

REHA 3030 PODIATRIC SURGERY

Credit Points 10

Legacy Code 401183

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

Description This unit will introduce students to local anaesthesia, the theory of surgical procedures and the practice of skin and nail surgical techniques. As such, this unit allows students to assess patients' suitability for administration of local anaesthesia; understand procedures involved in obtaining voluntary consent, appreciate, and reasonably predict and describe the possible adverse effects of administering local anaesthesia. Surgery will focus the medico-legal requirements, principles of theatre protocol, peri-operative and post-surgical management of the patient and nail and skin surgery, in preparation for student undertaking surgery during Podiatric Practice 3 and 4.

School Health Sciences

Discipline Podiatry

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/) page.

Level Undergraduate Level 3 subject

Pre-requisite(s) NATS 1010 AND
NATS 1022 AND
REHA 3028 AND
NATS 2008

Incompatible Subjects REHA 3033 - Podiatric Techniques 2A

Restrictions Students must be enrolled in 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). For registration, students must be competent in performing partial nail avulsions as an accreditation requirement for state registration to practice as a podiatrist. 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 podiatric practice subject and prerequisite subjects).

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. Assess patients for suitability for administration of local anaesthetics, including medical, psychological or any other contraindications and describe the possible adverse effects of administration of local anaesthetics.
2. Demonstrate a thorough understanding of the medico-legal requirements relevant to performing invasive procedures and understand and undertake the procedures to obtain voluntary consent.
3. Discuss knowledge of pharmacology to explain the mode of action of local anaesthetics.

4. Demonstrate the acquisition of the practical skills required for the safe and efficient administration of local anaesthetic agents by injection to those structures distal to the knee.
5. Demonstrate upgraded and continuous development in the theoretical and practical knowledge of resuscitation techniques.
6. Recognise the legal requirements relating to the control, supply and application of local anaesthetic drugs within the state of New South Wales, and Australia.
7. Demonstrate a theoretical understanding and practical competence in the principles of theatre protocol.
8. Recognise and select through a range of investigative procedures those patients with conditions requiring surgical intervention and/or referral.
9. Actively participate and demonstrate competence in those surgical procedures relating to the nail and skin integuments and appreciate through observation and limited participation, the indications for, and procedures involved in, a range of other surgical procedures of the foot and ankle.
10. Appreciate the consequences of a range of orthopaedic surgical procedures of the lower limb and plan, implement and evaluate post surgical management, with particular reference to pharmacological therapy, orthotic therapy and physical therapies.

Subject Content

1. Regional Anaesthesia
 - theories related to The aetiology and pathophysiology
 - Review of The Pharmacology of local anaesthetic agents, including The history, Classification, Chemical structure, and commercial preparations
 - Review The Anatomy of The Nerve fibre and The conduction of The Nerve impulse
 - Review The anatomical considerations of Nerve and blood Supply to The Lower limb
 - Review and explore in greater depth The mechanism of action of local anaesthetics
 - absorption and Disposition of local anaesthetic agents
- Examine the procedures necessary for the preparation of the patient, including the clinical indications, contraindications and special precautions for the use of local anaesthetics
- Calculation of safe maximum dosages
- Toxic and side effects of local anaesthetic agents, including overdose, allergic reactions and psychogenic reactions
- Recognition and treatment of adverse reactions
- Medico-legal considerations and implications, including documentation, consent and laws relating to the distribution, supply and use of restricted substances
- Theory and practice of techniques and sites of administration; dorsal and plantar infiltration, digital block, field block (Mayo) and ankle block
2. Procedures for surgery
 - Medico-legal requirements (informed consent, duty of care and documentation)
 - Biological safety (Review of definitions and terms, Rules governing sterility and Operating room Protocol)
 - Pre-operative review (systems review, vascular assessment and diagnosis)
 - Phenolisation technique for partial and total nail avulsion and The properties of phenol
 - Complications of Phenolisation procedures
 - Incisional techniques for partial and total nail avulsion
 - Indications for Incisional techniques
 - Blunt dissection /curettage for verrucae
 - skin biopsy techniques
 - use of LASER in foot surgery
3. Introduction to orthopaedics
 - Orthopaedic terminology and equipment

- Wound and bone healing

4. Other surgery

- soft tissue (skin plasty, neuroma surgery, tendon lengthening)
- digital surgery (neuroma Sequential release)
- Bunion surgery (aims, mechanisms and mechanical effects of hallux valgus surgery; x-ray evaluation of bunions and procedures - Austin, Keller, closing base, Akin, Reverdin, Green-Waterman)
- hallux rigidus (application of primary surgical principles, silastic implants and fusion of The first metatarsophalangeal joint)
- Other metatarsal surgery (plantar condylectomy, pan-metatarsal head resection and fifth metatarsal surgery)
- Midfoot procedures (Lisfranc articulation surgery, posterior tibial dysfunction, tarsal coalition and talipes equino varus)
- Common rearfoot procedures (heel surgery, triple arthrodesis, ankle reconstruction)

5. Related topics

- Fracture management
- Jones compression dressings
- Below knee casting
- post-operative Complications, e.g. pain and infection
- chronic Regional pain syndrome

Special Requirements

Legislative pre-requisites

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

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.

Item	Length	Percent	Threshold	Individual/ Group Task
Case study	1,000 words	30	N	Individual
Practical Examination	90 minutes	50	N	Individual
Final Exam	60 minutes	20	N	Individual
Injections	10 injections	Pass/Fail	Y	Individual
Attendance and Participation in Tutorial and Practical Sessions	Equivalent 13 weeks x 1 hr tutorial and 2 hr practical	Pass/Fail	Y	Individual

Teaching Periods

2nd Half Campbelltown

Day

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

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=REHA3030_22-2H_CA_D#subjects)