



Course Handbook

MRes Cancer Biology

2019/20

Course Leader: Dr Gail Welsby

School of Pharmacy and Biomedical Sciences



<http://www.bbc.com/earth/story/20160601-is-cancer-inevitable> (Credit: Mopic/Alamy)

Please read this Handbook in conjunction with the University's Student Handbook.

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1. Welcome to the course

Welcome to the School of Pharmacy and Biomedical Sciences at the University of Central Lancashire. We hope that you'll enjoy your studies and experiences in Preston. The Student Handbook brings together information to help you to answer queries that you might have about the course. If we have missed something that you think should be included in this Handbook then please let us know.

The MRes Cancer Biology degree programme is designed for those of you wishing to embark upon a career in molecular and cellular bioscience within companies and research organisations serving the needs of biomedical science and related disciplines.

1 in 3 people are affected by cancer; it remains a leading cause of death, but great strides are being made in both our knowledge of basic cancer biology and potential therapies. It is a field of intense interest and significance, with new discoveries making significant contributions to how we are able to diagnose and treat this disease.

This course provides specialist theoretical and practical knowledge of both basic molecular, genetic and biological processes associated with cancer together with an emphasis on the advances in pathology, diagnosis and therapy. The award will prepare the student for further study to PhD level or a career in the pharmaceutical, biotechnology or healthcare industries.

The course aims to extend your knowledge and understanding of the biology of cancer, advances in prognosis, diagnosis and treatment, and to give you an appreciation of pertinent legislative and ethical issues. In addition, the course has been designed to meet requirements of potential employers providing opportunities for you to develop a skill base that is not solely focussed on academic ability by incorporating elements of assessed work which facilitate personal development in the following areas: communication, IT, numeracy; interpersonal/teamwork, self-management and professional development.

This Handbook is intended to be a user-friendly and informative guide to your Master's degree programme. It offers a lot of essential information about the structure and content of your course and provides guidance on important issues such as studying, learning and assessment.

Although sections of this Handbook may seem rather daunting at first, you will find them invaluable as you progress through your degree studies. This means that it is important to read your Handbook carefully, and that you should keep it handy for future reference throughout your studies at UCLan.

Please note that this Handbook is not the only source of information that you need to consult. It needs to be read in conjunction with a number of other documents, in particular:

- The Module Handbooks which are produced for each module, detailing information on timetabling, lecture schedule, details of assessments and deadline for submission of assignments.
- The Programme Specification for your degree course, which is included in the Handbook as an Appendix. This offers you a summary of the aims, learning outcomes, assessment and overall structure of the course in a condensed format.

- The School of Pharmacy and Biomedical Sciences Website (<http://www.uclan.ac.uk/schools/pharmacy-biomedical-sciences/index.php>) and the appropriate ELearn (Blackboard) support domains which provide electronic versions of all key documents associated with your course.

We want this to be a positive learning experience for you. There will be some very hard work, but we hope that you'll find it interesting and stimulating, and that you'll have the chance to enjoy yourself along the way. We believe you can succeed, and we want you to succeed. The academic and support staff are here to help you achieve that goal.

Good luck!

Dr Gail Welsby
Course Leader

1.1 Rationale, aims and learning outcomes of the course



1.1.1 Programme Aims

- To provide a sound educational platform, appropriate to Masters level, from which students may launch their careers in a range of professions allied to biomedicine.
- To enable students to develop an appreciation and understanding of current analytical technologies used in the provision of a comprehensive service in the diagnosis, treatment and monitoring of cancer.
- To develop an appreciation of legislative and ethical issues pertinent to cancer research and the development and introduction of new therapies.
- To develop research skills necessary for the competent execution of scientific research.
- To involve the learner in a stimulating educational environment in which students are encouraged to achieve personal growth to an advanced level, in terms of a wide range of skills including communication, numeracy, IT, independence, interpersonal and group working skills.

1.1.2 Learning Outcomes

On successful completion of this course, you will have gained the following:

Knowledge and Understanding

- Demonstrate an in depth understanding of the principles underpinning cancer biology and analytical instrumentation applicable to the diagnosis, prognosis and management of cancer.
- Evaluate current biotechnological and pharmaceutical developments and their application to cancer through appraisal of both philosophical and ethical issues.
- Apply knowledge/theory to new situations e.g. the formulation of hypotheses and experimental design.

Subject Specific Skills

- Demonstrate knowledge of concepts, principles and theories relevant to cancer biology and therapy.
- Discuss the necessary legal, ethical safety and research governance issues relevant to cancer research and therapy.
- Manipulate, interpret and report conclusions on a range of data and problems encountered in clinical science.
- Select appropriate technology to enable a scientific research project to be undertaken.

Thinking Skills

- Use and integrate discipline specific theories, concepts and principles.

- Critically analyse a range of data and information derived either experimentally or from within scientific literature / data banks and evaluate it critically supported by logical and structured argument.
- Collect and integrate several lines of evidence to develop and test theories, hypotheses and concepts.
- Apply knowledge and understanding to address familiar and unfamiliar problems.
- Critically appraise the moral and ethical issues raised by the process of clinical investigation.

Other Skills Relevant to Employability and Personal Development

- Communicate through a range of media adopting an appropriate scientific style.
- Display advanced interpersonal and teamwork skills.
- Use IT effectively for information retrieval, communication and presentation.
- Collate and analyse information relevant to a particular problem/proposal and generate a satisfactory report and conclusion.
- Demonstrate advanced skills in self-management and professional development.

1.2 Course Team

Key staff involved in the MRes Cancer Biology

Name	Role	E-mail
Teaching Staff		
Dr Gail Welsby	Course Leader / Module Tutor	GWelsby@uclan.ac.uk
Dr Peter Abel	Module Tutor	PAbel@uclan.ac.uk
Dr Jane Alder	-	JEAlder@uclan.ac.uk
Dr Anthony Ashton	-	ACAshton@uclan.ac.uk
Dr Victorio Bambini-Junior	-	VBambini-Junior@uclan.ac.uk
Dr Amina Ferraz	-	AFerraz@uclan.ac.uk
Mr David Griffiths	-	DMGriffiths2@uclan.ac.uk
Dr Marta Krysmann	-	MKrysmann@uclan.ac.uk
Dr Lisa Shaw	Module Tutor	LShaw1@uclan.ac.uk
Dr Leroy Shervington	-	LAShervington@uclan.ac.uk
Prof Kamalinder Singh	-	KSingh1@uclan.ac.uk
Dr Tim Snape	-	TJSnape@uclan.ac.uk
Dr Izabela Stasik	Module Tutor	IStasik@uclan.ac.uk
Dr Philip Welsby	Module Tutor	PJWelsby@uclan.ac.uk
Administration		
Foster Hub (FB058)	General Enquiries	FosterHub@uclan.ac.uk
	Notification of Absence	FosterHubattendance@uclan.ac.uk
	Extension Requests	PBSExtensions@uclan.ac.uk
	Extenuating Circumstances	FosterEC@uclan.ac.uk

In the event that you are required to submit an extension request or extenuating circumstances form, these can be found on the University website (insert link). Once

completed, the form should be e-mailed to the appropriate Foster Hub address as shown above.

