

RADI 7006 PRINCIPLES OF CARDIAC SONOGRAPHY 1

Credit Points 10

Legacy Code 401185

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

Description In Autumn 2024, this subject replaced by RADI 5001 - Physics for Diagnostic Ultrasound. This subject introduces students to two key areas of knowledge for cardiac sonographers: 1) cardiac anatomy and physiology, and 2) ultrasound physics. Students will learn about the normal and abnormal anatomy and physiology of the human heart. They will also learn about the essential physical principles that underpin ultrasound imaging. This subject provides an essential basis for future study in the Graduate Diploma in Cardiac Sonography.

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

Assumed Knowledge

Applicants for this program must have successfully completed an undergraduate degree in natural and physical sciences or health.

Learning Outcomes

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

1. Identify and explain normal cardiac anatomical structures and physiological processes
2. Explain the central principles of transmission and interaction of ultrasound with human tissue

Subject Content

1. Cardiac anatomy and physiology
 - features of The cardiovascular system and its development
 - cardiac Anatomy
 - Cardiopulmonary circulation
 - Essential cardiac electrophysiology
2. Ultrasound physics
 - introduction to Ultrasound instrumentation
 - Pulsed Ultrasound
 - Doppler principles
 - Haemodynamic measurements

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
Applied Project	20 Images with descriptive text	20	N	Individual	Y
Quiz	30 minutes	20	N	Individual	Y
Quiz	30 minutes	20	N	Individual	Y
Short Answer	90 minutes	40	N	Individual	N