RADI 7016 PRINCIPLES OF VASCULAR SONOGRAPHY 2

Credit Points 10

Legacy Code 401294

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Description This subject builds on the knowledge acquired in Principles of Vascular Sonography 1, via a blend of theoretical and practical activities. Students' knowledge of general pathology principles will be extended, and they will also cover the principles of coagulation and atherosclerotic disease. Aspects of ultrasound physics studies in this subject include identifying imaging artefacts, recognizing equipment limitations and bio-effects and safety. Basic vascular pharmacology is also covered.

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/) page.

Level Postgraduate Coursework Level 7 subject

Pre-requisite(s) RADI 7015

Co-requisite(s) RADI 7011 - Practice of Vascular Sonography

Restrictions

Students must be enrolled in 4765 Graduate Diploma in Vascular Sonography

Assumed Knowledge

Basic human anatomy, physiology and mathematics.

Learning Outcomes

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

1. Distinguish the abnormal anatomical features and pathological processes that contribute to specific vascular diseases (CLO 1)
2. Justify essential operational aspects of established and emerging ultrasound technologies to inform professional practice in vascular sonography (CLO 2)
3. Evaluate limitations in the acquisition of vascular images within the professional workplace to allow best practice in vascular sonography(CLO 3)
4. Apply safe practice principles in the performance of vascular sonography (CLO 6)
5. Analyse the roles and interactions of common cardiovascular medicines. (CLO 1)

Subject Content

- vascular pathophysiology I
1.???? Principles of pathology
2.???? Coagulation and clotting pathologies
3.???? Principles of atherosclerotic disease
4.???? Essential cardiovascular pharmacology
- Ultrasound physics II
1.???? Ultrasound instrumentation and equipment performance
2.???? Ultrasound artefacts
3.???? Bio-effects and safety

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	20 MCQs / 30 minutes	20	N	Individual	N
Quiz	18 MCQs and 6 SAQ/60 minutes	30	N	Individual	N
Final Exam	120 minutes	50	N	Individual	N

Prescribed Texts

- 1. Gill, R (2012). The Physics and Technology of Diagnostic Ultrasound: A Practitionerðfs Guide. Sydney, Australia: High Frequency Publishing
- 2. Underwood, JCE (2009). General & Systematic Pathology. 5th Ed. Churchill Livingstone