1.3 Expertise of staff

The academic staff that are involved in teaching you are all highly qualified and specialists in the areas that they deliver. All staff are engaged in research and/or scholarly activity which helps enrich your experiences with cutting edge knowledge and practical skills. You are welcome to visit the staff's profiles - <http://www.uclan.ac.uk/schools/pharmacy-biomedical-sciences/staff.php>

1.4 Academic Advisor

You will be assigned an Academic Advisor who will provide additional academic support during the year. They will be the first point of call for many of the questions that you might have during the year. Your Academic Advisor will be able to help you with personal development, including developing skills in self-awareness, reflection and action planning.

My Academic Advisor is:

Name	E-mail	Tel.	Room No



1.5 Administration details

Campus Admin Services provides academic administration support for students and staff and are located in the following hubs which open from 8.45am until 5.15pm Monday to Thursday and until 4.00pm on Fridays. The hub can provide general assistance and advice regarding specific processes such as extenuating circumstances, extensions and appeals.

Allen Building

Medicine

Dentistry

telephone: 01772 895566

email: AllenHub@uclan.ac.uk

Harris Building

Lancashire Law School

Humanities and the Social Sciences

Centre for Excellence in Learning and Teaching

telephone: 01772 891996/891997

email: HarrisHub@uclan.ac.uk

Foster Building

Forensic and Applied Sciences

Pharmacy and Biomedical Sciences
Psychology
Physical Sciences (Mathematics/Chemistry/Physics)
telephone: 01772 891990/891991
email: FosterHub@uclan.ac.uk

Computing and Technology Building

Art, Design and Fashion
Computing
Journalism, Media and Performance
Engineering
telephone: 01772 891994/891995
email: CandTHub@uclan.ac.uk

Greenbank Building

Sport and Wellbeing
Management
Business
telephone: 01772 891992/891993
email: GreenbankHub@uclan.ac.uk

Brook Building

Community, Health and Midwifery
Nursing
Health Sciences
Social Work, Care and Community
telephone: 01772 891992/891993
email: BrookHub@uclan.ac.uk



1.6 Communication

The University expects you to use your UCLan email address and check regularly for messages from staff. If you send us email messages from other addresses they risk being filtered out as potential spam and discarded unread.

Staff will normally respond to emails within 2-working days (unless they are on annual leave or are part-time teaching staff; whereby you should receive an automatic reply, which clearly states a return date). Where possible we will notify you by email of any alterations to classes at least 24hrs in advance of the change taking place.

If you do not get a response in a timely manner, email the member of staff again. If there is still no response and the matter remains unresolved, you should bring this to the attention of another member of staff, such as the Module Tutor or Course Leader, for an 'action request'. This colleague will then address the matter with the original member of staff.

All academic staff have set hours when they are available to students outside of their class contact time. These may be indicated in a number of ways: marked outside their office on signs or under the 'staff' section of Blackboard on the relevant module. To request a meeting either sign up on the sheet provided on the office door or email them to request a time.

When emailing staff, do ensure that you indicate in the subject field the purpose of your email (including the module number), e.g. BL4210 meeting about case study. It is important to use your university email account, as emails from external accounts often go to junk.

CC-ing in emails - You are encouraged to send emails directly to the person from whom you want a response from. Where other staff are cc'd into the email, it should be made clear why e.g. I am copying in my course leader so that they are also aware of this situation.

1.7 External Examiner

The University has appointed an External Examiner to your course who helps to ensure that the standards of your course are comparable to those provided at other higher education institutions in the UK.

The name of this person, their position and home institution can be found below. If you wish to make contact with your External Examiner, you should do this through your Course Leader and not directly. External Examiner reports will be made available to you electronically. The School will also send a sample of student coursework to the external examiner for external moderation purposes, once it has been marked and internally moderated by the course tutors. The sample will include work awarded the highest and lowest marks and awarded marks in the middle range.

External Examiner Name: Dr Adrienne Gorman
Position: Lecturer and Vice-Dean for Research in College of Science
Home institution: National University of Ireland, Galway



2. Structure of the course

2.1 Overall structure

The MRes course comprises of taught core modules in semester 1. A decision about whether to continue on the MSc course or to transfer onto the MRes will be made with you at the end of semester I. The decision process will involve a review of your academic performance in semester I assessments in addition to a short discussion with you to ensure the course you progress on is most suitable for you.

The award of the post-graduate degree of Master of Research *via* full time study requires you to complete 4 modules (180 credits) over one year's study period. Extension of this period may be granted by the University in exceptional circumstances. The modules comprising the MRes Cancer Biology degree are shown in Table 1, and the structure, so that the credits can be gained, is shown in Figure 1. All classes will be held on the UCLan Preston campus.

Table 2: Modules for MRes Cancer Biology

Module Code	Title	Semester	Credits
BL4012	Introduction to Cancer and its Management	1	20
BL4013	Research Methods	1	20
BL4014	Research Proposal	1	20
BL4016	MRes Research Project	2 & 3	120

