1. **GENERAL INFORMATION**

1. Programme Title: BSc (Hons) Radiotherapy and Oncology
2. Final Award: BSc (Hons) Radiotherapy and Oncology*
3. Exit Awards:
   - Level 1: Certificate of Higher Education in Health and Social Care
   - Level 2: Diploma of Higher Education in Health and Social Care
   - Level 3: BSc Health and Social Care**
4. Awarding Body: Glasgow Caledonian University
5. Approval Date: April 2014
6. School: School of Health and Life Sciences (SHLS)
7. Host Department: Department of Psychology, Social Work and Allied Health Sciences (PSWAHS)
8. UCAS Code: B822
9. PSB Involvement: Health and Care Professions Council, Society and College of Radiographers
10. Place of Delivery: Glasgow Caledonian University
11. Subject Benchmark Statement: Radiography

* with eligibility for registration with the HCPC
** with no eligibility to apply for registration with the HCPC

2. **EDUCATIONAL AIMS OF THE PROGRAMME**

The BSc (Hons) Radiotherapy and Oncology is designed to produce graduates who meet the criteria for professional registration with the Health and Care Professions Council (HCPC), inspiring them with the desire for lifelong learning and the recognition of the importance of an evidence-based approach in their pursuit of excellence in professional practice. These graduates will be fit for practice and fit for purpose and will have a sound understanding of the science and technological principles underpinning radiotherapeutic practice. In addition, the programme aims to develop communication and interpersonal skills required to manage psychosocial needs of service users and carers and other healthcare professionals. Graduates will have the attributes of a GCU graduate: global citizens and a lifelong commitment to promoting health and wellbeing and the common weal and, as stated in the Strategy for Learning: will be

‘Proficient in their discipline, enterprising, responsible and capable of fulfilling leadership roles’ in
During study for the BSc (Hons) Radiotherapy and Oncology students will have the opportunity to gain the professional knowledge whilst developing the professional skills and attributes of a therapeutic radiographer¹. These are to:

1. ‘be able to practise safely and effectively within their scope of practice
2. be able to practise within the legal and ethical boundaries of their profession
3. be able to maintain fitness to practise
4. be able to practise as an autonomous professional, exercising their own professional judgement
5. be aware of the impact of culture, equality, and diversity on practice
6. be able to practise in a non-discriminatory manner
7. understand the importance of and be able to maintain confidentiality
8. be able to communicate effectively
9. be able to work appropriately with others
10. be able to maintain records appropriately
11. be able to reflect on and review practice
12. be able to assure the quality of their practice
13. understand the key concepts of the knowledge base relevant to their profession
14. be able to draw on appropriate knowledge and skills to inform practice
15. understand the need to establish and maintain a safe practice environment

The main aims of the Programme, therefore, are to produce graduates equipped with the transferable skills and abilities and grounded in the knowledge that will stand them in good stead, not only for first-post competency, but for eventual advanced and consultant-level practice. The interprofessional framework gives students the opportunity to explore health and social care environments from a number of different professional stand-points and encourages them to develop attitudes and skills to enable them to work effectively in teams and in collaboration with other health and care professional groups.

3 INTENDED LEARNING OUTCOMES

The learning outcomes for the BSc (Hons) Radiotherapy and Oncology have been developed to meet the curriculum content of the Education and Career Framework for the Radiography Workforce² and to enable graduates to meet the Standards of Proficiency¹ and Standards of Conduct, Performance and Ethics³ of the statutory body (as mentioned in the previous section). In addition the programme content is designed to meet the QAA Academic and Practitioner Standards in Therapeutic Radiography⁴. Whilst these standards have not been updated recently they outline knowledge, skills and attributes of graduate.

This undergraduate programme is designed to provide an award that also confers eligibility to apply for registration as a therapeutic radiographer with the HCPC. Graduates should be able to demonstrate the following clinical skills and behaviours, underpinned by the subject knowledge and understanding described below:

**A  Knowledge and Understanding:**
A1 Describe and explain the theoretical principles and scientific concepts that underpin radiotherapeutic practice.
A2 Describe and explain the pathophysiology associated with health and disease and evaluate methods employed in diagnosis and treatment.
A3 Evaluate the capability, applications and range of technological equipment used for imaging and radiotherapy.
A4 Describe and evaluate the role of the radiographer in the cancer pathway, prevention, pre-treatment, planning, delivery, after care and within the healthcare team.
A5 Evaluate developments in Radiotherapy and Oncology practice.
A6 Describe the principles of radiobiology, the stochastic and non-stochastic, genetic and somatic effects of radiation.
A7 Evaluate the principles and application of radiation protection and the measurement of radiation dose.
A8 Describe the organisation and management of health and social care services within the UK and evaluate developments and trends in legislation and health and social care policy.
A9 Describe the sociological and psychological aspects of care for people undergoing examinations and treatments, their families and carers.
A10 Understand the risks and benefits of different imaging and radiotherapy techniques.

**B  Intellectual Skills:**
B1 Employ effective information retrieval skills to identify and manage relevant resources to inform professional practice.
B2 Evaluate, analyse and synthesise research and clinical practice, in order to promote evidence based practice.
B3 Integrate theory and practice based knowledge in order to inform, implement and evaluate professional practice.
B4 Critically reflect on personal and professional practice.
B5 Engage in lifelong learning and continuing professional development to maintain and develop skills and knowledge to enable continuing fitness to practice.
B6 Use research, reasoning and problem solving skills to determine appropriate actions and critically evaluate practice.

