Chest and Abdominal Imaging

Module Code: RAD4007-C
Academic Year: 2018-19
Credit Rating: 30
School: School of Allied Health Professions and Midwifery
Subject Area: Radiography
FHEQ Level: FHEQ Level 4

Pre-requisites:
Co-requisites:

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>38</td>
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<tr>
<td>Demonstration</td>
<td>3</td>
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<tr>
<td>Clinical Placement</td>
<td>200</td>
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<tr>
<td>Tutorials</td>
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<tr>
<td>Directed Study</td>
<td>56</td>
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Availability Periods

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<th>Occurrence</th>
<th>Location/Period</th>
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<tbody>
<tr>
<td>BDA</td>
<td>University of Bradford / Academic Year (Sept - May)</td>
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Module Aims

Students will study the body’s cellular structure, and the anatomy, physiology, common pathology and imaging techniques of the chest and abdomen.

Outline Syllabus

Biological Science: Fundamentals of molecular and cell biology. Macroscopic, microscopic and radiographic anatomy, physiology and pathology of the chest and abdominal organs. Radiographic technique for a comprehensive range of routine radiographic examinations of the chest and abdomen, with consideration of radiation, safety, patient centred care, and appropriate alternative imaging methods, to include Computed Tomography, Magnetic
Resonance Imaging and Medical Ultrasound. Evaluation of the evidence base around choice of imaging method, technique and protocols. Patient care, informed consent and equality of service provision for a diverse population. Working as part of a health care team.

Module Learning Outcomes

On successful completion of this module, students will be able to...

1.1 Describe fundamental concepts of cell biology
1.2 Describe the basic physical principles associated with ultrasound, MRI and CT and the risks and benefits associated with imaging of the chest and abdomen
1.3 Describe radiographic technique, normal anatomy, physiology and common pathologies of the chest and abdomen.

2.1 Gain informed consent for and perform appropriate routine radiographic examinations of the chest and abdominal contents safely and effectively
2.2 Provide appropriate patient care and understand the need to ensure equality of service provision for a diverse population
2.3 Evaluate radiographic images of the chest and abdomen
2.4 Discuss the applications of alternative radiographic imaging and when appropriate for the chest and abdomen.

3.1 Identify and evaluate literature guiding evidence based safe practice
3.2 Communicate effectively with service users, carers, and health care staff

Learning, Teaching and Assessment Strategy

Students will achieve module learning outcomes by following an integrated approach to learning, undertaken through academic study and placement learning (indicated below by `Other` hours of study).

Lectures: introduce students to research informed concepts and principles of general radiographic examinations of the chest and abdomen as first line procedures which are subsequently followed up by other imaging modalities. Students will use the evidence base to review the clinical applications of these imaging modalities and their role in chest and abdominal imaging and patient care. Tutorials sessions will support students’ application of knowledge in identifying normal and abnormal anatomy and critically appraising radiographic technique.

Other: in clinical practice under supervision of trained clinical staff students will develop skills and apply theory to achieve the subject specific outcomes.

Assessment of the achievement of learning outcomes 1.1, 1.2, 1.3, 2.3, 2.4 will be undertaken utilising a computer delivered objective structured clinical examination (OSCE). This exam allows an assessment of the full range of knowledge based on medical images and procedures that students will encounter in practice. Student’s clinical learning is directed by their Professional Development e-Portfolio. Clinical learning objectives 2.1, 2.2, 2.3, 3.1 & 3.2

Mode of Assessment
<table>
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<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
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<tr>
<td>Summative</td>
<td>Computer-based assessment</td>
<td>Objective structured clinical examination</td>
<td>2 hours</td>
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<td>Summative</td>
<td>Clinical Assessment</td>
<td>Portfolio</td>
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**Legacy Code (if applicable)**

**Reading List**
To view Reading List, please go to [rebus:list](#).