

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/>)

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/) 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 |
|-----------------|--------------------------------|---------|-----------|---------------------------|
| Quiz | 30 minutes | 20 | N | Individual |
| Quiz | 30 minutes | 20 | N | Individual |
| Applied Project | 30 images plus supporting text | 20 | N | Individual |
| Short Answer | 75 minutes | 40 | N | Individual |