**C  Professional/ Practical Skills:**
C1 Demonstrate clinical reasoning skills regarding pre-treatment and treatment processes and competence in all aspects of the role of a therapeutic radiographer.
C2 Maintain accurate records.
C3 Judge the correctness of the radiation prescription and interpret it in such a way that radiotherapy is delivered accurately and reproducibly.
C4 Evaluate the needs of patients and demonstrate sound clinical judgement to deliver quality person-centred and context-specific care in a broad range of settings in radiotherapy and oncology practice.
C5 Recognise faults and malfunctions/deviations from normal equipment operation and the possible
Implications of such faults on treatment delivery.

C6 Practise safely and accurately within the legal, ethical and professional framework demonstrating anti-oppressive and anti-discriminatory practice.

C7 Work collaboratively with interdisciplinary colleagues in the best interest of the patient and carers.

C8 Demonstrate the ability to seek assistance, consult colleagues and make referrals where appropriate. Display the ability to examine and synthesise information gathered, and apply this knowledge to the service user’s needs.

D Transferable/Key Skills:

D1 Exhibit good numerical, written and verbal and IT skills.

D2 Incorporate effective communication and confidentiality in all dealings with service users and carers.

D3 Critically reflect on strengths and weaknesses and self-evaluate own practise.

D4 Demonstrate the professional values of a healthcare professional including but not limited to honesty and integrity, reliability, self-confidence, self-reliance and regard for others.

D5 Display the ability to prioritise tasks and meet deadlines for the completion of work to required standards either individually or as part of a team.


2 SCoR 2013 Education and Career Framework


4 QAA Benchmark statements Academic and Practitioner Standards in Therapeutic Radiography

<table>
<thead>
<tr>
<th>SfL Design Principles</th>
<th>Programme Compliance</th>
</tr>
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<tbody>
<tr>
<td>A. Engaged Learning</td>
<td>1. Project and group-work are embedded across the programme in the interprofessional modules, the Honours project and in the discipline-specific academic and placement modules.</td>
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<td></td>
<td>2. Students have an element of choice in a number of learning activities such as group work and negotiation with module leaders regarding assessment topics.</td>
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<td>3. Embedded support sessions are available at all levels along with access to other educational resources such as webinars and face-to-face sessions.</td>
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<td>4. Students are encouraged to become involved with and contribute to changes in programme and other university initiatives.</td>
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<td>5. Students are encouraged to join the GCU Radiotherapy and Oncology Society and to assist at open evenings, professional and charity events.</td>
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<td>6. The programme team adheres to the GCU feedback strategy which aims to engage students with their learning to enable them to act effectively on timely and constructive and effective feedback provided from staff and peers.</td>
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<tr>
<td>B. Divergent Thinking</td>
<td>1. Group work relating to real-life problem solving is embedded across the programme in the interprofessional and programme specific modules to encourage students to link theory and practice, to challenge established norms and to resolve professional practice issues.</td>
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<td></td>
<td>2. Research methods and Honours project modules provide the students with an opportunity to investigate complex areas of practice and to generate appropriate and reasoned recommendations.</td>
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<tr>
<td>C. Personalised Learning</td>
<td>1. Personalised learning provides an element of choice across a range of modules in terms of assessment topic and timing (see point A2 above).</td>
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</tbody>
</table>
2. A range of learning opportunities are utilised such as online activities, learning materials and the provision of a varied range of placement based options.

3. Practice placement mentors attend to the developmental needs of the student in the placement setting and provide a personalised approach and guidance for learning and development.

D. Inclusive and Accessible Learning

1. The programme complies with all aspects University policies in terms of admissions, disability, equality and diversity etc.

2. Teaching and learning activities avoid and challenge stereotypes and assumptions regarding students as well as the radiotherapy and oncology patient group to ensure students are fairly treated and that patients are dealt with in a professional, caring and supportive manner.

3. Staff are made aware of students with needs assessment records and take action to ensure these needs are met. These might include adapted teaching materials or extra examination time.

4. Anonymised marking is the norm in the programme to minimise any possibility for perceived bias. Assessment are also devised to ensure that all students are treated fairly.

5. Flexibility is given where possible to students with caring responsibilities in terms of timetabling e.g. students can negotiate alternative placement hours to accommodate caring requirements.

E. Broader and Deeper Learning

1. Interprofessional modules across the programme provide opportunities for students to engage with other professional to provide a broader and deeper understanding of their own and others disciplines

2. A wide range of learning and teaching methods are employed to provide a rich learning experience to extend professional skills and knowledge for students to acquire citizenship, entrepreneurial and socially committed attributes.

3. Optional modules are available to students such as languages and others from the module catalogue for the students to broaden their knowledge or to deepen a particular aspect of professional knowledge.

4. Elective placements provide an opportunity to broaden and deepen the students knowledge and understanding of radiotherapy and oncology in alternative environments. Foreign placements provide an alternative perspective on culture and healthcare provision.

5. Volunteering opportunities are available with Macmillan Cancer Support/ Glasgow Life to provide information and support to cancer sufferers, carers and families.

6. Alternative observational placements have been implemented such as the Small Animal Hospital Radiotherapy Department and selected hospices to provide a broader perspective on the role of radiotherapy in animals and to consider more fully the entire cancer patient journey and associated patient care.

7. Reflection is promoted throughout the programme. Activities ranging from the PPACT academic advising process to reflection on practice placement encourages students to become broader and deeper thinkers.

