

**COURSE DATA****Data Subject**

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|----------------------|-----------------|
| Code | 34339 |
| Name | Orthopodiatry I |
| Cycle | Grade |
| ECTS Credits | 6.0 |
| Academic year | 2019 - 2020 |

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 RENAÚ, 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.

OUTCOMES

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

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 (T. 01-02-03-04)

ITEM 01: HISTORY OF ORTOPODOLOGÍA. DEFINITION OF ORTHOPEDICS. ORTOPODOLOGÍA DEFINITION. INTRODUCTION TO THE SUBJECT. RELACIÓNDE 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. ORGANIZATION OF THE WORKSHOP ORTOPODOLOGIA. (T 05)

ITEM 05: DESCRIPTION OF THE WORKSHOP ORTOPODOLOGÍA. FEATURES TO CONVEINE THE WORKSHOP. PROVISION OF FURNITURE AND EQUIPMENT ERGONOMICS. HYGIENE AND SAFETY. RULES OF THE MACHINERY USO.DESCRIPCIÓN OWN WORKSHOP ORTOPODOLOGÍA. USE, HEALTH AND SAFETY STANDARDS AND MAINTENANCE.

3. TECHNICAL MOULDING AND REPRODUCTION OF THE FOOT.(T .06-07-08-09)

ITEM 06: DESCRIPTION AND CHARACTERISTICS OF THE ROOM MOLDES.DESCRIPCIÓN ERGONOMIC COMPONENTS. MAINTENANCE.

ITEM 07: DESCRIPTION AND CHARACTERISTICS OF THE MATERIALS USED IN THE PREPARATION OF MOULDS. INSTRUMENTS USED IN THE PREPARATION OF MOULDS. DESCRIPTION AND METHOD OF USE.

ITEM 08: 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.

ITEM 09: METHOD OF OBTAINING PLANT MOLD. GETTING IN LOAD AND DISCHARGE SEMI-CHARGED. NEUTRALIZATION TECHNIQUES. NEUTRALITY ASSESSMENT OF MOLD.



4. PATTERN DESIGN.(T. 10)

ITEM 10: 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.

5. DESCRIPTIVE STUDY OF SHOES (T. 11-12-13)

ITEM 11: HISTORICAL EVOLUTION OF SHOES. GENERAL ANATOMY OF THE SHOE. TAKING ACTION. HORM. FEATURES OF THE LAST. VARIETY IN THE MANUFACTURE OF SHOES. MATERIALS.

ITEM 12: CHILDREN'S SHOES. FEATURES. GENERAL DESIGN RECOMMENDATIONS. BASIC CONCEPTS FOR CHOOSING THE RIGHT SHOE IN CHILDREN.

ITEM 13: SPORTS SHOES. CHARACTERISTICS BY SPORT ACTIVITY TO BE DEVELOPED. SPORTS FOOTWEAR: BASKETBALL, TENNIS, SOCCER, ATHLETICS AND URBAN RACE.

6. THERAPY OF SHOES (T 14-15-16-17-18)

ITEM 14: 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 15: DESIGN AND METHOD OF APPLICATION OF THE ELEMENTS ORTHOSIS FOOTWEAR. BIOMECHANICAL EFFECT. MATERIALS.

ITEM 16: SPECIAL FOOTWEAR. CLASSIFICATION. ORTHOPEDIC FOOTWEAR.

ITEM 17: TECHNICAL WORK FOOTWEAR. GENERAL DESIGN RECOMMENDATIONS. TECHNICAL FEATURES IN YOUR SHOES.

ITEM 18: SUBSIDIARIES OF TREATMENT ORTOPODOLOGICO PATHOLOGY. IN YOUR SHOES. DISSYMMETRY. PES VALGUS. VARO PIE. EQUINUS.

