

REHA 2003

MUSCULOSKELETAL DISORDERS AND IMAGING

Credit Points 10

Legacy Code 401180

Coordinator Kym Hennessy ([https://directory.westernsydney.edu.au/search/name/Kym Hennessy/](https://directory.westernsydney.edu.au/search/name/Kym%20Hennessy/))

Description This subject will introduce students to clinical and theoretical foundations of musculoskeletal disorders that can impact on the function of the lower extremity and reduce patient quality of life. Musculoskeletal disorders including rheumatic diseases, inflammatory arthropathies, connective tissue disorders, bone disease and tumours will be covered. Advanced assessment evaluation will be taught with a focus on diagnostic imaging techniques including ultrasound, X-rays, magnetic resonance imaging, computer tomography and bone scans. This will assist in the clinical diagnosis of disease processes that present in podiatric settings

School Health Sciences

Discipline Podiatry

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) REHA 1003 AND
REHA 2005 AND
NATS 1022

Co-requisite(s) REHA 2007

Equivalent Subjects REHA 3032 - Podiatric Techniques 1B

Restrictions The subject is Podiatry specific and restricted only to students enrolled in programs 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). The subject will be building on previous clinical skills. It is essential that students have been able to demonstrate baseline competencies in theoretical content, patient management, infection control and safe work practices (i.e completed the preceding prerequisite subjects). Students must meet all inherent requirements for the podiatry program.

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. Analyse and interpret the aetiology, pathophysiology and clinical manifestations of rheumatic diseases, bone disease, and neoplasms of the foot, ankle and lower extremity.
2. Identify and demonstrate and examination techniques (history taking, clinical examination and further investigations) needed to construct a differential diagnoses, obtain appropriate diagnostic criteria and implement a treatment program for a range of musculoskeletal disorders affecting the foot, ankle and lower extremity.

3. Distinguish and compare between the diverse range of treatment strategies (pharmacological, physical, mechanical, surgical, alternative etc.) available to treat rheumatic diseases and other musculoskeletal disorders of the foot, ankle and lower extremity.
4. Differentiate and describe the history, development and functionality of current diagnostic imaging modalities, including radiography, ultrasound, MRI, CT or bone scans, available to interpret different musculoskeletal tissue densities and anatomical structures of the foot, ankle and lower extremity.
5. Distinguish and demonstrate between the most appropriate imaging modalities and views needed for the visualisation of particular foot, ankle and lower extremity anatomical structures and common musculoskeletal disorders and develop referral skills for each of these modalities
6. Integrate diagnostic imaging test results with clinical examinations.
7. Identify and appraise the indications and contraindications of a range of diagnostic modalities used in the foot, ankle and lower extremity including radiography, ultrasound, MRI, CT and bone scans.
8. Analyse and compare the legal, ethical and medical ramifications of utilising different diagnostic imaging modalities to investigate common musculoskeletal disorders of the lower extremity.

Subject Content

1. Rheumatic Diseases/Inflammatory Arthropathies
 - Osteoarthritis (OA)
 - Rheumatoid Arthritis (RA)
 - Spondyloarthropathies (SpA) (i.e. Psoriatic Arthritis, Reactive Arthritis, Ankylosing Spondylitis etc.)
 - Connective tissue / auto-immune arthropathies (systemic Lupus Erythematosus, Scleroderma, Sjogrens syndrome etc.)
 - Crystal Arthropathies (Gout, chondrocalcinosis/Pseudogout, apatite deposition etc.)
 - Juvenile Idiopathic Arthritis (Jia)
 - other (Septic Arthritis, Neuropathic arthropathies etc.)
 - For each of these rheumatic conditions, students will be taught appropriate:

Theories related to the aetiology and pathophysiology
Definitions of each condition from a podiatric perspective including clinical manifestations (lower limb joint, tendon, entheses, bursal & extra articular (i.e. skin, nails, nodules/ganglions) involvement and systemic changes to body tissues and systems) and their investigation processes of clinical examination (i.e. tender, swollen, painful joint/tendon counts) and laboratory tests

Management of patients with pharmacological, physical, surgical, alternative therapies, psychosocial support etc.

2. Bone disease
 - theories related to The aetiology and pathophysiology of osteoporosis, Pagets disease, osteomyelitis, osteochondroses (i.e. severs disease, Osgood Schlatters disease, Freiberg's infarction, Kohlers disease etc.) etc
 - Traumatic syndromes (fractures and soft tissue injury)
 - 3. Other disorders

Special Requirements

Legislative pre-requisites

Note: Due to Covid Restrictions, the First Aid Requirement is currently not needed.

Prior to enrolling in this subject, students must have submitted a Student Undertaking Form and have a National Police Check, which is required to be submitted before placement. Students must also have submitted a Working with Children Check Student Declaration. Students must 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/)

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	Approximately 25 1,500 words		N	Individual
Practical Exam	1 hour	25	N	Individual
Final Exam	2 hours	50	N	Individual

Teaching Periods

2nd Half (2024)

Campbelltown

On-site

Subject Contact Steven Walmsley (<https://directory.westernsydney.edu.au/search/name/Steven Walmsley/>)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=REHA2003_24-2H_CA_1#subjects)