8. Embedded sessions relating to student wellbeing and the impact on learning are being implemented to enhance resilience and cope with the stressors associated with academic and practice demands.
| **F. Flexible Learning** | 1. Opportunities are available for volunteering within the programme with placement time being negotiated to permit engagement.  
2. Language study will be made available to students in addition to their core curriculum. |
| **G. Global Learning** | 1. Students can choose to travel abroad for their elective placement and feed back to their own and other levels of the programme on their return.  
2. Foreign students can study for a year on the programme through the Science Without Borders Programme. This enhances the knowledge and understanding of home students on the programme in terms of international aspects of health care and cancer service provision and provides a rich environment for learning.  
3. Opportunities are currently being explored for student exchanges and engagement with non-UK HEI's to enhance international activities. |
| **H. Real-world Problem Solving** | 1. Students are immersed in the radiotherapy and oncology environment throughout the programme and witness at first-hand the realities of cancer service provision and the day to day problems that occur. Practice placement permits the students to learn from the practice educators how do deal with these issues in a safe and effective way. Problem-solving is embedded in learning, teaching and assessment strategies of many of the programme modules both interprofessional and discipline specific.  
2. Students are supported by consideration of their mental wellbeing to optimise their resilience in coping with the stresses of competing demands on their time. This is carried out via the Positive Living team and embedded session delivery and also by the PPACT studies advice scheme.  
3. Students take part in a research methods module in Level 2 of the programme and complete their Honours project in level 4. These provide the students with inquiry skills and to apply these to professional practice problems. |
| **I. Entrepreneurship and Employability** | 1. The provision of safe, effective practitioners who meet the needs of service and who are the "students of choice" for employers is one of the main aims of the programme. Employability is embedded across the programme in terms of meeting the professional and statutory requirements. The careers service provide workshops and one-to-one sessions on CV's, job applications and interview technique and these are embedded in Level 4.  
2. Entrepreneurial activity is promoted across the programme in the interprofessional and profession-specific modules where service redesign, teamwork, leadership and social engagement are explored.  
3. Volunteering opportunities are available and promoted to enhance student employability in a competitive jobs market. |
| **J. Responsible Leadership and Professionalism** | 1. Leadership in an interprofessional context is specifically covered in one of the Level 4 modules to provide students with the skills, knowledge, confidence and attributes to demonstrate awareness of the contribution of their profession to radiotherapy and oncology services and to contribute to service redesign and improvement.  
2. Reflection is promoted throughout the programme in order to ensure that students are aware of professional body and statutory requirements and how they comply with these. |
3. Students are assessed on the required knowledge, skills and behaviours of a registered Therapeutic Radiographer to ensure that they meet eligibility requirements for HCPC registration.

3.1 Overview of the Learning, Teaching and assessment strategy

The teaching and learning strategy of BSc (Hons) Radiotherapy and Oncology has been informed and developed in cognisance of theories of adult learning and the Strategy for Learning. In addition, the long term strategy to use and develop e learning opportunities for students will continue into the 2014-19 programme.

The programme integrates academic learning with practice learning; students spend no more than 50% of the programme in practice placement. Students spend less time in placement in level 1 to enable them to adapt to life as a GCU student. Thereafter, in the subsequent years students spend increasing hours in the placement environment to build their confidence, knowledge and skills and ultimately competence to become eligible to register as a therapeutic radiographer with the HCPC.

E learning resources will continue to be developed and utilised to enhance teaching and learning in each module. Collaborative learning in groups will continue both as face to face, wikis and discussion boards using GCULearn or Facebook.

Student digital literacy cannot be assumed and ICT skills sessions are part of student induction to enable students to identify areas requiring to be addressed.

A variety of learning and teaching methods will be used in the delivery of the programme to address different learning styles. These include:

- e-learning:
  - online lectures,
  - discussion boards,
  - podcasts,
  - blogs,
  - wikis
  - mobile technology
  - GCULearn App
  - Access to e resources e.g YouTube, Itreatsafely,
- Keynote Lectures
- Tutorials
- Seminars
- Presentations
- Clinical demonstrations and visits
- Case Studies
- Role Play
- Scenario based learning
- Problem based learning
- Practice Education placements
- Professional Portfolio

The newly upgraded Interprofessional clinical skills simulation suite will be utilised to prepare students for placement in terms of patient care, aseptic technique and preparation for ward, clinic and theatre visits.
The radiotherapy treatment planning facility is used to introduce students to the principles of radiotherapy treatment planning and thereafter to supplement the experience gained within the clinical environment. In addition, the radiotherapy treatment planning facility is used to promote deep learning of treatment planning concepts, cross sectional and 3D anatomy.

4.  PROGRAMME STRUCTURES AND REQUIREMENTS, LEVELS, MODULES, CREDITS AND AWARDS

SHE1 Level

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>M1B823870</td>
<td>Applied Clinical Anatomy</td>
<td>30</td>
</tr>
<tr>
<td>M1B822612</td>
<td>Radiotherapy and Oncology 1</td>
<td>30</td>
</tr>
<tr>
<td>M1B102521</td>
<td>Fundamentals of Human Physiology</td>
<td>20</td>
</tr>
<tr>
<td>M1B823891</td>
<td>Preparation for Radiotherapy Practice</td>
<td>20</td>
</tr>
<tr>
<td>M1B022653</td>
<td>Foundations for Interprofessional Practice</td>
<td>20</td>
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Exit Award – Certificate in Health and Social Care

<table>
<thead>
<tr>
<th>SHE2 Level</th>
<th>Module Code</th>
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<tbody>
<tr>
<td>M2B822663</td>
<td>Physics for Radiotherapy and Oncology Practice</td>
</tr>
<tr>
<td>M2B822616</td>
<td>Radiotherapy &amp; Oncology 2</td>
</tr>
<tr>
<td>M2B023908</td>
<td>Working in Interprofessional Teams</td>
</tr>
<tr>
<td>M2B822664</td>
<td>Practice Education 2</td>
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Exit Award – Diploma of Higher Education in Health and Social Care

