



COURSE DATA

Data Subject

Code	34339
Name	Orthopodiatry I
Cycle	Grade
ECTS Credits	6.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1208 - Degree in Podiatry	Faculty of Nursing and Chiropody	2	First term

Subject-matter

Degree	Subject-matter	Character
1208 - Degree in Podiatry	12 - Orthopodiatry	Obligatory

Coordination

Name	Department
CAMPOS CAMPOS, JUAN	125 - Nursing
IZQUIERDO RENAU, MARTA	125 - Nursing
LEYDA PINEDA, ROSA MARIA	125 - Nursing

SUMMARY

MODULE 3. SUBJECT: PODIATRIC PATHOLOGY, PHYSICAL AND PHARMACOLOGICAL ORTOPODOLÓGICOS TREATMENTS.

MODULE 3 provides knowledge: pathological processes of structure function and impact of the foot at the locomotor apparatus. Knowledge and development of scanning techniques to make a diagnosis, prognosis and to design a treatment plan ortopodológico. Knowledge of instruments, equipment and machinery used for the preparation and implementation of treatment ortopodológicos: requirements, design, production and application. Chiropodist's study of shoes and comprehensive changes to chiropodists associated with sports. Application of physical methods, electric and manual. taping and treatment of pain and inflammation



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

*ORTOPODOLOGÍA I, II AND III, compulsory taught in 1 st and 2 n semester of 2nd year and 1 semester of 3rd year.

RECOMMENDATIONS: have acquired the skills of raw materials: human anatomy, biochemistry and biophysics and pathology general.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1208 - Degree in Podiatry

- Know and implement the exploration techniques to give a diagnosis and prognosis, and to design the orthopodologic treatment plan of the lower limb pathology. Bone, ligament and muscle injuries. Pathology of the forefoot and hindfoot. Congenital deformities. Neurological damage. Amputations. Asymmetries.
- Develop the skill and dexterity in the use of instruments, equipment and machinery used for the preparation and implementation of orthosis treatments. General concept of orthopedics. The orthosis workshop. Orthosis therapeutic materials technology. Fundamentals and techniques for foot-leg casts.
- Design, procure and implement plantar supports, digital orthoses, prosthesis and splints using different techniques and materials. Plantar and digital orthotics. Study of footwear and shoe therapy. Prescription of lower extremity orthopedic treatments.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

Get the capacity, ability and skill necessary to diagnose, prescribe, specify, implement and / or develop and evaluate any type of podiatry treatment, ortopodológico, quiropodológico surgery, podiatry, physical, pharmacological, preventive and / or education, based on clinical history. acting at all times based on compliance with professional ethical obligations, the law and the criteria norm praxis.

DESCRIPTION OF CONTENTS



1. INTRODUCTION TO ORTOPODOLOGÍA

ITEM 01: HISTORY OF ORTOPODOLOGÍA. DEFINITION OF ORTHOPEDICS. ORTOPODOLOGÍA DEFINITION. INTRODUCTION TO THE SUBJECT. RELACIÓND E SUBJECT WITH OTHER SUBJECTS OF THE CURRICULUM BASE.

UNIT 02: CLASSIFICATION OF TYPES OF ORTOPODOLOGÍA. PALLIATIVE ORTOPODOLOGÍA, COMPENSATORY, CORRECTIVE AND REPLACEMENT. DEFINITION, CHARACTERISTICS AND RECOMMENDED.

ITEM 03: PROVISIONAL AND DEFINITIVE TREATMENT ORTOPODOLOGICOS. APPLICATION GUIDELINES AND INSTRUCTIONS FOR USE.

ITEM 04: DEFINITION OF ORTHOTICS AND PROSTHETICS. TYPES, CHARACTERISTICS AND CRITERIA FOR APPLICATION.

2.

Types of orthopedics

3.

Topic 06: Description of the orthopedic workshop. Characteristics that the workshop must have. Ergonomic arrangement of furniture and tools. Rules of use. description of the machinery of a workshop of orthopedics.

