

CLINIMAG 717

CT CLINICAL APPLICATIONS

15 points
Semester 2, 2018

Course Description

Addresses normal and abnormal Computed Tomography (CT) imaging appearances, protocol selection and modification, and application to clinical practice. The course will ensure students develop the knowledge, skills and attitudes needed to demonstrate both academic and professional clinical decision making capability in CT practice.

Objectives of the Course

This course aims to cultivate a critically questioning approach to CT 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 CT with relevant biological processes and imaging appearances.

Learning Outcomes

1. Differentiate and explain normal and abnormal CT imaging appearances of the head, thorax, abdomen and pelvis.
2. Make informed clinical judgements with regard to the selection of imaging protocols and technical parameters in relation to the head, thorax, abdomen and pelvis.
3. Assess current clinical protocols for specific pathologies of the head, thorax, abdomen and pelvis, suggesting and justifying possible modifications.
4. Critically evaluate a range of both standard and specialised CT techniques to investigate specific regions and pathologies.
5. Apply an evidence-based approach to clinical decision-making and problem solving.

Teaching Staff



Catherine Lyman
Course Coordinator
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Programme and Course Advice

MEDIMAGE 710 is recommended as a prerequisite course, although not required.

Restriction: CLINIMAG 707

This course is a compulsory course within the PGCertHSc (Medical Imaging – CT pathway) programme.

Students enrolled in the PGDipHSc/PGCertHSc (Medical Imaging) programmes may choose this course to contribute 15 points towards the MEDIMAGE/CLINIMAG point requirements.

Students from the PGDipHSc(MRI) and PGCertHSc (Mammography) programmes may choose this course as an elective.

All Medical Imaging Technologists and students admitted to any one of the above programmes are eligible for direct entry to this 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 CT department is highly recommended.

Course Delivery

The 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 CT clinical practice (30 hours)
- Other resources provided on Canvas e.g. videos, websites (20 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 Textbooks

The **required textbooks** for this course are:



CT teaching manual: a systematic approach to CT reading (4th ed.)
Matthias Hofer
Stuttgart: Thieme c2010

In addition, students will be **required to purchase** a copy of the following book:



'Workbook for sectional anatomy for imaging professionals' (3rd ed.) by Lorrie Kelley and Connie Petersen (2012). Access to the corresponding textbook **'Sectional anatomy for imaging professionals'** (3rd ed.) by the same authors would be helpful although the information required to complete the workbook is available in a range of other textbooks.

A large selection of other readings and resources will be able to be accessed online via the course website and the Philson Library databases.

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:

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| • Clinical Decision-Making Portfolio | 50% |
| • Written Question | 30% |
| • MCQ and Image Evaluation Test | 20% |

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.