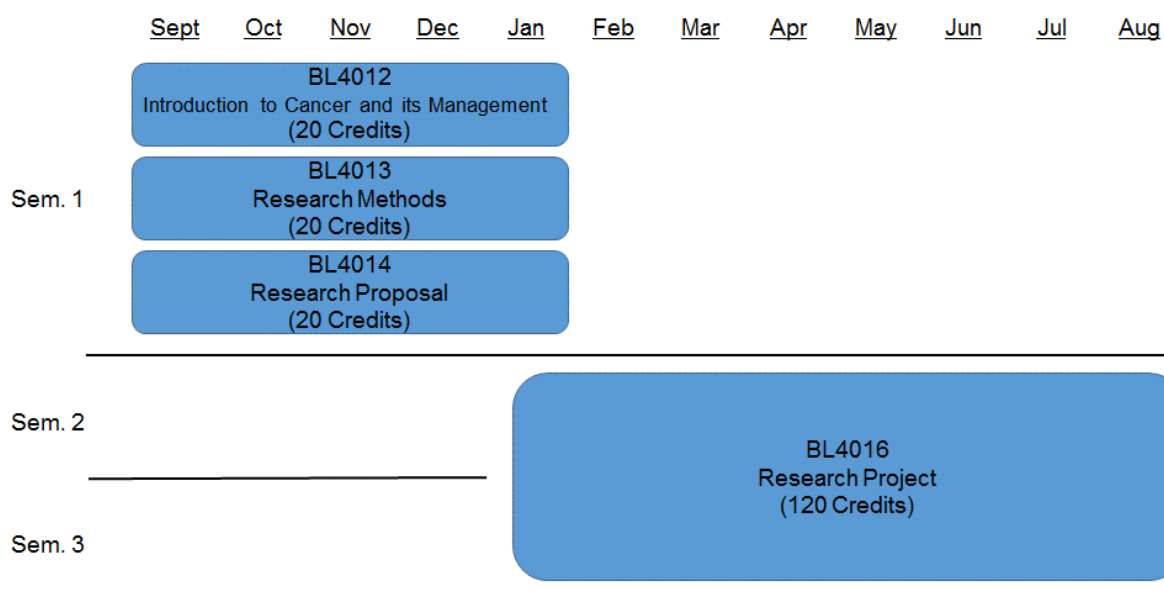


Figure 1: Programme of Modules for MRes Cancer Biology

2.2 Modules available

Each module is a self-contained block of learning with defined aims, learning outcomes and assessment. A standard module is worth 20 credits. It equates to the learning activity expected from one sixth of a full-time undergraduate year. Modules may be developed as half or double modules with credit allocated up to a maximum of 120 credits per module.

BL4012 Introduction to Cancer and its Management

The module aims to develop the students' understanding of the molecular and cellular processes underlying normal cell growth, and the how these may be disrupted, leading to oncological disease.

BL4013 Research Methods

This module will enable students to develop an appreciation and understanding of current analytical technologies used in the diagnosis, treatment and monitoring of neoplastic disease and cancer research. The module also aims to provide students with transferable career skills relevant to clinical sciences including the communication, planning and management of scientific ideas and data presentation.

BL4014 Research Proposal

The aim of this module is to enable the students to design an independent research project to be undertaken within a defined time and with a controlled budget.

BL42016 MRes Research Project

The module aims to further develop the student's ability to formulate hypotheses and through the process of effective decision making, employ relevant experimental strategies. It will expand the student's ability to critically evaluate experimental methods, analyse data and provide the means whereby students can present research data both orally and in the form of a written scientific report in the style of a scientific journal article.



2.3 Course requirements

Modules will be received at the School Postgraduate Assessment Board at the end of each semester.

Unless specifically stated in the module descriptors, you will be expected to receive a pass mark in both coursework and examination components of any module employing a mix of these two elements.

Students not achieving a passing module mark may be re-assessed in the deficient component(s).

2.4 Module Registration Options

Your Course Leader, Dr Gail Welsby, encourages you to discuss any concerns regarding your academic performance with her during the course of your studies. Please e-mail GWelsby@uclan.ac.uk to arrange an appointment.

2.5 Study Time

2.5.1 Weekly timetable

A timetable will be available once you have enrolled on the programme, through the student portal.

2.5.2 Expected hours of study

The normal amount of work involved in achieving a successful outcome to your studies is to study for 10 hours per each credit you need to achieve – this includes attendance at UCLan and time spent in private study. 20 credits is a standard module size and equals 200 notional learning hours.

Normally you will have face-to-face contact with a member of academic staff ranging from 10-15 hours/week. This contact will be in the form of lectures, laboratory sessions, tutorials and workshops. All the modules studied under the course have module booklets which provide you with module outline and aims. These booklets can be accessed via ELearn (Blackboard).



2.5.3 Attendance Requirements

You are required to attend all timetabled learning activities for each module. Notification of illness or exceptional requests for leave of absence must be made to by emailing the Foster Hub

(FosterHubattendance@uclan.ac.uk) **from your UCLan email address** by 9.30am on the morning of your absence to notify us that you will be

absent and which modules you will miss.

You will be required to complete a form (which will be emailed to you from Foster Hub or can be found in the Forms folder on your Course area on Blackboard) where you should detail the reason you cannot attend and the classes you will miss and email this back to (FosterHubattendance@uclan.ac.uk).

If your absence is due to illness you will be required to submit a medical note to the Foster Hub for illness over 7 days in duration. Reasons other than sickness must be discussed and authorised in advance with your Course Leader or Module Tutor.

If you do not e-mail to report your absence, the absence will be classed as unauthorised, unless appropriate documentary evidence (e.g. medical note) is provided.

Attendance responsibilities for international students

For students from overseas and non-EU countries it is very important that you understand your responsibilities after enrolling; these are broadly defined as follows:

1. You **MUST** keep UCLan informed of your contact details at all times; it is your responsibility to inform UCLan if your contact details change. If you do change your term time address and/or phone number, please inform the Course Administration Service at the Foster Hub (FB058).
2. You **MUST** attend your course of study regularly; under the Points Based System (PBS), UCLan is obliged to tell UK Visas and Immigration (UKVI) if you withdraw from a course, defer or suspend their studies, or if you fail to attend the course regularly. If your studies are sponsored by a company or government agency we may have an obligation to provide them with information about your attendance and progression.
3. You **MUST** comply fully with the working conditions of your visa.

4. You MUST inform UCLan immediately of any change in your personal circumstances (eg. marriage/civil partnership/cohabitation/birth of a child in the UK; change in dependant circumstances; divorce; dissolution of civil partnership).

The penalties for not complying with the Points Based System (PBS)

Penalties for failing to comply with PBS will be implemented by UKVI and may be severe and long-lasting. Penalties may include your removal from the UK and/or your exclusion from the UK for a number of years.

Please refer to the 'Regulations for the conduct of students' for clarification on attendance requirements and penalties:

http://www.uclan.ac.uk/study_here/assets/regulations_for_the_conduct_of_students_1819.pdf

Attendance is normally monitored through SAM and you are able to check your attendance record through myUCLan.

Please note that absence for reasons other than sickness must be discussed and agreed in advance with your Course Leader or Module Tutor as they would have to authorise any absence. If you do not do this, your absence will be classed as unauthorised.

Unauthorised absence is not acceptable and may attract academic penalties and/or other penalties.

Students who do not respond to communications concerning continuous unauthorised absence may be deemed to have withdrawn from the course. The date of withdrawal will be recorded as the last day of attendance.

Please note that in any cases of absence (authorised or otherwise) it is your responsibility to find out what material you have missed, and by negotiation with staff (and perhaps other students) to catch up with your general learning and especially the work required for assessments.