4. HYGIENE AND SAFETY STANDARDS IN THE ORTHOPEDIC WORKSHOP

Hygiene and safety standards in the orthopedic workshop (LESSON 7)

5. DEFINITION OF MOLD. INDICATIONS. TYPES. POSITIVE AND NEGATIVE MOULD

DEFINITION OF MOLD. INDICATIONS. TYPES. POSITIVE AND NEGATIVE MOULD MOLD OR DRAIN. CLASSIFICATION OF MOLD BY SEGMENT FOOT PLAY. PRINT METHODOLOGY FOR OBTAINING THE NEGATIVE. CAST THE FIRST SEGMENT, HEEL, FOREFOOT AND BOOTS. GETTING POSITIVE MOLD.



6. DEFINITION OF MOLD. INDICATIONS. TYPES. POSITIVE AND NEGATIVE MOULD

DESCRIPTION AND CHARACTERISTICS OF THE ROOM MOLDES. DESCRIPCIÓN ERGONOMIC COMPONENTS. MAINTENANCE

DESCRIPTION AND CHARACTERISTICS OF THE MATERIALS USED IN THE PREPARATION OF MOULDS. INSTRUMENTS USED IN THE PREPARATION OF MOULDS. DESCRIPTION AND METHOD OF USE.

7. MOLDS. PLANTAR MOLD IN DOWNLOAD

Molds. plantar mold in download(T.10)

8. Molds. Positive mold grinds

Molds. Positive mold grinds T 12)

9. DESCRIPTIVE STUDY OF SHOES

Topic 12: Historical evolution of footwear. General anatomy of footwear. Measurement taking. Last. Characteristics of the last. Varieties in the manufacture of footwear. Materials employed.

Topic 13: Children's footwear. Characteristic. General design recommendations. Elementary notions for choosing the right footwear for children.

Topic 14: Sports shoes. General characteristics according to the sports activity to be developed. Types of sports shoes: basketball, tennis, soccer, athletics and urban running.

10. THERAPY OF SHOES

TEM 16: DEFINITION OF THERAPY OF SHOES. FEATURES THAT YOU HAVE TO HAVE THE IDEAL FOOTWEAR ELEMENTS FOR THE APPLICATION OF ORTHOTICS. DESCRIPTION AND ACTION ITEMS ORTHESIST BIOMECHANICS APPLIED TO FOOTWEAR.

ITEM 17: DESIGN AND METHOD OF APPLICATION OF THE ELEMENTS ORTHOSIS FOOTWEAR. BIOMECHANICAL EFFECT. MATERIALS.

ITEM 18: SPECIAL FOOTWEAR. CLASSIFICATION. ORTHOPEDIC FOOTWEAR.

ITEM 19: TECHNICAL WORK FOOTWEAR. GENERAL DESIGN RECOMMENDATIONS. TECHNICAL FEATURES IN YOUR SHOES.



12. PRACTICE (N° 1-2-3-4-5-6--7-8-9-10)(20h)

PRACTICAL CONTENT. (20 H).

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PRACTICE 1: PRESENTATION OF THE WORKSHOP ORTOPODOLÓGÍA.

PRACTICE 2: PROVISIONAL ORTOPODOLÓGICOS TREATMENTS.

PRACTICE 3: LOCATION OF ANATOMICAL LANDMARKS.

PRACTICE 4: TECHNIQUES FOR OBTAINING THE FOOTPRINT.

PRACTICE 5: CAST PHENOLIC FOAM.

PRACTICE 6: NEGATIVE MOULD PLANT.

Practice 7: Mold plant, negative (adaptation and techniques of correction (I)

Practice 8: Mold plant, negative (adaptation and techniques of correction II) Practice 9: Mold plant,

negative (adaptation and techniques of correction III)

Practice 10:Development of the different types of negative molds(with foam)

13. WORKSHOP I,II,III,IV,V

THE STANDARD BASE. DEFINITION. BENCHMARKS FOR YOUR COLLECTION. METHODOLOGY OF CLOTHING ON FOOT, CAST OR PEDÍGRAFÍA. MATERIAL CHANGES IN FUNCTION AND SHOE. BENCHMARKS FOR PERFORMANCE, MAKING METHODOLOGY.

