

# RADI 7007 PRINCIPLES OF CARDIAC SONOGRAPHY 2

**Credit Points** 10

**Legacy Code** 401186

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

**Description** This subject will build on the knowledge acquired in Principles of Cardiac Sonography 1, via a blend of theoretical and practical activities. The students' understanding of cardiac anatomy and physiology will be extended, and they will begin studying cardiovascular diseases. Aspects of ultrasound physics studied in this subject include identifying imaging artifacts, recognizing equipment limitations, and bio-effects and safety.

**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 7006

## Learning Outcomes

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

1. Identify and explain abnormal anatomical features and physiological processes that underpin a range of acquired cardiovascular diseases
2. Explain the key principles of cardiac pacemakers and common cardio-active agents
3. Review essential operational aspects of established and emerging ultrasound technologies
4. Identify, assess and address limitations in the acquisition of cardiac ultrasound images
5. Examine and apply principles of safe practice in the performance of different types of cardiac sonography

## Subject Content

1. Cardiovascular pathophysiology
  - Myocardial infarction and dilated cardiomyopathies
  - Hypertrophic and restrictive cardiomyopathies
  - principles of heart valve disease
  - cardiac pacing and Basic cardiovascular Pharmacology
2. Ultrasound physics
  - Ultrasound instrumentation and equipment performance
  - new Ultrasound technologies and Contrast agents
  - Ultrasound artefacts
  - Ultrasound 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	30 minutes	20	N	Individual	N
Quiz	30 minutes	20	N	Individual	N
Applied Project	30 images plus supporting text	20	N	Individual	N
Short Answer	75 minutes	40	N	Individual	N