

# REHA 4021 THE HIGH RISK FOOT

**Credit Points** 10

**Legacy Code** 401184

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

**Description** The subject builds on fundamentals of pathophysiology and podiatry specific subjects to understand and manage the impact of systemic disease on foot health. The subject specifically investigates pathology associated with the 'high risk foot' including lower extremity manifestations associated with vascular, endocrine, neurological pathology and immunosuppression. This subject aims to develop comprehensive, coherent and connected knowledge to assist making informed decisions and contribute to sustainable change and improvements in health care for people with systemic disease, with particularly emphasis on diabetes and wound management.

**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/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 4 subject

**Pre-requisite(s)** REHA 2003 AND  
REHA 2007 AND  
NATS 2038

**Co-requisite(s)** REHA 3028

**Incompatible Subjects** REHA 7026 - Podiatric Techniques 3C

## Restrictions

Students must be enrolled in 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). This subject builds on previous podiatry specific clinical and theory subjects

## Assumed Knowledge

All core subjects are assumed knowledge - NATS1009 (400868) Human Anatomy and Physiology 1, NATS1010 (400869) Human Anatomy and Physiology 2, NATS3037 (300754) Neuroanatomy, NATS2008 (400981) Clinical Pharmacology, NATS 2038 (401407) Pathophysiology 1

## Learning Outcomes

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

1. Analyse the physiological basis of clinical manifestations of chronic diseases associated with the high-risk foot across multiple organs and body systems.
2. Perform a thorough and safe examination of vascular and neurological function of the foot and lower extremity and interpret the results in the context of disease and test limitations
3. Develop and implement appropriate management plans for conditions affecting the high-risk foot with an emphasis on the role of the podiatrist in the interdisciplinary health care team'

4. Analyse the aetiologies of wounds and wound chronicity in the foot and lower extremity and the principles of effective wound management.
5. Describe acute and chronic infections affecting the foot and lower extremity including microbial aetiology and effective pharmacological and non-pharmacological management.
6. Critique the impact of social and cultural determinants of health on access to foot care services and foot health outcomes in the context of the high-risk foot.
7. Discuss applications of digital health as it relates to the high risk foot from clinical and research perspectives

## Subject Content

### 1. Vascular Pathologies and Wound Healing

#### Arterial pathology:

- Review of normal arterial structure and function
- Aetiological and risk factors in the development of macrovascular disease
- Pathophysiology of imacrovascular disease
- Clinical manifestations and health outcomes of macrovascular pathology in the leg
- Assessment concepts and skills in the identification of macrovascular disease
- Limitations in the assessment and interpretation of instrumental macrovascular assessment
- Treatment of macrovascular disease, conservative, pharmaceutical, and surgical
- Podiatric case management of the patient with macrovascular disease
- Pathophysiology of microvascular disease and dysfunction

#### Venous pathology:

- Review of normal structure, function and haemodynamics of the venous system
- Venous hypertensive syndromes through stasis and obstruction in the venous system
- Consequences of deep venous hypertension (oedematous syndromes, ulceration, dermatitis and superficial varicosities)
- Management of obstructive conditions and deep venous hypertension (conservative, pharmaceutical and surgical)
- Management of the consequences of deep venous hypertension, with particular references to ulcerative states

### 2. Neurology

- Review of the anatomy of the neurological structure, motor and sensory tracts and neurotransmitters
- Overview of the assessment of clinical and medical conditions in relation to the upper and lower motor neurone disorders and presentations
- Overview of neurological conditions affecting the lower limb

Assessment concepts and skills in the identification of neurological disease

- Limitations in the assessment and interpretation of neurological assessment
- Treatment of neurological disease.

### 3. Wound healing:

- Review the physiology of wound healing in normal and pathologic states
- Diagnosis of wounds according to multifactorial aetiologies

#### Evidence based wound management

- Case management of wound pathology

#### 4. Diabetes

- Defining diabetes mellitus - aetiological factors and the signs and symptoms in the development of diabetes
- Pathophysiology of diabetes.
- Diabetes related complications diagnosis and management

#### Interdisciplinary care for the management of diabetes and diabetes related foot disease

- Principles of health education and promotion - the role of the podiatrist, and strategies for functioning within a multidisciplinary health care team

#### 5. Advanced diagnostic techniques for lower extremity complication

- The role of digital health high risk foot research and clinical practice

#### 6. Inequities in chronic disease related foot health care access and outcomes

- Foot disease in priority populations including people living in rural and remote and Aboriginal and Torres Strait Islander Peoples
- Cultural and social determinants contributing to foot disease outcomes

## Special Requirements

Legislative pre-requisites

### Special Requirements - NSW Health Legislative Prerequisites **Pre-requisites**

#### Student Compliance Information for all Health-Related Placements

**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, and a Working with Children Check Student Declaration. Use the link to the Special Requirements webpage below for more information.**

To be eligible to enrol in this subject and complete any required health-related placements or experiences, students must meet Western Sydney University program requirements as well as any special, legislated, or policy-mandated requirements.

### Western Program Requirements

Visit the Special Requirements webpage for details about your program.

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

#### Mandatory NSW Health student placement policy requirements

To be able to undertake placement in any NSW Health facility you must be assessed as compliant with NSW Health student placement policy in the first year of your program, regardless of when you expect to go on your first placement. Access and read the NSW Student Compliance Information Booklet.

NSW Student Compliance Information Booklet ([https://www.westernsydney.edu.au/placements\\_hub/placements\\_hub/student\\_compliance/](https://www.westernsydney.edu.au/placements_hub/placements_hub/student_compliance/))

Please ensure that you

1. Find your existing National Police Check or apply for one
2. Gather documentary evidence of your vaccination history
3. Print and complete all relevant NSW Health forms relevant to the campus you are enrolled at or online enrolment requirements
4. Follow booklet instructions on how to have your compliance documents assessed by NSW health staff.

International students have additional requirements; the link to the booklet will inform you of these requirements.

### School Requirements

Contact your School for further details regarding your School's requirements, if any, such as

- If you live outside of NSW or Australia and need to meet your state, territory or country's compliance requirements
- If you need to meet different state, territory or country compliance requirements.
- NSW Working with Children Check (WWCC) or other state equivalent, valid for your entire program.
- Current approved first aid certificate valid for your entire program - approved program providers can be found at the Government Training website
- <http://training.gov.au> (<http://training.gov.au/>)
- Other non-health related requirements.

Student Compliance Resources are also available on the Placements Hub web page (NSW students only)

[https://www.westernsydney.edu.au/learning\\_futures/home/placements\\_hub/placements\\_hub/student\\_compliance](https://www.westernsydney.edu.au/learning_futures/home/placements_hub/placements_hub/student_compliance) ([https://www.westernsydney.edu.au/learning\\_futures/home/placements\\_hub/placements\\_hub/student\\_compliance/](https://www.westernsydney.edu.au/learning_futures/home/placements_hub/placements_hub/student_compliance/))

## 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	Mandatory
Practical Exam	30 minutes	40	N	Individual	N
Intra-session Exam	60 mins	40	N	Individual	N
Quiz	30 minutes	20	N	Individual	N
Professional Placement Performance	Attendance at and participation in all face to face tutorials and a clinical session is required	S/U	Y	Individual	Y

Teaching Periods

## 1st Half (2025)

### Campbelltown

#### On-site

**Subject Contact** Sarah Casey ([https://directory.westernsydney.edu.au/search/name/Sarah Casey/](https://directory.westernsydney.edu.au/search/name/Sarah%20Casey/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=REHA4021\\_25-1H\\_CA\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=REHA4021_25-1H_CA_1#subjects))