7. PRACTICAL CONTENT. (20 H).

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PRACTICE 1: PRESENTATION OF THE WORKSHOP ORTOPODOLOGÍA.
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: DEVELOPMENT OF DIFFERENT TYPES OF NEGATIVE MOULD.
PRACTICE 8: PERFORMANCE STANDARDS (I).
PRACTICE 9: PERFORMANCE STANDARDS (II).

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 | |

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.

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.

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CONCERNS AND DIFFICULTIES ENCOUNTERED BY STUDENTS. PERSONAL PROJECT

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.

MORENO DE LA FUENTE, JL. PODOLOGÍA GENERAL Y BIOMECÁNICA. Ed. Masson (2003).

VALENTÍN, V. ORTESIS DEL PIE. TRATAMIENTO ORTÉSICO DE LAS ALTERACIONES BIOMECÁNICAS DE LA MARCHA. BUENOS AIRES. ED. Médica Panamericana, 1987.

CORTÉS BARRAGÁN, JM., LEVY BENASULY AE. ORTOPODOLOGÍA Y APARATO LOCOMOTOR. ORTOPEDIA DEL PIE Y EL TOBILLO.ed. Masson 2003.

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DORCA COLL, A., TRATAMIENTOS ORTOPODOLÓGICOS I. Barcelona. Publicaciones Universidad de Barcelona, 2000.

V. autores., GUIA DE RECOMENDACIONES PARA EL DISEÑO DEL CALZADO. Ed. IBV 1995.

RAMIRO, J., GUIA DE RECOMENDACIONES PARA EL DISEÑO, SELECCIÓN Y USO DE CALZADO PARA PERSONAS MAYORES. Ed. IBV, 1998.

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- VILADOT PERICÉ, A., QUINCE LECCIONES SOBRE PATOLOGÍA DEL PIE.2º Ed Barcelona Springer-Velag Ibérica, 2000.

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- RUEDA SANCHEZ, M. PODOLOGIA LOS DESEQUILIBRIOS DEL PIÉ. Ed. Paidotribo, 04
- R.VALMASY, R., CLINICAL BIOMECHANICS OF THE LOWER EXTREMETIES. Ed. Mosby, 1998.
- DONATELLI, R.A., THE BIOMECHANICS THE FOOT AND ANKLE. Ed. F. A, Davis Company 1998.
- HUNTER, S., DOLAN, M., DAVIS, J., FOOT ORTHOTICS IN THERAPY END SPORT. Ed. Human Kinetics, 1995.
- BOWKER, J. PFEIFER, M. (2008). Levin y O'Neal. El pie Diabético. 7ª Ed. Barcelona: Elsevier.
- LEVY, AE. CORTÉS, JM. (2003).Ortopodología y aparato locomotor. Ortopedia de pie y tobillo. Barcelona: Masson.
- 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.
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- VIADÉ J. Pie Diabético. Guía práctica para la prevención, evaluación y tratamiento. Madrid: Médica-Panamericana; 2006.
- REVISTA INTERNACIONAL DE CIENCIAS PODOLOGICAS,
- REVISTA ESPAÑOLA DE PODOLOGÍA,
- JOURNAL OF THE AMERICAN PODIATRIC MEDICINE ASSOCIATION,
- THE FOOT, EL PEU,
- REVISTA INSTITUTO BIOMECANICA DE VALENCIA (IBV).

Additional

- <http://www.ibv.org>
<http://www.traumaweb.net>
<http://www.eorthopod.com>
<http://www.traumazamora.org/ortoinfantil/cavozambo/cavozambo.html>
http://escuela.med.puc.cl/paginas/publicaciones/TextoTraumatologia/Trau_Secc02/Trau_Sec02_10.html
<http://numancia1.vhebron.es/htr/ortopediatria/castellano/salud/lista.html>
<http://www.ortoinfo.com/comun/enlaces/enlaces61.html>
<http://iicop.com/casosclnicos.html>



ADDENDUM COVID-19

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

English version is not available