WORKSHOP III :negative Molds with foam

WORKSHOP IV :CAD/CAM SYSTEM

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	58,00	100
Laboratory practices	20,00	100
Classroom practices	10,00	100
Tutorials	2,00	100
Attendance at events and external activities	2,00	0
Development of group work	2,00	0
Development of individual work	2,00	0
Study and independent work	40,00	0
Readings supplementary material	2,00	0
Preparation of evaluation activities	2,00	0
Preparing lectures	7,00	0
Preparation of practical classes and problem	2,00	0
Resolution of case studies	1,00	0



TOTAL	150,00
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TEACHING METHODOLOGY

TO CARRY OUT THE PROCESS OF TEACHING - LEARNING COURSE USING DIFFERENT TEACHING METHODS, SEEK A BALANCE BETWEEN TRADITIONAL AND INNOVATIVE METHODS SHOULD BE ENHANCED AND METHODOLOGIES WHICH PROVIDES, BETTER CONDITIONS, TRAINING AND SKILLS OBJECTIVES OF THE COURSE . BE BASED ON THE FOLLOWING ACTIVITIES:

8.1. TEACHING METHODS (CLASSROOM) (T) 58 H:

GROUP THEORETICAL EXPLANATION OF STUDENTS ENROLLED (N), THE CONTENT OF EDUCATIONAL UNITS THROUGH EXPOSITORY SESSIONS, EXPLANATIONS AND / OR DEMONSTRATIONS BY THE PROFESSOR. THE STUDENT MAY ACCESS THE CONTENTS OF MEETINGS CLASS THROUGH THE VIRTUAL CLASSROOM IN THE MODULE "DOCUMENTS". THE PROGRAM WILL BE ESTABLISHED FOR THE GOOSE COURSE.

8.2. TEACHING METHODS (CLASSROOM PRACTICE: SEMINAR-WORKSHOP (P) 10 H: SUPERVISED SESSIONS-GRAPHIC MONOGR SHARED WITH PARTICIPATION OF TEACHERS, STUDENTS.

8.3. TEACHING METHODS (LAB) (L) 20 H:

THE MAKING OF PRACTICE IS VITAL FOR STUDENTS ACQUIRING SKILLS AND PROCEDURES RELEVANT TO THE SUBJECT. THESE PRACTICES ARE HELD AT THE WORKSHOP LOCATED IN THE CLASSROOM B0. DISTRIBUTION OF PUPILS IN THE GROUPS WILL BE ASSIGNED TO THE CENTER OF THE SECRETARIAT AND ITS TOTAL (N / 4) BY GROUP WILL BE BETWEEN 16-24 STUDENT S. BE ASSIGNED TO RESPECT THE GROUP AND SUPPORT THESE PRACTICES WILL BE MANDATORY. L1-L2-L3-L4

8.4. TEACHING METHODS (TUTORIALS) (U) 2 H:

TUTORIALS WILL BE SET OF THREE TYPES:

- * PEER TUTORING (N / 4) BETWEEN 20 TO 25 STUDENTS: THIS IS TO MEET THE CONCERNS AND DIFFICULTIES ENCOUNTERED BY STUDENTS. PERSONAL PROJECT MONITORING OF STUDENTS AND ACADEMIC ACTIVITIES LEADING UP TO THE CLASS.
- * ONE TUTORING: PERSONAL PROJECT MONITORING OF STUDENTS AND BROADEN OR DEEPEN THE INFORMATION PROVIDED IN OTHER LEARNING SITUATIONS.
- * VIRTUAL TUTORIALS: AVAILABLE FOR ALL STUDENTS ENROLLED THROUGH THE MAIL FROM THE UNIVERSITY.

TO CARRY OUT THE PROCESS OF TEACHING - LEARNING COURSE USING DIFFERENT TEACHING METHODS, SEEK A BALANCE BETWEEN TRADITIONAL AND INNOVATIVE METHODS SHOULD BE ENHANCED AND METHODOLOGIES WHICH PROVIDES, BETTER CONDITIONS, TRAINING AND SKILLS OBJECTIVES OF THE COURSE . BE BASED ON THE FOLLOWING ACTIVITIES:



8.1. TEACHING METHODS (CLASSROOM) (T) 58 H: GROUP THEORETICAL EXPLANATION OF STUDENTS ENROLLED (N), THE CONTENT OF EDUCATIONAL UNITS THROUGH EXPOSITORY SESSIONS, EXPLANATIONS AND / OR DEMONSTRATIONS BY THE PROFESSOR. THE STUDENT MAY ACCESS THE CONTENTS OF MEETINGS CLASS THROUGH THE VIRTUAL CLASSROOM IN THE MODULE "DOCUMENTS". THE PROGRAM WILL BE ESTABLISHED FOR THE GOOSE COURSE.

