MEDI 3009 FOUNDATIONAL DIAGNOSTIC IMAGING

Credit Points 10

Coordinator Paul Stoodley (https://directory.westernsydney.edu.au/search/name/Paul Stoodley/)

Description This unit will introduce students to a range of diagnostic imaging modalities providing an overview of both the technical and practical aspects. Three imaging modalities will be covered, MRI, cardiac sonography and vascular sonography. Within the MRI module, you will learn how to view MRI images and compare them with CT/ ultrasound as well as understand the clinical values of each modality and the risks associated. In the cardiac module you will learn the principles of cardiac ultrasound image acquisition, methods used to evaluate cardiac anatomy and function, and the essentials of complimentary tests such as electrocardiograms and stress tests. In the vascular module, undertaking non-imaging assessments will be covered, alongside imaging principles. The practical skills are aimed at providing students with a working knowledge of imaging modalities and enhancing students' prospects of successful application for a training position. The majority of this course is delivered online. However, students must attend a compulsory one-day face-to-face practical skills workshop at Blacktown clinical school.

School Medicine

Student Contribution Band HECS Band 3 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Learning Outcomes

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

1. Explore key imaging concepts and principles to inform clinical practice
2. Review 3D and relational anatomy and the relationship to advanced diagnostic imaging
3. Apply theories and strategies used in the performance of both imaging and non-imaging assessments
4. Assess the clinical values of different imaging modality covering diagnostic confidence of each modalities and the risks associated
5. Examine professional pathways and development within medical imaging

Subject Content

MRI: MR image acquisition / 3D and relational anatomy / clinical aspect.
Cardiac ultrasound: image acquisition / evaluating anatomy and function / complimentary tests.
Vascular ultrasound: image acquisition / evaluating anatomy and haemodynamics / non-imaging assessments.

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.

Item	Length	Percent	Threshold	Individual/ Group Task
Quiz	3 Quizzes x 10 minutes	S/U	N	Individual
Case Study	1,000 words	40	N	Individual
Reflection	600 words	30	N	Individual
Professional Task	800 words	30	N	Individual

Teaching Periods