

CLINIMAG 714

ULTRASOUND CLINICAL APPLICATIONS

15 points
Semester 1, 2018

Course Description

Addresses normal and abnormal ultrasound imaging appearances, in addition to adaptation of scanning techniques relating to the abdomen, musculoskeletal system, vascular system, small parts and paediatric imaging.

Objectives of the Course

This course aims to cultivate a critically questioning approach to ultrasound imaging practice. An emphasis will be placed on integrating theory and clinical practice elements in order to facilitate clinical competence. The course will expect students to assimilate the underlying physical principles of ultrasound with relevant biological processes and imaging appearances.

Learning Outcomes

1. Differentiate and explain normal and abnormal appearances of the abdomen, musculoskeletal system, vascular system, small parts and paediatric imaging on ultrasound images.
2. Make informed clinical judgements with regard to the selection of appropriate scanning techniques and technical parameters in relation to the abdomen, musculoskeletal system, vascular system, small parts and paediatric imaging.
3. Develop appropriate scanning techniques for abdominal, musculoskeletal, vascular, small parts and paediatric applications.
4. Critically evaluate a broad range of both standard and advanced ultrasound applications to investigate specific regions and pathologies of the abdomen, musculoskeletal system, vascular system, small parts and paediatric applications.
5. Apply an evidence-based approach to clinical decision-making and problem solving.

Teaching Staff



Sangeeta Kumar
Course Coordinator
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Programme and Course Advice

Prerequisite: CLINIMAG 709 or MEDIMAGE 716
Restriction: CLINIMAG 704

This course is a compulsory course within the PGDipHSc(Ultrasound) programme for students commencing the programme prior to semester 2, 2017. Students enrolled in CLINIMAG 709 in semester 2, 2017 will also be required to complete this course.

All students enrolled in the PGDipHSc(Ultrasound) programme are eligible for direct entry to this course on completion of the prerequisite course. For all other students, departmental approval is required and a concession request must be submitted when applying to enrol in this course.

Access to a clinical ultrasound department is highly recommended.

Course Delivery

This course is delivered fully online by distance via the University of Auckland's learning management system 'Canvas'. It will incorporate a range of learning approaches including videos, webpages, links to the library databases and resources, and utilising online technologies to promote shared learning opportunities.

Students are urged to discuss privately any impairment-related requirements face-to-face and/or in written form with the Course Coordinator.

Workload and contact hours

The total expected workload for this course is approximately **150 hours**. This may be broken down as follows:

- Set readings relevant to ultrasound clinical practice (40 hours)
- Other resources provided on Canvas e.g. videos, websites (10 hours)
- Assignments and self-directed learning (100 hours)

Communication

All official communication to a student will be sent to the student's current University email address (username@aucklanduni.ac.nz) and the student is responsible for ensuring that any desired forwarding to other addresses is in place and operating correctly. Staff will not be responsible for any consequences if students fail to read and respond to University correspondence in a timely manner.

Students are encouraged to use the course discussion forum as much as possible for communication with staff and other students. Email may be used for more private matters. Staff will endeavour to respond to email queries as soon as possible.

Course Textbook

Students will be required to have access to the following textbook:



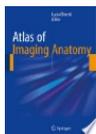
Diagnostic ultrasound (5th ed.)

Carol M. Rumack editor; Stephanie R. Wilson editor; J. William Charboneau editor; Deborah Levine editor.

Philadelphia, PA: Elsevier/Mosby ©2018

This book is available online via the Philson library. A large selection of other readings and resources will also be able to be accessed online via the course website and the Philson Library databases.

Pre-course Reading



It is highly recommended that students access the online textbook '**Atlas of imaging anatomy**' by Lucio Olivetti (2015) via the Philson Library and read 'Chapter 4: Breast', 'Chapter 11: Male reproductive organs' and 'Chapter 13: Joints' as preparatory pre-reading for this course. This should be revision and will be assumed prior knowledge when you begin the course.

Assessment

An aggregated mark of 50% or more is required to successfully pass this course. Resubmission of failed assessments is not permitted.

Penalties for excessive word count and/or late submission (without prior written approval for an extension) will be applied in accordance with the 'Medical Imaging Assessment Requirements and Presentation Criteria' document.

The following is indicative of the type of assessments to be completed for this course:

- Case-Based Discussion 50%
- Clinical Decision Making Portfolio 20%
- MCQ, Short Answer and Image Evaluation Test 30%

Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting his or her learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the world-wide web. All students' assessed work will be reviewed against electronic source material using computerised detection mechanisms.

Student Feedback

Assessments will be marked, moderated and returned within 3 weeks of submission, with the possible exception of the last course assessment which will be returned after the Board of Examiners meeting. Feedback will be provided on all assessments in the form of a marking rubric and/or individual or class comments. This feedback will be accessed via email or Canvas as identified by the Course Coordinator.

At the end of this course, feedback from students may be requested in the form of an online course evaluation survey.

Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration.