If you have not gained the required authorisation for leave of absence, do not respond to communications from the University and if you are absent for four weeks or more, you may be deemed to have withdrawn from the course. If this is the case, then the date of withdrawal will be recorded as the last day of attendance.

3. Approaches to teaching and learning

3.1 Learning and teaching methods

Fundamentally, you are committed to study diligently and systematically on your chosen degree programme in order to learn and understand. We expect you to acquire new knowledge, general (transferable) and subject-specific skills during your time in the School.

The type of learning that you will acquire is indicated in the Programme Specifications for the course, include at the end of this Handbook. Learning is generally expressed in the form of Learning Outcomes and these are descriptions of what you will be able to do upon

completion of your Masters degree course as a whole, or upon completion of an individual module.

All module descriptors list the Learning Outcomes that you are expected to demonstrate upon completion and the purpose of assessments (see Section 5) is to test your success in achieving these learning outcomes.

Learning is an active process and requires your engagement and commitment. This means that you will only be able to meet the Learning Outcomes of each module (and ultimately your course as a whole) if you commit yourself to:

1. Attending the timetabled sessions.
2. Completion of assessment requirements (including prompt submission of coursework and attendance at all examinations).
3. Supplementing the taught sessions by reading and using all learning material recommended by the Module tutor – this out of class investment on your part is specified as ‘directed learning’ or ‘independent learning’.
4. Playing an active role in seminars tutorials, group work and in-class discussions/debates.

The majority of modules have been divided into a number of specific topics, where lectures will be delivered by recognised specialists in the field who will guide you on current state of development of the subject, as well as indicating future developments. This will be supported by independent learning using a case study/problem solving/data interpretation approach. You will be given guided reading based on the current literature and will be expected to work independently to gain further information on the topic, thereby extending your knowledge and understanding beyond the lecture material. Your learning process will culminate in submitting assignments which require assimilation and expression of the knowledge and understanding gained during formal guided and independent learning.

The final semester involves a laboratory-based research project, where you will be working independently on a specific topic of interest to a research group within the School. The project constitutes a key element in the programme and provides you with the opportunity to enhance your practical skills and engender a spirit of enquiry in an area of research associated with one or more specialist disciplines. You will become experienced in research methods, develop the ability to critically appraise information and display logical and literary skills in the final project report. The project will be housed within the School research laboratories under the supervision of research active staff.

3.2 Study skills

The University has an excellent study skills support facility for students called **WISER**. WISER is an acronym for the two ways in which you may wish to make use of this service.

Walk-In Study Enhancement through Review drop in, one to one *tutorial consultations*, which is available to all students during term-time. The focus is on specific and individual needs.

Wiser Interactions for Study Enhancement and Review *workshops* on topics of direct relevance to students’ study needs. The workshops are not credited and are weekly per semester. See The Student Portal for further details.

WISER <http://www.uclan.ac.uk/students/study/wiser/index.php>

For international students, you may wish to access the services offered by the UCLan International Office Student Support Team.



3.3 Learning resources

3.3.1 Learning Information Services (LIS)

Extensive resources are available to support your studies provided by LIS – library and IT staff. Take advantage of the free training sessions designed to enable you to gain all the skills you need for your research and study. The library opening times can be accessed at:

http://www.uclan.ac.uk/students/study/library/opening_hours.php

3.3.2 Electronic Resources

LIS provide access to a huge range of electronic resources – e-journals and databases, e-books, images and texts.

Additional materials will be signposted by individual tutors, where needed, on Blackboard online.

3.4 Personal development planning

The School's PDP programme is based around core modules and assessments rather than stand-alone modules. You are introduced to the idea of PDP and career planning through sessions in induction week, including a talk from a careers advisor or employer and meetings with your academic advisor. Reflection and self-assessment on your achievements and goal setting is supported by linking selected coursework to the reflection process. Each course team has identified the coursework to be included in the scheme so that it covers a wide range of skills.



3.5 Preparing for your career

Your future is important to us, so to make sure that you achieve your full potential whilst at university and beyond, your course has been designed with employability learning integrated into it. This is not extra to your degree, but an important part of it which will help you to show future employers just how valuable your degree is. These “Employability

Essentials” take you on a journey of development that will help you to write your own personal story of your time at university:

- To begin with, you will explore your identity, your likes and dislikes, the things that are important to you and what you want to get out of life.
- Later, you will investigate a range of options including jobs and work experience, further postgraduate study and self-employment.
- You will then be ready to learn how to successfully tackle the recruitment process.

You might use a careers tool such as Pebblepad, the university's e-portfolio system, which will leave you with a permanent record of all the fantastic things you have achieved during your time at UCLan.

It's your future: take charge of it!

[Careers](#) offers a range of support for you including:

- career and employability advice and guidance appointments
- support to find work placements, internships, voluntary opportunities, part-time employment and live projects
- workshops, seminars, modules, certificates and events to develop your skills

Daily drop in service available from 09:00-17:00 for CV checks and initial careers information. For more information, access our careers and employability resources via the Student Portal.

4. Student Support

We are sure that in the next few days you will make friends with people on your course and this friendship could last for much longer than the year you will be at UCLan. If there are any questions or queries you may wish have answered, your first port of call is normally your Course Leader.

There is always one of the School's administration staff available to provide some guidance and the office is located on the ground floor of Foster Hub (FB058).

The 'i' located in the library is also a very good source of information and they are always happy and willing to provide advice on a variety of areas.

A student representative of the course will be elected during the first few weeks of the course and they are also an important contact.



4.1 Academic Advisors

You will be assigned an Academic advisor during the Welcome Week. The Academic advisor will generally be a member of the Academic Staff who has a good knowledge and understanding of your course and is most likely involved to some degree in teaching specific material covered in your course.

The role of the Academic advisor is to meet regularly with you and to provide a focal point for academic development, to provide individual feedback on progress, to help identify areas requiring improvement and discuss strategies for achieving this, and to monitor attendance and progress through the course.

The Academic advisor also provides academic guidance to students following Assessment Boards. In addition, Academic advisor should provide personal support, taking account of current problems in the student's life and be available for informal appointments through email or requests via availability sheets posted on staff doors or on-line appointment sheets. Students are also supported by the Course Leaders.

When appropriate, your Academic advisor may well refer you to specialized central University support, e.g. WISER, and may liaise with Futures to help provide you with careers guidance.

