Module Specification

Module Summary Information

1	**Module Title**	Radiotherapy Theory and Practice 1
2	**Module Credits**	60
3	**Module Level**	4
4	**Module Code**	RAD4050

5	**Module Overview**

Rationale

This module supports your knowledge and understanding of the planning and delivery of radiotherapy to structures in the body. The therapeutic radiographer is required to understand the inter-relationship between anatomical structures on a loco regional level and as they appear on sectional images and this is used to support planning, treatment and verification decisions. In addition, it is important that you have an understanding of the natural history of individual cancers found within these regions, to be able to account for their presenting signs and symptoms and the different ways in which they are managed. This module is designed to complement the Principles of Oncology and Radiotherapy module at level 4 and leads into the level 5 module; Radiotherapy Theory and Practice 2.

Alignment with Programme Philosophy and Aims

This module enables you to develop your understanding of the underlying theoretical concepts that underpin radiotherapy practice. Your increasing knowledge of anatomy, physiology, management and radiotherapy treatment techniques of cancers within the human body will form the foundation of your developing clinical skills which includes accrual of practice competence, increasing practice autonomy and delivery of high standards of patient-focussed care.

Learning and Teaching Strategy

Teaching and learning activities will provide you with the underpinning theoretical basis for treatment of management of cancers in the torso (thorax, abdomen and pelvis) and you will employ this knowledge within your clinical practice. Within the university setting you will be taught the anatomy and associated physiological functions of structures in the body, and will employ this knowledge during associated taught sessions that address cancers within these locations. Classroom seminars and lectures will be supplemented with workshops where you will explore anatomical and physiological concepts via the use of practical workshops involving anatomical models, medical images, medical specimens and surface anatomy models. The teaching of the theory of cancer management and associated radiotherapy techniques will be supported via the use of generation of treatment plans via the university's planning system, and 3D visualisation of these via the VERT system.

Alongside these academic activities you will be able to apply your developing understanding to your clinical practice and evidence your developing experience and skills within a clinical portfolio. The clinical portfolio will have aspects that will be completed while on clinical placement under staff supervision, and parts that will be completed in your own study time, requiring further reading around a topic area or personal reflection. The allocation of module study time is provided in the table below.

Assessment Strategy
You will undertake a classroom-based examination and a complete a record of your developing clinical competence within a clinical portfolio

6	Indicative Content

Foundations of anatomy to include systemic overviews of:-

- Cardio-vascular system
- Lymphatic system

Anatomy, Physiology, Oncology, Management and Radiotherapy Technique (to include side effects and patent care) for the following areas:-

- Lower respiratory system
- Male and Female Breast
- Upper Gastro-intestinal Tract
- Lower Gastro-intestinal Tract
- Male Reproductive System
- Female Reproductive System

Radiotherapy planning theory and its application.

7	Module Learning Outcomes On successful completion of the module, students will be able to:
1	Demonstrate knowledge of the regional and cross-sectional anatomy and physiology of the torso (thorax, abdomen and pelvis)
2	Demonstrate understanding of management techniques and interventions used to treat cancers within the torso
3	Generate and evaluate radiotherapy treatment plans and treatment techniques for cancers within the thorax, abdomen and pelvis
4	Demonstrate safe and effective clinical and communication skills commensurate with the expected competency level of a level 4 student therapeutic radiographer

8	Module Assessment		
Learning Outcome			
	Coursework	Exam	In-Person
1-3		x	
4			x

9	Breakdown Learning and Teaching Activities
Learning Activities	**Hours**
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	120
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	380
Private Study (PS) includes preparation for exams	100
Total Study Hours:	600