

Liverpool John Moores University

Title: CANCER
Status: Definitive
Code: **6104BMBMOL** (122475)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
Laura Randle	Y
Kate Phillips	
Giles Watts	
Nick Bryan	
Darren Sexton	
Kenneth Ritchie	
Jari Louhelainen	
Andrew Evans	
Gordon Lowe	

Academic Level: FHEQ6 **Credit Value:** 20 **Total Delivered Hours:** 56
Total Learning Hours: 200 **Private Study:** 144

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	47
Off Site	2
Seminar	2
Tutorial	1
Workshop	2

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Exam	50	2
Presentation	Poster	Choice of titles provided by	50	

Category	Short Description	Description	Weighting (%)	Exam Duration
		tutors		

Aims

To provide a bench to bedside approach to cancer underpinning the key molecular and cellular events during initiation and progression of cancer, and an appreciation of diagnostic techniques and therapies available.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically discuss the hallmarks of cancer.
- 2 Evaluate current scientific literature, in order to prepare and present a scientific poster.
- 3 Evaluate the key principles of cancer diagnosis and therapy.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Exam	1	3
Prepare a scientific poster	2	

Outline Syllabus

The students' understanding of the cell cycle will be extended. The genetic basis of Cancer will be covered - changes in oncogenes, tumour suppressor genes, chromosomal alterations and DNA repair. Understanding of processes in carcinogenesis – chemical carcinogens and mutagens, genotoxicity tests, risk factors including effect of diet and nutrition - will be developed. The module will cover key features of specific types of cancers including tumour progression, benign and malignant, invasion and metastasis, immunology and cancer, aspects of diagnostics – histological and molecular techniques involved in identifying disease. Students will be introduced to therapeutics – classical and novel therapies, adverse effects - to modulating cellular defence mechanisms and to genetic counselling

Learning Activities

Lectures, workshops, offsite visit, seminar, tutorial

Notes

This course is designed to provide students with a holistic, bench to bedside overview to cancer biology, diagnostics and therapy. This module aims to consolidate students prior learning in genetics, histology, cell biology, molecular biology, chemistry, biochemistry within a disease model. The course is based around the hallmarks of cancer and enabling characteristics and novel therapies.