4.2 Students with disabilities

If you have a disability that may affect your studies, please either contact the Disability Advisory Service - disability@uclan.ac.uk - or let one of the course team know as soon as possible. With your agreement information will be passed on to the Disability Advisory Service. The University will make reasonable adjustments to accommodate your needs and to provide appropriate support for you to complete your study successfully. Where necessary, you will be asked for evidence to help identify appropriate adjustments.

The disability lead within the School of Pharmacy and Biomedical Sciences is:

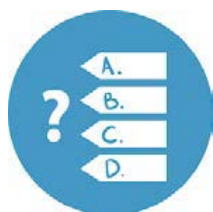
Dr Lisa Shaw (LShaw1@uclan.ac.uk).

4.3 Students' Union

The Students' Union offers thousands of volunteering opportunities ranging from representative to other leadership roles. We also advertise paid work and employ student staff on a variety of roles. You can find out more information on our website:

<http://www.uclansu.co.uk/>

5. Assessment



5.1 Assessment Strategy

Please note that all modules will be assessed. You are expected to attempt all required assessments for each module for which you are registered, and to do so at the times scheduled unless authorised extensions, special arrangements for disability, or extenuating circumstances allow you to defer your assessment.

The School recognises the main purposes of assessment as the diagnosis of strengths and weaknesses; encouragement to be involved in determining your own performance; and testing the achievement of the learning outcomes. Assessment is continuous and comprises formative and summative methods. Formative assessment encourages the development of personal self-awareness and self-evaluation such that corrective change can be instigated by the individual. This formative feedback is central to the development of the student from a dependent to independent worker which is at the heart of the programme philosophy. The nature of formative assessment varies between modules. In some there are short tests or essays, in others there is informal feedback via activities such as tutorials or discussion of experiment results during laboratory sessions.

The summative assessment strategy in each module is designed to best test the achievement of the module learning outcomes. A range of assessment methods are utilised including essays; data interpretation/analysis; both written and practical reports; group and individual presentations, phase tests/drop quizzes; posters; examinations; competence assessments; research project reports. Some of the above are on a group basis, and in this case there is an element of peer assessment. Thus assessments are extremely important

and you should devote sufficient time to each one and plan your work accordingly. The assessments of each module address specific learning outcomes listed in the programme specifications, so by the time you complete your course, you should have covered all the learning outcomes.

The criteria used for marking work at Masters level can be found in Section G of UCLan's Academic Regulations.

Aims and objectives of Assessment strategy

The aims of the assessment on non-project work are:

- To assist in the teaching/learning process.
- To provide a measure of the extent to which you are benefiting from the course.
- To indicate to what extent the course is achieving its own aims, by testing your ability to meet the Learning Outcomes of your individual modules and the Masters degree programme as a whole.

The objectives of the assessment are:

- To provide you with feedback on your level of competence with the assessed material and to advise of strategies which could be used to improve future performance.
- To alert staff to individuals or collective problems students may have with aspects of course material.

The course programme is designed to spread the assessment load as far as possible, however, there may be some bunching towards the conclusion of each of the first two semesters. You are strongly advised to make an early start on the preparation of assignments and to plan well ahead in order to avoid an accumulation of work that could adversely affect your performance.

You will find details of the assessments of individual modules in the relevant Module Descriptors. In addition to the essential information in the module descriptors, your Module Booklets (provided by the Module Tutor at the first timetabled session and on the module ELearn (Blackboard) site will give further details on the assessment requirements.

5.2 Notification of assignments and examination arrangements

Full details relating to the assessment of your course, (including policies on deadlines, penalties for late submission, plagiarism and feedback) can be found on ELearn (Blackboard).

Precise details of the timing and nature of individual assignments will be made available within individual Module Booklets, provided at the beginning of each semester.

At the discretion of the Module Tutor this information may be supplemented with additional detail (including the assessment criteria – if not available in Module Booklet) which will be

given out during taught classes when the individual assignments are set, and well in advance of the submission date.

The marking criteria that are used to assess your work can be found in the appendices.

5.3 Referencing

It is normal School policy to use the Harvard style of referencing. Below are a few examples, you will be given a lot more guidance in your modules.

Citing authors in the text:

Single author: The salt form of a drug affects the dissolution rate (Smith, 2010)

Two authors: The salt form of a drug affects the dissolution rate (Smith and Jones, 2010)

Three or more authors: The salt form of a drug affects the dissolution rate (Smith et al., 2010)

Citations for a reference list:

Wan, K. W. (2004). Poly(amidoamine) salt form: effect on pH-dependent membrane activity and polymer conformation in solution. *Biomacromolecules*. 5(3):1102-9

5.4 Confidential material

Although you are not expected to access confidential information during the course, you still need to be aware of ethical and legal responsibilities to respect confidentiality and maintain anonymity of individuals and organisations.

5.5 Dealing with difficulties in meeting assessment deadlines

Assignments must be submitted no later than the date on your assignment instructions / brief. If you anticipate that you will have difficulty in meeting assessment deadlines or you have missed or are likely to miss in-semester tests you must report this at the earliest possible opportunity to the Hub at the Foster Hub in the Foster Building (01772 893500) and no later than 9.30 am on the morning when the work is due in or you have an in-semester test.

Authorisation of the late submission of work requires written permission. Your School is authorised to give permission for **one extension period of between 1 and 10 working days** where appropriate evidence of good reason has been accepted and where submission within this timescale would be reasonable taking into account your circumstances ([Academic Regulations](#)).

You should complete and submit an extension request form, with any supporting evidence, to your Hub (PBSExtensions@uclan.ac.uk). Further information is available on the Student Portal at: http://www.uclan.ac.uk/students/study/examinations_and_awards/extensions.php

We aim to let you know if the extension has been granted within 1 working day of the receipt of the request.

If you are unable to submit work within 10 working days after the submission date due to verifiable extenuating circumstances, you may submit a case for consideration in accordance with the University's Policies and Procedures on Extenuating Circumstances ([Academic Regulations](#) and [Assessment Handbook](#)).

5.5.1 Extenuating circumstances

Some students face significant events in their personal life that occur after their course has started, which have a greater impact on their studies than can be solved by the use of an extension. If this applies to you, the University is ready to support you both with regard to your course and your personal wellbeing through a process called Extenuating Circumstances (see [Academic Regulations](#) and [Assessment Handbook](#)).

Normally extenuating circumstances will relate to a change in your circumstances since you commenced your course, which have had a significant, adverse effect on your studies. Everyday occurrences such as colds or known conditions such as hay-fever will not qualify unless the effects are unusually severe and this is corroborated by a medical note. The University does not look sympathetically on absences or delays caused by holiday commitments or by work commitments in the case of full-time students. The normal work commitments of part-time students would not constitute an extenuating circumstance. A disability or learning difficulty does not constitute an extenuating circumstance (see [Academic Regulations](#)).