8.2. TEACHING METHODS (CLASSROOM PRACTICE: SEMINAR-WORKSHOP (P) 10 H: SUPERVISED SESSIONS-GRAPHIC MONOGR SHARED WITH PARTICIPATION OF TEACHERS, STUDENTS.

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THE MAKING OF PRACTICE IS VITAL FOR STUDENTS ACQUIRING SKILLS AND PROCEDURES RELEVANT TO THE SUBJECT. THESE PRACTICES ARE HELD AT THE WORKSHOP LOCATED IN THE CLASSROOM B0. DISTRIBUTION OF PUPILS IN THE GROUPS WILL BE ASSIGNED TO THE CENTER OF THE SECRETARIAT AND ITS TOTAL (N / 4) BY GROUP WILL BE BETWEEN 16-24 STUDENT S. BE ASSIGNED TO RESPECT THE GROUP AND SUPPORT THESE PRACTICES WILL BE MANDATORY.

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MONITORING OF STUDENTS AND ACADEMIC ACTIVITIES LEADING UP TO THE CLASS.

Ø ONE TUTORING: PERSONAL PROJECT MONITORING OF STUDENTS AND BROADEN OR

DEEPEN THE INFORMATION PROVIDED IN OTHER LEARNING SITUATIONS.

Ø VIRTUAL TUTORIALS: AVAILABLE FOR ALL STUDENTS ENROLLED THROUGH THE

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EVALUATION

TECHNICAL ASS

REFERENCES

Basic

- MICHAUD TC (1997). FOOT ORTHOSES AND OTHER FORMS OF CONSERVATIVE FOOT CARE. ORTESIS PLANTARES Y OTRAS FORMAS DE TRATAMIENTO CONSERVADOR (2ª ed.) Michaud, TC, Baltimore.
- KIRBY KA. Foot and lower extremity biomechanics: A ten year collection of precision intricast newsletters. Precision Intricast, Inc, Payson, Arizona; 1997.
KIRBY KA. Foot and lower extremity biomechanics I: precision intricast newsletters, 1997-2002. Precision Intricast, Inc., Payson, Arizona; 2002.
KIRBY KA. Foot and lower extremity biomechanics II: precision intricast newsletters, 2002-2008. Precision Intricast, Inc, Payson, Arizona; 2009
KIRBY KA biomecanica del pie y la extremidad inferior ,volIV ARTICULOS DE REVISION INTRICAST 2011.2018 IBN .9780965730983.eD autor editor
- RAMIRO J, coordinador. Guía de recomendaciones para el diseño de Calzado. Valencia: Instituto de Biomecánica de Valencia; 1995
- ZAMBUDIO PERIAGO R. Prótesis, ortesis y ayudas técnicas. Barcelona: Elsevier Masson; 2009
- NÄDER M, NÄDER HG, editores. OTTO BOCK. Compendio de prótesis. Prótesis para la extremidad inferior. 2ª ed. Berlín: Schiele & Schön; 1993.

Additional

- Revistas científicas:
 - Revista Española de Podología: <https://www.revesppod.com/?AspxAutoDetectCookieSupport=1>
 - Revista Europea de Podología: <https://revistas.udc.es/index.php/EJP/index>
 - Revista de Internacional de Ciencias Podológicas: <https://revistas.ucm.es/index.php/RICP>
 - Journal of the American Podiatric Medical Association: <https://meridian.allenpress.com/japma>
 - Journal of the Foot and Ankle Research: <https://jfootankleres.biomedcentral.com/>
 - Current Pedorthics: <https://www.pedorthics.org/page/CurrentPedorthics>
 - Podiatry Today : <https://www.podiatrytoday.com/archive>



Asociaciones Internacionales:

- American Podiatric Medical Association: <https://www.apma.org/>
- The American College of Foot and Ankle Orthopedics and Medicine: <https://www.acfaom.org/>
- American Academy of Orthopaedic Surgeons: <https://www.aaos.org/>
- American Orthopaedic Society for Sport Medicine: <https://www.sportsmed.org/aossmimis>
- SUBIRANA I CAMPÀ MQ. Manual de Técnicas en Ortopodología. Barcelona: Ediciones Especializadas Europeas; 2004.
- VÁZQUEZ MALDONADO B, editor. Manual de Ortopodología. Barcelona: Ediciones Especializadas Europeas; 2009.