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<thead>
<tr>
<th>SHE3 Level</th>
<th>Module Code</th>
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<tbody>
<tr>
<td>M3B822611</td>
<td>Radiotherapy Treatment Planning and Brachytherapy</td>
</tr>
<tr>
<td>M3B822610</td>
<td>Radiotherapy and Oncology 3</td>
</tr>
<tr>
<td>M3B022651</td>
<td>Teams in Interprofessional Practice</td>
</tr>
<tr>
<td>M2B022655</td>
<td>Methodology and research for effective practice</td>
</tr>
<tr>
<td>M3B822609</td>
<td>Practice Education 3</td>
</tr>
</tbody>
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Exit Award – BSc in Health and Social Care

<table>
<thead>
<tr>
<th>SHEH Level</th>
<th>Module Code</th>
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<tbody>
<tr>
<td>MHB022652</td>
<td>Leadership in Interprofessional Teams</td>
</tr>
<tr>
<td>MHB822659</td>
<td>Supportive Care in Oncology</td>
</tr>
<tr>
<td>MHB922654</td>
<td>Honours Project</td>
</tr>
<tr>
<td>MHB822657</td>
<td>Practice Education 4</td>
</tr>
</tbody>
</table>

Exit Award – BSc (Hons) Radiotherapy and Oncology

4.1  Programme Outline of the BSc (Hons) Radiotherapy and Oncology

Currently this Programme can only be accessed on a full time basis. Table 1 gives an overview of the whole 4-year programme, and illustrates where each of the programme-specific modules sit in relation to those modules belonging to the IPE Framework of SHLS. Thereafter, the curriculum outline for each level is discussed more fully.
Level 1

The module content in Level 1 begins to develop students’ knowledge and understanding of radiotherapy and oncology practice as well as introducing the concept of partnership working within health and social care practice.

*Applied Clinical Anatomy* introduces students to key aspects of clinical and radiographic anatomy and includes medical and directional terminology. This two trimester module will encourage students to work independently using a mixed approach using keynote lectures and blended learning using GCULearn and mobile technology.

*Radiotherapy and Oncology 1* is also profession-specific and introduces students to cancer as an entity, and is the first of a series of three modules that integrate the patient care pathway with aetiology and epidemiology, pathology, oncology and radiotherapy techniques associated with cancers in specific sites. In addition, this module introduces the students to the evidence-based nature of cancer treatment. As many patients attending cancer centres have other long-term conditions and co-morbidities, students are introduced to common pathologies and radiographic appearances in this module.

*Preparation for Radiotherapy Practice* is designed to provide a common foundation upon which the students will build their discipline-specific knowledge in later levels of the programme, and includes the principles of professional practice as well as introductory physics, radiation protection, person centred care, and health and wellbeing. Within this module students are introduced to personal development planning and the professional portfolio. This introduces students to reflective practice and the concept of lifelong learning. Although Level 1 is predominantly university-based, the *Preparation for Practice* module provides students with an opportunity to initiate and develop
professional skills through visits to the practice education environment. Emphasis is placed on the application of theoretical knowledge to fundamental professional practice, thus commencing the process of horizontal and vertical integration of all professional modules and the journey towards professional competency.

The IPE Framework module, *Foundations for Interprofessional Practice*, introduces students to the principles and benefits of working as part of a wider health and social care team. This module encourages students to develop knowledge, skills and appropriate attitudes to build effective and efficient team working and collaboration.

*Fundamentals of Human Physiology* is taught multi-professionally by the Life Sciences department of SHLS.

Students will learn to use GCULearn (Virtual Learning Environment (VLE)) to access lecture notes, quizzes, online resources and additional learning resources. The school-based inter-professional clinical skills suite will be utilised for practice skill development and role play. Shaderware will be used to simulate exposure factors, and illustrate the concept of dose. Students will use the PACS library and the cross sectional imaging treatment planning suite to apply their anatomical knowledge.

Transferable skills of self-expression, collaboration, working in groups and teams, both within and across disciplines, basic use of information technology, construction of written reports and the adoption of a self-critical approach to their work, are encouraged and developed through the teaching, learning and assessment strategies throughout Level 1 of the programme.

**Level 2**

The module content at this level continues to develop students’ knowledge and understanding of radiotherapy and oncology practice via the module entitled *Radiotherapy and Oncology 2*. This is the second of the series of three modules aiming to enhance student’s knowledge of oncology, radiotherapy technique, pre and post verification imaging and radiographic appearances associated with cancers in specific sites. In addition, this module continues to extend the students’ knowledge of the evidence-based nature of cancer treatment within the global context, and the most appropriate modalities of treatment. Patient and carer issues associated with cancer sites are discussed in scenario based learning to extend students’ problem solving and independent learning skills.

The radiotherapy and oncology team are keen to continue the philosophy that our graduates will be equipped with the skills to interpret diagnostic, planning related and treatment-related images associated with their patients. Discussion with existing students, graduates and with representative staff from the associated clinical centres drew broad support for the team’s ideas in relation to continuing this philosophy including imaging and image interpretation in each of the radiotherapy and oncology modules.

*Physics for Radiotherapy & Oncology Practice* is a 40 credit module and introduces students to the range of imaging and treatment-related technology and concepts relating to the use of radiation in the detection, diagnosis and management of malignant disease. This module uses a comprehensive and applied approach to the role of imaging systems in the detection, staging and management of malignant disease, treatment planning, and verification and quality assurance procedures.

*Practice Education 2* is the first of three 40 credit practice education modules contained within the
BSc (Hons) Radiotherapy and Oncology and builds upon the experiences gained when the students visited practice placement during the Level 1 module Preparation for Radiotherapy Practice. It consists of placements that take place throughout Level 2, with an extension into the beginning of the summer, and will ensure constructive alignment of academic and practice learning. Similarly, the module aims to ensure that theory and practice are integrated throughout the academic session, for further information see radiotherapy and oncology specific practice education document.