Further information is available on the Student Portal at:

http://www.uclan.ac.uk/students/study/examinations_and_awards/extensions.php

You can apply for extenuating circumstances online via myUCLan. You must apply no later than 3 days after any examination or assessment submission date. Do not wait until you receive your assessment results to submit a claim. It is in your own interests to submit the claim as soon as possible.

You will be expected to re-submit claims for extenuating circumstances for each semester. All evidence that is provided relating to extenuating circumstances will be treated in a sensitive and confidential manner. Supporting evidence will not be kept for longer than is necessary and will be destroyed shortly after the end of the current academic year.

In determining assessment recommendations, Assessment Boards will consider properly submitted claims from students who believe their performance has been adversely affected by extenuating circumstances. N.B. Assessment Boards are not permitted to alter individual assessment marks to take account of extenuating circumstances ([Academic Regulations](#) and [Assessment Handbook](#)).

5.5.2 Late submissions

If you submit work late and unauthorised, a universal penalty will be applied in relation to your work:

- If you submit work within 5 working days following the published submission date you will obtain the minimum pass mark for that element of assessment.

- Work submitted later than 5 working days after the published submission date will be awarded a mark of 0% for that element of assessment.
- Unauthorised late submission at resubmission will automatically be awarded a mark of 0% for that element of assessment.

5.6 Feedback Following Assessments

UCLan is committed to giving you clear, legible and informative feedback for all your assessments (Academic Regulations). You are expected to review and reflect on your feedback and learn from each experience to improve your performance as you progress through the course.

You will be provided with generic feedback for in-module formative and summative elements of assessment which contribute to a module within 15 working days of the scheduled submission or examination date. Generic feedback on end of module assessment and dissertations will be made available within 15 days of publication of results. Feedback may be oral, written, posted on a website or other.

5.7 Cheating, plagiarism, collusion or re-presentation

Please refer to the information included in section 6.6 of the University Student Handbook for full definitions. The University uses an online Assessment Tool called Turnitin. A pseudo-Turnitin assignment will be set up using the School space on Blackboard to allow students to check as many drafts as the system allows before their final submission to the 'official' Turnitin assignment. Students are required to self-submit their own assignment on Turnitin and will be given access to the Originality Reports arising from each submission. In operating Turnitin, Schools must take steps to ensure that the University's requirement for all summative assessment to be marked anonymously is not undermined and therefore Turnitin reports should either be anonymised or considered separately from marking. Turnitin may also be used to assist with plagiarism detection and collusion, where there is suspicion about individual piece(s) of work.

You are required to sign a declaration indicating that individual work submitted for an assessment is your own.

If you attempt to influence the standard of the award you obtain through cheating, plagiarism or collusion, it will be considered as a serious academic and disciplinary offence as described within the [Academic Regulations](#) and the [Assessment Handbook](#) .

- Cheating is any deliberate attempt to deceive and covers a range of offences described in the Assessment Handbook.
- Plagiarism describes copying from the works of another person without suitably attributing the published or unpublished works of others. This means that all quotes, ideas, opinions, music and images should be acknowledged and referenced within your assignments.
- Collusion is an attempt to deceive the examiners by disguising the true authorship of an assignment by copying, or imitating in close detail another student's work - this includes with the other student's consent and also when 2 or

more students divide the elements of an assignment amongst themselves and copy one another's answers. It does not include the normal situation in which you learn from your peers and share ideas, as this generates the knowledge and understanding necessary for each individual to independently undertake an assignment; nor should it be confused with group work on an assignment which is specifically authorised in the assignment brief.

- Re-presentation is an attempt to gain credit twice for the same piece of work.

Please pay attention to the plagiarism and writing exercise in the induction week to help you avoid plagiarism and re-presentation of your work.

The process of investigation and penalties which will be applied can be reviewed in the Assessment Handbook. If an allegation is found to be proven then the appropriate penalty will be implemented:

In the case of a single offence of cheating, plagiarism, collusion or re-presentation:

- the penalty will be 0% for the element of assessment, and an overall fail for the module.
- the plagiarised element of assessment must be resubmitted to the required standard the penalty will be 0% for the element of assessment, and an overall fail for the module.
- the plagiarised element of assessment must be resubmitted to the required standard and the mark for the module following resubmission will be restricted to the minimum pass mark.
- when it is detected for the first time on a resubmission for an already failed module, no further resubmission for the module will be permitted, and the appropriate fail grade will be awarded.

In the event of a repeat offence of cheating, plagiarism, collusion or re-presentation (irrespective of whether the repeat offence involves the same form of unfair means) on the same or any other module within the course:

- the appropriate penalty will be 0% for the module with no opportunity for re-assessment. This penalty does not preclude you being able to retake the module in a subsequent year.

The penalties will apply if you transfer from one UCLan course to another during your period of study and module credits gained on the former course are transferred to the current course.

Contact the Students' Union Advice and Representation Centre by emailing: suadvice@uclan.ac.uk for support and guidance.

The University uses an online Assessment Tool called Turnitin. A pseudo-Turnitin assignment will be set up using the School space on Blackboard to allow students to check as many drafts as the system allows before their final submission to the 'official' Turnitin assignment. Students are required to self-submit their own assignment on Turnitin and will be given access to the Originality Reports arising from each submission. In operating Turnitin, Schools must take steps to ensure that the University's requirement for all

summative assessment to be marked anonymously is not undermined and therefore Turnitin reports should either be anonymised or considered separately from marking. Turnitin may also be used to assist with plagiarism detection and collusion, where there is suspicion about individual piece(s) of work.

6. Classification of Awards

The University publishes the principles underpinning the way in which awards and results are decided in [Academic Regulations](#). Decisions about the overall classification of awards are made by Assessment Boards through the application of the academic and relevant course regulations.



7. Student Feedback

You can play an important part in the process of improving the quality of this course through the feedback you give.

In addition to the on-going discussion with the course team throughout the year, there are a range of mechanisms for you to feedback about your experience of teaching and learning. We aim to respond to your feedback and let you know of our plans for improvement.

At the end of each academic year we review all our modules. During this process we take into account student views, which are discussed at Staff Student Liaison Committee meetings. Following the discussions at Module Review, we may decide, for example to alter the number and/or type of module coursework assessments. Alternatively, we may choose to leave the module as it is for the next academic year.

