

# RADI 7018 PRINCIPLES OF VASCULAR SONOGRAPHY 4

**Credit Points** 10

**Legacy Code** 401298

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

**Description** In 2025, this subject replaced by RADI 7024 - Applied Vascular Sonography. This subject aims to provide students with adequate knowledge and skills to practice competently and safely as vascular sonographers. Students will learn about more specialised diseases and how to detect them using ultrasound and other imaging modalities. Research skills will also be developed and students will start contributing to a wider sonographic practice by conducting a case project and presenting the report to the professional audience. The university library's vast teaching and research resources will provide an important means for facilitating learning in this subject.

**School** Medicine

**Discipline** Radiography

**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** Postgraduate Coursework Level 7 subject

**Pre-requisite(s)** RADI 7017

**Co-requisite(s)** RADI 7014 - Practice of Vascular Sonography 4

**Restrictions**

Students must be enrolled in 4765 Graduate Diploma in Vascular Sonography

**Assumed Knowledge**

Basic human anatomy and physiology.

## Learning Outcomes

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

1. Assess atherosclerosis and aneurysmal development and relate to current treatment strategies (CLO 1)
2. Evaluate the causes and effects of venous disease, including patient outcomes (CLO 1)
3. Differentiate the unique characteristics of arterio-venous fistulae/grafts, and their assessment (CLO 3)
4. Appraise principles of transplant surgery and the role ultrasound plays pre and post-surgery (CLO 4)
5. Produce a report for a wider audience, including peers and other health professionals, based on a self-generated research project on vascular sonography (CLO 7)

## Subject Content

Vascular pathophysiology III

1. Abdominal vascular pathology
  2. Venous insufficiency
  3. Arterio-venous fistulae and grafts
  4. Renal & liver transplant
- Case Study & Research Skills 2

1. Principles of Research
2. Literature review
3. Statistical analysis of collected data

## 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
Quiz	30 minutes	15	N	Individual	N
Report	1500 words	35	N	Individual	N
Case Study	1500 words	50	Y	Individual	Y

Prescribed Texts

- Hartshorne, T., & Thrush, A., (2010). Peripheral Vascular Ultrasound: How, Why and When. 3rd Ed. Edinburgh, New York: Churchill Livingstone
- Pellerito, J., & Polak, F. (2012) Introduction to Vascular Ultrasonography (6th ed/(edited by) John S.Pellerito, Joseph F.Polak. (ed) Philadelphia, PA: Saunders/Elsevier
- Underwood, J.C.E., (2009) General and Systemic Pathology. (5th Ed) : Churchill Livingstone