*Working in Interprofessional Teams* focuses on communities. Using relevant psychological and sociological theory, the concept of communities will be explored and their contribution to health and well-being. In addition, the module will consider the determinants of health and well-being, along with the application of an asset-based approach to health. Given the community focus of the module, students will have the opportunity to work in interprofessional teams to identify an issue that impacts upon a community and provide a research-based blog to deliver their results. Students will be encouraged to reflect upon the effective functioning of the team throughout their experience.

**Level 3**
The module content at this level extends the development of the students’ knowledge and understanding of radiotherapy and oncology practice via the module entitled *Radiotherapy and Oncology 3*, the third in the series of profession specific modules aiming to integrate the teaching of oncology, radiotherapy technique and radiographic appearances associated with cancers in specific sites. As before, person centred care and service user and carer involvement is embedded in this series of modules. Scenario based learning is part of the teaching and learning strategy of each of these modules to extend the independent learning, analytical and problem-solving skills of the students.

The *Radiotherapy Treatment Planning and Brachytherapy* module enables students to explore contemporary concepts in treatment planning i.e. VMAT and inverse planning in the management of malignant disease.

The IPE Framework module, *Teamwork in Inter-professional Practice* aims to offer students scenario based inter-professional practice using real and relevant scenarios. It will enable students to further develop their self-direction, understanding of governance issues and critical enquiry abilities. The practical focus is on developing the students' ability to synthesise and evaluate the contextual factors and evidence base for practice.

*Methodology and Research for Effective Practice* is the first research module within the programme. The programme team considered the best placement for this module to be at level 3 thus providing continuity and underpinning for the subsequent *Honours Project*.

*Practice Education 3* is the second of three 40 credit modules contained within the BSc (Hons) Radiotherapy and Oncology and builds upon the practice experiences gained by students during the first two levels of the Programme. It consists of placements that will take place throughout Level 3, and includes a 4-week elective summer placement at a radiotherapy centre of their choice, either within the U.K. or abroad (subject to restriction), organised by the students themselves. The elective placement is popular with students on the current programme and consultation with representatives of the student body evidenced strong support to keep it in the new programme. This module complements the academic modules delivered in Level 3 and is constructively aligned, linking theoretical principles to their practical applications.

Throughout this level, students are provided with opportunities to further develop skills of communication, team-working, reflective practice, analysis, critical thinking, clinical reasoning and
interpretation of data. Their overall learning will be enhanced by the elective placement. It is proposed at this level of the programme that we will develop an international online collaboration giving students the opportunity to virtually meet students on similar programmes in other countries. This will enable students who are unable to arrange an elective placement abroad due to personal circumstances to further engage in internationalisation.

**Level 4**
The purpose of Level 4 of the Radiotherapy and Oncology programme should be to enable students to consolidate learning achieved in the previous three years. Students must be prepared not only for first-post-competency but with additional knowledge and skills for their future career. The IPE Framework module entitled *Leadership in Interprofessional Teams* is designed to equip students with the knowledge, skills and understanding of working within organisations and setting these organisations within current political and policy contexts. The students’ understanding of crucial issues such as power relationships, leadership, management and change will be developed and consolidated. Whilst recognising the constraints of the Statutory and Professional Bodies, the module allows the emerging professional to explore innovative and creative developments in practice. Students can choose to take one of the following: *Supportive Care in Oncology* or a module from the module catalogue (preferably cancer related). Optional modules must be negotiated with the Programme Lead. The optional profession-specific module, *Supportive Care in Oncology* not only encompasses a broad range of issues relating to current developments in oncology practice in terms of patient care, service delivery, quality and government policy, it complements the IPE Framework module. Additional content includes holistic patient centred care, including spiritual and end of life care and the role of the voluntary sector in person centred care. The final practice education module, *Practice Education 4*, takes place throughout Level 4 and complements the content of the above profession-specific module by including a broad range of developments in radiotherapy practice relating to patient care, political drivers, service delivery, patient safety, departmental management and quality improvement. Although students are unable to gain clinical competence at this time, the theory of intravenous injection is contained within this module. Students gain additional experience in this module of the role of the hospice, patient follow up and small animal oncology. During this module students can elect and arrange to spend part of their placement in other UK cancer centres to enhance their employability.

5. **SUPPORT FOR STUDENTS AND THEIR LEARNING**
Student Support commences at the induction and transition phase and continues throughout students’ four years at GCU. The Programme Team consistently provides academic and pastoral support to students. The Programme takes full advantage of the academic support provided by the Learning Development Centre, both in the provision of tailored, embedded sessions within modules, workshops and in the one to one support that they offer to students. All students have a named Academic Advisor who will normally provide continuous support throughout their programme of study this provides the opportunity to develop an understanding of each student’s academic and support requirements. The Programme fully engages in the University’s PPACT Standard of Academic Advising. This information is available on the Programme section of GCULearn. In addition, teaching and learning materials using GCULearn are designed to support students learning
e.g. on-line lectures, discussion boards, podcasts, blogs, wikis, GCULearn App, and access to online resources.

The team encourage collaborative learning within student cohorts.