The Students' Union and University work closely together to ensure that the student voice is heard in all matters of student-life. We encourage students to provide constructive feedback throughout their time at university, through course reps, surveys and any other appropriate means,

The Union's Student Affairs Committee (SAC), members of Students' Council and School Presidents each have particular representative responsibilities, and are involved with decision making committees as high as the University Board. Therefore, it is very important students engage with the democratic processes of the Students' Union and elect the students they see as most able to represent them.

7.1 Student Staff Liaison Committee meetings (SSLCs)

Details of the Protocol for the operation of SSLCs is included in section 8.2 of the University Student Handbook.

A course representative is a student who represents their fellow students' views and opinions to the course team, school, university and students' union. Course representatives work proactively and diplomatically to improve the academic and non-academic experiences of students.

7.1.1 Course Representative

The role of a course representative is extremely beneficial to both students on your course and the university. It enables students to have ownership of their student experience and voice their opinions and share positive practice with the course team, primarily the Student Staff Liaison Committee Meetings (see below).

Course representatives will be elected every year either in April or September. Alongside receiving recognition, support and respect being a course representative is a great opportunity to enhance your employability skills. If you are interested in becoming a course representative and wish to find out more about the role visit the Students' Union website or by emailing: coursereps@uclan.ac.uk.

School Presidents meanwhile are annually elected representatives who voice the opinions of students within each school. They communicate and engage with students in their school to gain feedback and work in partnership with senior management to create positive change.

They are also trained to support and signpost course representatives where needed. If you wish to find out who is your School President or more about the role visit the Students' Union website or email: coursereps@uclan.ac.uk.

7.1.2 SSLC Meetings

The purpose of a SSLC meeting is to provide the opportunity for course representatives to feedback to staff about the course, the overall student experience and to inform developments which will improve future courses. These meetings are normally scheduled once per semester.

Meetings will be facilitated using guidelines and a record of the meeting will be provided with any decisions and / or responses made and / or actions taken as a result of the discussions held. The meetings include discussion of items forwarded by course representatives, normally related to the following agenda items (dependent on time of year).

The course team encourage student feedback in all areas and recognise that additional items for discussion may also be raised at the meeting:

- Update on actions completed since the last meeting
- Feedback about the previous year – discussion of external examiner's report; outcomes of National /UCLan student surveys.
- Review of enrolment / induction experience;
- Course organisation and management (from each individual year group, and the course overall);
- Experience of modules - teaching, assessment, feedback;
- Experience of academic support which may include e.g. Personal Development Planning, academic advisor arrangements;
- Other aspects of University life relevant to student experience e.g. learning resources, IT, library;
- Any other issues raised by students or staff.

During induction week your course leader will ask you to volunteer to be a representative. Normally the representatives elected will continue in the post for the duration of the course. However, this is not mandatory and new representative(s) can be elected if required.

Representatives will be notified by the Hub of the date and times of SSLC meetings. There will be an agenda and minutes will be taken. Once the minutes have been agreed by the Chair of the SSLC they will be emailed to the representatives.

7.3 Complaints

The University recognises that there may be occasions when you have cause for complaint about the service you have received, when this happens, the complaints procedure is intended to provide an accessible, fair and straightforward system which ensures as effective, prompt and appropriate response. Click on this link for more information [Complaints Procedure](#)

8. Appendices

8.1 Programme Specification(s)

UNIVERSITY OF CENTRAL LANCASHIRE

Programme Specification

This Programme 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.

Sources of information on the programme can be found in Section 17

1. Awarding Institution / Body	University of Central Lancashire
2. Teaching Institution and Location of Delivery	University of Central Lancashire; Preston Campus
3. University School/Centre	School of Pharmacy and Biomedical Sciences
4. External Accreditation	None
5. Title of Final Award	MRes Cancer Biology
6. Modes of Attendance offered	1 year full-time study 2 years part-time study
7a) UCAS Code	n/a
7b) JACS Code (only required for <u>NEW</u> programmes)	C131
8. Relevant Subject Benchmarking Group(s)	None
9. Other external influences	None
10. Date of production/revision of this form	February 2018
11. Aims of the Programme	
<ul style="list-style-type: none"> To provide a sound educational platform, appropriate to Masters level, from which students may launch their careers in professions allied to biomedicine. 	

- To enable students to summarise, interpret and critically analyse current analytical technologies used in the provision of a comprehensive service in the diagnosis, treatment and monitoring of cancer.

- To evaluate and determine legislative and ethical issues pertinent to cancer research and the development and introduction of new therapies.

- To develop research skills to postgraduate level necessary for independent and competent execution of scientific research.

- To involve the learner in a stimulating educational environment in which students are encouraged to achieve personal growth to an advanced level, in terms of a wide range of skills including communication, numeracy, IT, independence, interpersonal and group working skills.

12. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

- A1. Appraise and discuss the principles underpinning cancer biology and analytical instrumentation applicable to research, diagnosis, prognosis and management of cancer.
- A2. Evaluate current biotechnological and pharmaceutical developments and their applications to cancer through appraisal of both philosophical and ethical issues.
- A3. Apply knowledge/theory to new situations e.g. the formation of hypotheses and experimental design.

Teaching and Learning Methods

A range of teaching and learning methods will be used including lectures; workshops; instruction in the use of a range of IT packages; oral and poster presentations; case studies and a project report. All students will be able to access their course-related material (course and module information, lecture notes and assessment information) via the Blackboard VLE.

Assessment methods

Students will demonstrate their knowledge and understanding through a combination of oral and poster presentations; problem-based learning; scientific reports and paper critiques. Coursework will be submitted electronically via Turnitin where possible. The final module mark is based on a weighted aggregate of all assignments in that module.

B. Subject-specific skills

- B1. Critically analyse knowledge of concepts, principles and theories relevant to cancer biology and therapy.
- B2. Critically discuss the necessary legal, ethical, safety and research governance issues relevant to cancer research and therapy.
- B3. Manipulate, interpret and critically report conclusions on a range of data and problems encountered in clinical science.
- B4. Select appropriate technology to enable a scientific research project to be undertaken.

Teaching and Learning Methods

A range of teaching and learning methods will be used including lectures; workshops; instruction in the use of a range of IT packages; oral and poster presentations; case studies and a project report. All students will be able to access their course-related material (course and module information, lecture notes and assessment information) via the Blackboard VLE.

Assessment methods

Students will demonstrate their knowledge and understanding through a combination of written reports, oral presentations, poster presentations, examinations and an extended research project. Coursework will be submitted electronically via Turnitin where possible. The final module mark is based on a weighted aggregate of all assignments in that module.

