcelona	9788445812990	2003	
Zambudio Periago, Ramón	Prótesis, ortesis y ayudas técnicas	Masson		9788445819692	2009	
Ramón Viladot Pericé; Salvador Clavell Paloma; Oriol Cohí Rimbau	Ortesis y prótesis del aparato locomotor. Vol.2, Extremidad inferior	Masson	Barcelona		1997	
Munuera, P. V.	El primer radio: biomecánica y ortopodología	Exa Editores	Santander	9788461608331	2009	
Turner, W.A., Merriman, L.M.	Habilidades clínicas para el tratamiento del pie.	Elsevier		8480862084	2007	