The university feedback strategy\(^5\) enables the student to gain feedback and feed forward to enhance learning. This is mainly delivered by Turnitin electronic coursework marking, VLE exams and face to face feedback with students. Other aspects of student support are:

- Specific Induction Programme and Enhanced Induction throughout Year 1
- Programme and Module Handbooks
- Academic Disability Co-ordinator
- Library and Study Skills Online Support
- GCULearn and My Caledonian online resources
- Named Librarian to provide information skills tuition
- Access to SCONUL resources
- Open door policy of academic staff gives access to module tutors and Programme Leader
- Access to technical support
- Practice Education supported by Practice Educators and Practice Placement
- Level Co-ordinators
- Interprofessional Simulation Centre
- Treatment Planning Laboratory
- Open access to university computing services
- Access to Student Services Department which provides support and guidance for students
- Student representatives from each class group are members of the Programme Board
- Student – Staff Consultative Committee
- The Professional Body – Membership of the Society of Radiographers is free for Level 1 students and then students are encouraged to maintain membership throughout the remainder of their course.
- GCU Students Radiography Society (offers opportunities for peer support and networking across other years of the programme)

6. **CRITERIA FOR ADMISSION**

Candidates must be able to satisfy the general admissions requirements of Glasgow Caledonian University. In keeping with the ethos of GCU, BSc (Hons) Radiotherapy and Oncology promotes widening participation in higher education from all sectors of the community offering equality of opportunity in terms of socio economic background, culture, ethnicity or gender.\(^6,7\) This section of the document provides details relating to the admissions policy of this programme.

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\(^5\) [http://www.gcu.ac.uk/futurelearning/](http://www.gcu.ac.uk/futurelearning/)

\(^6\) [http://www.gcu.ac.uk/media/gcalwebv2/aes/Admissions_Policy%20Ver2%20280114.doc](http://www.gcu.ac.uk/media/gcalwebv2/aes/Admissions_Policy%20Ver2%20280114.doc)

Student selection to the BSc (Hons) Radiotherapy and Oncology is determined principally by their academic record, personal statement and academic reference, all of which are obtained from the University Central Admissions System (UCAS) application form. To facilitate selection, shortlisted candidates will be required to attend for interview.

Open Days and Enquiries: The University conducts a number of open days, throughout each academic session, in which the SHLS take part. In addition, the School conducts open evenings for prospective students and their families. On these occasions prospective students are able to gather further programme information as well as gain an opportunity to ask specific questions relating to study at GCU. Current students and staff are available to show visitors around the radiotherapy and SHLS facilities.

All enquiries are dealt with either centrally or by the admissions tutor, with relevant information available via the University’s web site\(^8\) or printed in the form of the University Prospectus\(^9\) and BSc (Hons) Radiotherapy and Oncology specific leaflet which contains information about the programme.

Student Intake: Approximately 25 places are available for the BSc (Hons) Radiotherapy and Oncology. These target figures are set for the University by the Scottish Funding Council (SFC).

Admissions Criteria BSc (Hons) Radiotherapy and Oncology

The minimum entry requirements for entry to full time students under the age of 21 are:

Scottish Qualification Agency (SQA) Higher passes in four subjects at BBBB grades. Higher English is essential and preferred Higher subjects are any two from biology, chemistry, mathematics or physics with preference given to students with higher biology or physics. If physics or mathematics is not studied to Higher then the candidate must offer these subjects to Standard Grade (2 or above) or Intermediate 2/National 5 (B or above). Where physics has not been studied, and all other criteria have been achieved, an offer may be made at the discretion of the admissions tutor.

Three A-Level passes: BCC, or above to include a B in a science subject, excluding general studies; plus five GCSE subjects to include English, mathematics and at least two sciences at GCSE.

Irish applicants should have four subjects at Higher level at grade B (B1B2B2B2) or above and must include English and two sciences. If physics or mathematics is not studied to Higher Grade then the candidate must offer these subjects at Ordinary grade (A2). Where physics has not been studied, and all other criteria have been achieved, an offer may be made at the discretion of the admissions tutor.

Completion of Scottish Widening Access Programme (SWAP) Access to Radiography, or equivalent (subject to scrutiny of course content)

BTEC national diploma in Health Science or Science at grade MMM

Equivalent EU qualifications

Equivalent non EU qualifications

Applicants whose first language is not English

Applicants whose native language is not English must produce evidence of proficiency in English reading, spoken and written language. IELTS Average Score of 7 with no element less than 6.5.

Mature candidates and non-standard entry requirements

Mature candidates (aged twenty one years and above) and others who possess differing qualifications will be considered on their individual merit.

Applicants must normally be seventeen years and six months old by the beginning of the programme.

Applicants are required to provide evidence that they are in good health and should check their

\(^8\)http://www.gcu.ac.uk/study/undergraduate/courses/radiotherapy-and-oncology-8936.php?loc=uk

\(^9\)http://view.vcab.com/?vcabid=cneSpclcScnchara
vaccination status for tuberculosis, poliomyelitis, rubella and tetanus.

**Disclosure Scotland:** As a condition of entry to BSc (Hons) Radiotherapy and Oncology successful applicants require to undergo an Enhanced Criminal Disclosure procedure with the Protection of Vulnerable Groups Scheme (PVG). Applicants should note that criminal records will not be deemed as spent under the Rehabilitation of Offenders Act (1974) (ROA) (Exceptions) Order 1975, consequently all convictions, no matter when they occurred, will be included on the disclosure.

**Students with Disabilities**

University procedures within central admissions provide mechanisms of support to applicants with disabilities, including referrals to the disability service. Within the referral process consideration will be given as to whether the implementation of reasonable adjustments would enable the applicant to meet the HCPC standards of proficiency by the end of the Programme. Each programme and department has a dedicated academic disability co-ordinator who liaises with the disability service.

**Centralised Admissions:** Admission to all programmes within the University is handled centrally, and Admissions Tutors are consulted to make final decisions.

