# RADI 7018 PRINCIPLES OF VASCULAR SONOGRAPHY 4

### Credit Points 10

Legacy Code 401298

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**Description** This unit 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 unit.

School Medicine

Discipline Radiography

Student Contribution Band HECS Band 2 10cp

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)
- 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.

ltem	Length	Percent	Threshold	Individual/ Group Task
Online Quiz	30 minutes	15	Ν	Individual
Research Report	1500 words	35	Ν	Individual
Case Study on: Atherosclero & aneurysma development OR Causes & Effects of venous disease	l	50	Υ	Individual

### **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

Teaching Periods