C. Thinking Skills

- C1. Use and integrate discipline specific theories, concepts and principles.
- C2. Critically analyse a range of data and information derived either experimentally or from within scientific literature / data banks and evaluate it critically supported by logical and structured argument.
- C3. Collect and integrate several lines of evidence to develop and test theories, hypotheses and concepts.
- C4. Apply knowledge and understanding to address familiar and unfamiliar problems.
- C5. Critically appraise the moral and ethical issues raised by the process of clinical investigation.

Teaching and Learning Methods

A range of teaching and learning methods will be used including lectures; practical work, paper critique exercises; problem based learning (PBL) / case studies. An extended research project will develop the students research skills, including selection and interpretative skills and mastery of using primary and secondary sources. All students will be able to access their course-related material (course and module information, lecture notes and assessment information) via the Blackboard VLE.

Assessment methods

Students will demonstrate their knowledge and understanding through a combination of written reports, oral and poster presentations, and an extended research project. The research project will be assessed by a written report and a viva voce, where the students will critically reflect on their data and its contribution to the research field. Coursework will be submitted electronically via Turnitin where possible. The final module mark is based on a weighted aggregate of all assignments in that module.

D. Other skills relevant to employability and personal development

- D1. Communicate through a range of media adopting an appropriate scientific style.
- D2. Display advanced interpersonal and teamwork skills.
- D3. Use IT effectively for information retrieval, communication and presentation.
- D4. Collate and analyse information relevant to a particular problem/proposal and generate a satisfactory report and conclusion.
- D5. Demonstrate advanced skills in self-management and professional development.

Teaching and Learning Methods

A range of teaching and learning activities will be used. Coursework is required to be word processed; workshops developing IT skills in the use of appropriate IT sources, including the World Wide Web, the use of databases and suitable IT analytical packages; workshops on the library and literature searching; presentations; practical work incorporating numeracy and statistics; teamwork through tutorials, case studies and problem based learning exercises and problem solving activities. All students will be able to access their course-related material (course and module information, lecture notes and assessment information) via the Blackboard VLE.

Assessment methods

Students will demonstrate their knowledge and understanding through a combination of written reports (including the research project); presentations; data analysis and posters. Coursework will be submitted electronically via Turnitin where possible. The final module mark is based on a weighted aggregate of all assignments in that module.

13. Programme Structures				14. Awards and Credits
Level	Module Code	Module Title	Credit rating	
Level 7	BL4012	Introduction to Cancer	20	Master of Research Cancer Biology Requires 180 credits at Level 7 or above Postgraduate Certificate Cancer Biology Requires a minimum of 60 credits at level 7
	BL4013	Research Methods	20	
	BL4014	Research Proposal	20	
	BL4016	MRes Research Project	120	
15. Personal Development Planning				
<p>Students are initially introduced to PDP during induction week when they are introduced to the central processes of self-management, independent learning and reflective practice. Following induction, students must actively engage with elements of PDP in order to pass key pieces of coursework (e.g. the research proposal in BL4014; the lab notebook in BL4013 and BL4016). Career planning is supported through the University Careers service, with dedicated employability advisers for the School; Careers Fair and seminars given by School staff and external practitioners.</p>				
16. Admissions criteria * (including agreed tariffs for entry with advanced standing) <i>*Correct as at date of approval. For latest information, please consult the University's website.</i>				
<p>Students must hold one of the following:</p> <ol style="list-style-type: none"> 1. A minimum of a lower second class honours degree from a UK university or its equivalent in a biological discipline, for example Biochemistry, Physiology, Biomedical Science. Or 2. A qualification or experience deemed to be equivalent to the above. Plus 3. Students where English is not the first language need to demonstrate their ability in the English language through obtaining: IELTS at 6.5 or above Or TOEFL at 600 (paper) and 250 (CBE) with a TWE of 4 Or Other Accepted English Language Qualifications: <p>Those applicants seeking entry with appropriate experiences will be required to demonstrate the suitability of this experience both on application and at interview.</p>				

17. Key sources of information about the programme
<ul style="list-style-type: none">• University / School of Pharmacy and Biomedical Sciences web pages
<ul style="list-style-type: none">• MRes brochures and fliers
<ul style="list-style-type: none">• University Postgraduate Prospectus
<ul style="list-style-type: none">• Student Handbook

18. Curriculum Skills Map

Please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Level	Module Code	Module Title	Core (C), Compulsory (COMP) or Option (O)	Programme Learning Outcomes																
				Knowledge and understanding				Subject-specific Skills				Thinking Skills					Other skills relevant to employability and personal development			
				A1	A2	A3	B1	B2	B3	B4	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5
Level 7	BL4012	Introduction to Cancer and its Management	C	✓			✓				✓			✓		✓	✓	✓	✓	✓
	BL4013	Research Methods	C	✓	✓			✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
	BL4014	Research Proposal	C		✓	✓		✓		✓			✓	✓	✓	✓	✓	✓	✓	✓
	BL4016	MRes Research Project	C			✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓

Note: Mapping to other external frameworks, e.g. professional/statutory bodies, will be included within Student Course Handbooks

19. LEARNING OUTCOMES FOR EXIT AWARDS:

For **each exit award available**, list learning outcomes relating to the knowledge and understanding, subject specific skills, thinking, other skills relevant to employability and personal development that a typical student might be expected to gain as a result of successfully completing each level of a course of study.

For example, for a standard BA/BSc (Hons) award the exit award learning outcomes for CertHE (Level 4) and DipHE (Level 5), BA/BSc (Level 6) should be included; for a postgraduate Masters, this would normally be PGDip and PGCert.

Learning outcomes for the award of: _PGCert_Cancer Biology_

- A1. Discuss the principles underpinning the development, spread and resistance of cancers.
- A2. Review current biotechnological and pharmaceutical developments and their applications to cancer research, diagnosis, prognosis and management.
- A3. Apply knowledge/theory to formulate a hypothesis and experimental design.

- B1. Examine concepts, principles and theories relevant to cancer biology.
- B2. Interpret and report conclusions on a range of data and problems encountered in clinical science.
- B3. Select appropriate technology to enable a scientific research project to be undertaken.

- C1. Use and integrate discipline specific theories, concepts and principles.
- C2. Analyse data and information derived from within scientific literature / data banks and evaluate it, supported by logical and structured argument.
- C3. Collect and integrate evidence to develop and test theories, hypotheses and concepts.
- C4. Apply knowledge and understanding to address scientific problems.

- D1. Communicate through a range of media adopting an appropriate scientific style.
- D2. Display interpersonal and teamwork skills.
- D3. Use IT effectively for information retrieval, communication and presentation.
- D4. Analyse relevant information and generate a satisfactory scientific report and conclusion.
- D5. Demonstrate skills in self-management and professional development.