**Flexible Entry - Credit Transfer and RPL**

**Entry with Advanced Standing:**
Individual students may be able to claim credit towards their BSc (Hons) Radiotherapy and Oncology via Recognition of Prior Learning (RPL) from previous study or experience. Each case will be considered on an individual basis. No RPL claim permits exemption from all or part of practice education with the exception of those students transferring from other radiotherapy programmes or assistant practitioner programmes. For more information on RPL see the University RPL policy. Applications from those with Assistant Practitioner qualifications will be scrutinised to ensure equivalent content and placement hours before an offer of entry into Level 2 is made.

7. **METHODS FOR EVALUATING AND IMPROVING THE QUALITY AND STANDARDS OF TEACHING AND LEARNING**

**Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards:**
- Annual Programme Monitoring Process
- Annual Module Monitoring Process
- Annual Monitoring Report for the College of Radiographers
- Annual Monitoring by the Health and Care Professions Council
- Module Feedback Questionnaires
- External Assessor Reports
- Module Team Meetings
- Programme Review Meetings

**Committees with responsibility for monitoring and evaluating quality and standards:**
- Programme Board (PB)
- Student Staff Consultative Group (SSCG)
- Learning, Teaching and Quality Committee (SHLS)
- Learning, Teaching and Quality Committee (PSWAHS)
- Inter-professional Education Framework Management Group
- Clinical Liaison with Practice Educators

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10 [http://www.gcu.ac.uk/student/disability/](http://www.gcu.ac.uk/student/disability/)
11 [http://www.gcu.ac.uk/media/gcalwebv2/theyuniversity/gao/gaofiles/Revised%20GCU_RPL_Policy_190613.pdf](http://www.gcu.ac.uk/media/gcalwebv2/theyuniversity/gao/gaofiles/Revised%20GCU_RPL_Policy_190613.pdf)
• School Board
• Assessment Board (AB)
• University Learning and Teaching Sub-Committee (LTSC)
• University Academic Policy Committee (APC)
• University Senate

**Mechanisms for gaining student feedback on the quality of teaching and their learning experience:**

• Student-Staff Consultative Group (SSCG)
• Student representation on Programme Board (PB)
• Student representation on School Board
• Module Feedback Questionnaires
• GCULearn
• Open access to members of the Programme Team e.g. Module Leaders, Programme Leader, Academic Advisor, Year Tutors
• Open access to Practice Placement Co-ordinator
• Practice placement evaluation
• PPACT meetings

**Staff development priorities include:**

• Continuous Professional Development (CPD)
• Postgraduate certificate in learning and teaching
• Performance and Development Annual Review (PDAR)
• Peer support for teaching
• Mentoring scheme for new teaching staff
• Conference and seminar attendance and presentation
• Research Excellence Framework (REF) submission
• Membership of Higher Education Academy (HEA)
• Membership of and involvement with Professional Bodies

**8 ASSESSMENT REGULATIONS**

The Glasgow Caledonian University Assessment Regulations (available at:
http://www.gcu.ac.uk/media/gcalwebv2/theuniversity/gaq/gaqfiles/assessmentregulations/University%20Assessment%20Regulations%202015-16%20Undergraduate.pdf) apply to this programme with the following approved exceptions:

**School of Health and Life Sciences Undergraduate Programme-Specific Assessment Regulations (2013).**

1 University Assessment Regulations apply except where there is a documented exception approved by the University Exceptions Committee. Some health and social care Programme-Specific Regulations deviate from the University’s standard regulations (Approved October 2013) in sections 1, 8, 12, 13, 21, 23, 26, 27, 34, 53, and 58.

2 The School Programme-Specific Assessment Regulations apply to modules irrespective of the number of credit points allocated.

3 Due to the time commitments and Practice Education elements of the professional programmes hosted by the SHLS, students may not be registered on a second full-time programme of study while enrolled on a health or social care programme.

4 The minimum length of study is 3 years for an ordinary degree and 4 years for an honours degree. The maximum period within which a student must complete the programme is normally 6 years. This period includes the successful completion of all assessments. In the situation where a student is not in attendance at the University, the maximum break from the programme is 1 academic year for health and social care programmes.
5 The offer of re-entering Level 4 as an attached student is normally only subject to exceptional medical or social circumstances, which are appropriately documented.

6 Students within health and social care programmes are expected to attend all classes, clinical visits, laboratory sessions and Practice Education placements. Where a student has unauthorised absence of, or in excess of, 20% of a University based module he/she may be required to retake the module with attendance prior to undertaking Practice Education Modules or proceeding to the next level of the programme. Unauthorised absence in more than one module may result in the student being required to withdraw from the Programme.

7 Students within Health and Social Care Programmes are normally required to successfully complete all modules identified in the Definitive Programme Document for their programme.

8 For modules assessed by coursework and examination the overall pass mark for the module will be 40% subject to the attainment of a mark of at least 35% in each of the coursework and examination elements of the assessment; in cases where the coursework comprises two or more separate pieces of work, the 35% minimum attainment applies to every piece of coursework; in cases where the examination comprises two or more separate components, the 35% minimum attainment applies to every component of the examination. This regulation applies to professional modules hosted within health and social care programmes and is documented in module descriptors.

9 Compensation for failure in a single module, where a student has passed modules at any one level, will not normally apply to professional modules hosted by health and social care programmes. Compensation/condonement of a fail in Practice Education modules is not permitted. This is consistent with the guidelines set by Regulatory/Professional Bodies concerning professional standards.

10 Submission of the Honours Project is compulsory. The submitted Honours project must comply with project, the School and programme guidelines. Failure to submit an Honours Project will result in the student being ineligible for the Named award and consequently, registration with the Regulatory Body.

11 Failure in any Level 4 module at second attempt will result in the award of an unclassified degree (e.g. BSc in Health and Social Care) and will result in the student being ineligible for the named award and consequent eligibility to apply for registration with the Regulatory Body.

