

# REHA 4017 PODIATRIC PAEDIATRICS AND SPORTS MEDICINE

**Credit Points** 10

**Legacy Code** 401115

**Coordinator** Steven Walmsley ([https://directory.westernsydney.edu.au/search/name/Steven Walmsley/](https://directory.westernsydney.edu.au/search/name/Steven%20Walmsley/))

**Description** This subject will introduce students to clinical and theoretical foundations of biomechanical alignment, trauma, psychological and behavioural factors leading to pain and restricted function of the foot and lower extremity affecting daily living activities. Particular focus will be placed on the mechanics, diagnosis and treatment options of problems experienced in paediatrics and sports in normal daily activities or the sporting arena. This integration will enhance the previously taught assessment and diagnostic techniques in the development of appropriate management and treatment programs of the lower extremity in different populations.

**School** Health Sciences

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 4 subject

**Pre-requisite(s)** REHA 3028 AND REHA 3029 AND REHA 2005

**Co-requisite(s)** REHA 4018

**Incompatible Subjects** REHA 7024 - Podiatric Techniques 3A REHA 7025 - Podiatric Techniques 3B

**Restrictions** Students must be enrolled in 4708 - Bachelor of Podiatric Medicine and 470 - Bachelor of Podiatric Medicine (Honours).

**Assumed Knowledge**

Completion of all core subjects to this semester/ year of study.

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Discuss and analyse current theories and processes of normal growth from birth to adulthood.
2. Use appropriate knowledge of diseases, musculoskeletal injury with skills to accurately examine (physical, historical and psychosocial) the child and the sports patient.
3. Quantify paediatric and sports assessments using pathology/ injury screening tools
4. Explore legal, ethical and resourcing issues in the practice of podiatric medicine in the areas of policy development, appropriate assessment techniques and treatment programs provided to the child (management of condition, child protection and care); sporting patients (professional or social environments).
5. Integrate theoretical and practical knowledge of biomechanics and its role in sporting activities and exercise science and understand approaches to determine the aetiology, pathology,

clinical presentation in the diagnoses of common injury to the lower extremity.

6. Distinguish between normal age related changes and pathological conditions (physical and psychological) that may occur in paediatric and sports cohorts.
7. Recognise and review age related gait changes and differentiate these from gait changes associated with systemic or orthopaedic disturbances.
8. Examine the role of the podiatrist in a multidisciplinary health care team which includes the paediatric and sports patient (hospital and community settings).
9. Apply the theory of measuring health outcomes, pain and pain management in a clinical setting and identify, assess and implement a treatment plan for soft tissue, osseous and synovial conditions.
10. Demonstrate and evaluate the role of physical therapies, particularly musculoskeletal retraining, neural and orthoses intervention in the ongoing patient management and rehabilitation process.

## Subject Content

The content of this subject covers paediatrics and sports medicine.

- 1) Paediatrics
  - a. Overview of paediatrics
    - The Roles, glossary and teamwork involved in managing paediatric populations
  - b. The patient, environment and examination
    - underpinning assumptions, The first encounter (parental dynamics and rapport ) and The Examination process
  - c. Child protection
    - Children (care and protection) Act 1998/Amendments
    - Preventing child Abuse and neglect
    - Risk Factors, signs and duty of care
  - d. Legal and Ethical considerations in assessment and treatment
  - e. Normal muscular, neuro and skeletal development
    - Embryology, foetal development, Developmental changes and Lower limb function and postural changes with Age
  - f. Factors affecting growth and development
    - Genetic, neurological, hormonal, racial, environmental and disease
  - g. Treatment and management
    - conditions and principles applying to treatment (Palliative, accommodative and curative treatments)
  - h. Postural disorders
    - osteochondroses, pes calcaneo-valgus, vertical talus, talipes equinovarus, metatarsus adductus, coxa vara ? valga, genu varum ? valgum, tibial varum, transverse Plane deformities and Developmental flatfoot
  - i. Paediatric Screening
- 2) Sports Medicine
  - a. Physical activity across the life span
    - physiological and mental health Benefits
    - physical Activity guidelines
    - barriers and Facilitators for physical Activity participation and The podiatrists role
  - b. Overview of sport and related injury
    - biomechanics, structure and function of The Lower extremity
    - common reported injuries and sequelae of Activities
    - physiology, pathophysiology and Psychology of pain in Activity
  - c. History taking and examination
    - Activity type, frequency, level of fitness, surface, footwear and other equipment
    - injury and treatment history (previous and present)
    - assessment and investigative techniques
    - injury and Activity Screening
    - Prevalence of injury across Sports
    - Red alerts ( differential Diagnosis)

- d. Legal and Ethical considerations in assessment and treatment of sports person
- e. Specific injuries
  - aetiology, pathology, clinical presentation and treatment of A range of pathologies ( ie stress fractures, soft tissue injury, subluxations and related conditions such as fractures, sinus tarsi, compartment, cuboid, and iliotibial syndrome)
- f. Treatment strategies and management plans, including
  - orthoses, splinting, strapping and Motion restriction devices and techniques
  - footwear prescription and modification
  - prevention and Musculoskeletal rehabilitation programs
  - designing rehabilitation programs
  - Interventions ( i.e stretching, activity and training modification, strength and proprioception, muculoskelal techniques- deep tissue massage, neural testing and tension, muscle rehabilitation (stretching and strengthening), mobilisation, myofascial the

## Special Requirements

Legislative pre-requisites

Prior to enrolling in this subject, students must have submitted a Student Undertaking Form and undertake to apply for a National Police Check, which is required to be submitted before placement. Students must also hold a valid and current First Aid Certificate from a Registered Training Organisation. Refer to the Special Requirements website for more information.

Special Requirements ([https://www.westernsydney.edu.au/currentstudents/current\\_students/enrolment/special\\_requirements/](https://www.westernsydney.edu.au/currentstudents/current_students/enrolment/special_requirements/))

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Case Study	15 minutes	30	N	Individual
Practical Exam	1 hour	20	N	Individual
Final Exam	2 hours	50	N	Individual

Teaching Periods

### 1st Half (2022)

**Campbelltown**

**Day**

**Subject Contact**

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=REHA4017\\_22-1H\\_CA\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=REHA4017_22-1H_CA_D#subjects))

### 1st Half (2023)

**Campbelltown**

**On-site**

**Subject Contact**

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=REHA4017\\_23-1H\\_CA\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=REHA4017_23-1H_CA_1#subjects))