

## Liverpool John Moores University

Title: Cancer: from bench to bedside  
Status: Definitive  
Code: **6015BMBMOL** (117380)  
Version Start Date: 01-08-2018

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

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**Academic Level:** FHEQ6      **Credit Value:** 24      **Total Delivered Hours:** 50  
**Total Learning Hours:** 240      **Private Study:** 190

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	36
Off Site	2
Seminar	3
Tutorial	2
Workshop	5

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	AS1	Prepare and present a scientific poster	25	
Exam	AS2	Answer 2 out of 4 exam questions. All questions carry equal marks	50	2

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS3	Working in groups interpret and evaluate the data and produce a report to support your findings	25	

## Aims

*This module 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 Discuss the major steps in cancer development and progression in humans.
- 2 Discuss knowledge of the known causes of cancer including genetic components and carcinogens.
- 3 Outline the basic principles of diagnosis and therapy, interpret and evaluate simple clinical data

## Learning Outcomes of Assessments

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

Prepare a scientific poster	1	2	
Final Exam	1	2	3
Case Study	3		

## Outline Syllabus

- *Cell cycle and developmental biology*
- *Genetic basis of Cancer - changes in oncogenes, tumour suppressor genes, chromosomal alterations and DNA repair.*
- *Carcinogenesis – chemical carcinogens and mutagens, genotoxicity tests. Risk factors including effect of diet and nutrition.*
- *Key features of specific types of cancers including tumour progression, benign and malignant, invasion and metastasis.*
- *Diagnostics – histological and molecular techniques involved in identifying disease.*
- *Therapeutics – classical and novel therapies, adverse effects. Modulating cellular defence mechanisms*
- *Genetic counselling*

**Learning Activities**

Lectures, laboratory visit, workshops, case study, poster preparation and seminar.

**Notes**

To develop knowledge and understanding of cancer.