12 * Within health and social care programmes, the classification of the award of the Degree with Honours will be based upon the average marks obtained in Level 3 (contributing 30%) and Level 4 (contributing 70%). The classification will be based upon the year mean obtained by combining the weighted results of all modules studied in Levels 3 and 4 with the final classification being arrived at as stated i.e. 30% weighting of Year 3 and 70% weighting of Year 4. The Honours project must be included (40 Credits). Where a student requires to be profiled in order to determine their overall classification award, students must have a performance in their Honours Project of no more than one division below the final award classification. Details of the profiling system used by Assessment Boards can be found in paragraphs 40-47 of the GCU Assessment Regulations under the heading “Honours Classification Profiling” for programmes considering performance in Level 4 modules only.

13 A student may be required to withdraw from the programme if he/she is deemed by the Fitness to Practise Board and ratified by the Assessment Board to be professionally unsuitable or guilty of professional misconduct. A student who fails to demonstrate appropriate standards of professionalism, either at University or in the practice environment, may be considered to be professionally unsuitable.

A student who is considered to have demonstrated professional misconduct will be one who:-

- has failed to abide by the SHLS Fitness to Practise Policy and Code of Conduct which includes the Rules of Professional Conduct and Standards of Regulatory/Professional Bodies & University.
- and/or has failed to meet the standards, policy, code of conduct laid down by partner
organizations which provide Practice Education Placements for the programmes hosted by the SHLS and/or is unable to meet the programme requirements despite reasonable adjustments.

Students will be required to declare at the commencement of each session his/her Fitness to Practise and Good Character through Self-Disclosure.

14 Due to the requirements of the Regulatory/Professional Bodies there will be no aegrotat awards of BSc (Hons) Occupational Therapy, BSc (Hons) Podiatry, BSc (Hons) Physiotherapy, BSc (Hons) Radiotherapy and Oncology, BSc (Hons) Diagnostic Imaging, BSc Operating Department Practice or BA (Hons) Social Work.

15 Students who are awarded a BSc (Hons) Occupational Therapy, BSc (Hons) Podiatry, BSc (Hons) Physiotherapy, BSc (Hons) Radiotherapy and Oncology, BSc (Hons) Diagnostic Imaging, BSc Operating Department Practice or BA (Hons) Social Work degree are eligible to apply for Registration with the Health and Care Professions Council (HCPC) / Scottish Social Services Council (SSSC) and/or Membership of the named Professional Body.

16 In the case of Health and Care Professions Council (HCPC) regulated Programmes, all Programmes will have at least one external examiner who is appropriately experienced and qualified and, unless other arrangements are agreed, will be from the relevant part of the Register.

Additional Assessment Regulations Specific to Practice Education

1 All Practice Education Modules must be passed including Elective Placements where offered.

2 For Practice Education Module assessments which consist of a practice component and a written component both components must be passed in order to successfully complete any Practice Education module.

3 For Practice Education Modules only two attempts are permitted.

4 Students are expected to attend Practice Education 100% of the time allocated. If a student misses up to 20% (continuous or accumulated time) of a Practice Education Placement he/she is required to make up the time missed. How and when this time will be made up is at the discretion of the Programme of study.

5 Students who miss more than 20% (continuous or accumulated time) or more of a placement within Health and Social Care programmes will be deemed to have failed the placement and will be required to re-enter the placement as second attempt, at a time to be arranged by the Department.

6 If a student is absent from more than 20% of a placement due to certified ill health then the placement will normally be considered void and the student permitted to re-enter at first attempt.

7 Completion of a Mitigating Circumstances form with supporting Medical and/or Personal documentation must be submitted as per the University Assessment Regulation before a placement may be considered void.

8 A student who fails / voids Practice Education Module(s) will be required to re-enter these modules either during the students’ summer recess, or as an attached student as determined by the Programme Assessment Board. The specific dates will be determined by placement availability.

9 A student must satisfactorily complete all requirements laid down by Regulatory/Professional bodies in relation to Practice Education e.g. number of placement days, hours (as specified in the Programme Handbook). Failure to do so will require additional placements to be undertaken.

The concise guide to assessment procedures can be found at http://www.gcu.ac.uk/media/gcalweb2/thenuiversity/gaq/gaqfiles/assessmentregulations/Concise%20Guide%20to%20Assessment%20Procedures%202015-16.pdf

9. INDICATORS OF QUALITY AND STANDARDS
• Enhancement led internal subject review
• Module evaluation
• Annual Programme Analysis
• HCPC annual monitoring / audit
• QAA subject reviews
• External Assessor Reports
• National Student Survey results
• Quality Standards for Practice Placements

10. INFORMATION ABOUT THE PROGRAMME

Key information about the programme can be found in:

• Approved Programme Document
• Programme Handbook
• Student Handbook
• Practice Education Handbook
• University Website http://www.gcu.ac.uk
• School Website http://www.gcu.ac.uk/hls/
• GCULearn
• University Prospectus

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning assessment methods of each module can be found in the University Module catalogue which can be accessed from the University website. The accuracy of the information in this document is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.
## 11. Curriculum Map

The curriculum map links the modules (Section 4) to the Outcomes listed in Section 3. This map provides both a design aid to help academic staff identify where the programme outcomes are being developed and assessed within the course. It also provides a checklist for quality assurance purposes and could be used in approval, accreditation and external examining processes. This also helps students monitor their own learning, and their personal and professional development as the course progresses. The map shows only the main measurable learning outcomes which are assessed. There are additional learning outcomes (e.g. attitudes and behaviour) detailed in the module specifications which are developed but do not lend themselves to direct measurement.

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