Medical Imaging Option

Module Code: RAD6005-B
Academic Year: 2018-19
Credit Rating: 20
School: School of Allied Health Professions and Midwifery
Subject Area: Radiography
FHEQ Level: FHEQ Level 6
Module Leader: Mrs Beverley Foster

Additional Tutors:
Mr James Beck, Professor Maryann Hardy, Mr Stephen Boynes

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>8</td>
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<tr>
<td>Placement</td>
<td>136</td>
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<tr>
<td>Tutorials</td>
<td>8</td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>Directed Study</td>
<td>44</td>
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Availability Periods

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

To provide the student with the opportunity to consolidate and extend their knowledge, understanding and practical skills in computed tomography of the head and one area of diagnostic imaging chosen from a list of options.

Outline Syllabus
In relation to computed tomography (CT): equipment, clinical indications for emergency referrals, techniques, protocols and safety consideration to enable the student to be able to perform and standard head examination as required by the Health Professions Council. Also, the student will increase their knowledge and practical skills in one medical modality/procedures previously studied in year 2 of the course. The student will choose from a defined list (for example; CT, MRI, ultrasound, nuclear medicine and breast imaging). They will study: The application of physical principles of image production and technological and operational design features of equipment to optimise production and visualisation of images. Patient care, before, during and after the examination. Techniques, protocols and patient preparation for the safe and effective conduct of a limited range of routine examinations suitable for practitioner level practice. Normal, variant and pathological anatomical image appearances. Evaluate and implement risk/benefit based patient care pathways (clinical indications and examination justification) and effective multidisciplinary health care provision.

Module Learning Outcomes

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

1.1 Appraise the design features of equipment and how they contribute to the optimisation of diagnostic imaging performance.

1.2 Critically evaluate and justify the techniques / protocols for a specified range of imaging procedures / examinations

2.1 Perform a standard computed tomography (CT) examination of the head to enable participation in a sustainable imaging service and meet the requirements of the HCPC Standards of Proficiency.

2.2 Formulate a strategy for the preparation and care for the patient, and where appropriate their relatives / carers, physically and psychologically.

2.3 Operate imaging and associated equipment competently and with due regard to technique-specific safety considerations.

2.4 Evaluate images produced and interpret findings, recognising normal anatomy and some commonly encountered abnormal image appearances

3.1 Critically evaluate the effectiveness of your communication with service users.

3.2 Appraise your ability to work and communicate effectively as part of a multidisciplinary team.

3.3 Using critical thinking and reflective processes, appraise your learning needs, identify and act upon identified areas of improvement.

Learning, Teaching and Assessment Strategy

Lectures from clinical specialists to enable students to perform a standard computed tomography examination of the head, as required by the Health Professions Council, Standards of Proficiency (2009).

Directed study: they will select for study, one imaging modality or specialist area of imaging from a defined list. Students will consolidate and extend the knowledge of the selected area
of practice, gained from the year two module 'Imaging Modalities in Practice'.

Students will take complete responsibility for their learning by organising a one week CT placement and a suitable two weeks placement in a department offering their chosen specialism (normally in the UK at a SCoR approved department).

Tutorials will support guided independent study with their personal academic tutor and a subject specialists.

A named placement mentor will be required to supervise the student arrange a clinical assessment and conduct a final interview to assess and give feedback on the students performance and professional conduct during the placement.

Assessments: case study, developed from one or more examinations/cases observed during their specialist placement including a critical review of clinical protocols and working practices (learning outcomes 1.1, 1.2, 2.3, 2.4).

The student clinical decision making will be assessed through the Objective Structured Patient Assessment, and their Professional Development Portfolio (learning outcome LO 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3).

### Mode of Assessment

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<th>Type</th>
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<th>Length</th>
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<tr>
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Legacy Code (if applicable)
Reading List
To view Reading List, please go to rebus:list.