



## Module Definition Form (MDF)

<b>Module code: MOD006298</b>	<b>Version: 2 Date Amended: 14/May/2024</b>
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<b>1. Module Title</b>
Contemporary Issues in Medical Science

<b>2a. Module Leader</b>
Kanwar Virdee

<b>2b. School</b>
School of Allied Health and Social Care

<b>2c. Faculty</b>
Faculty of Health, Medicine and Social Care

<b>3a. Level</b>
6

<b>3b. Module Type</b>
Standard (fine graded)

<b>4a. Credits</b>
30

<b>4b. Study Hours</b>
300

<b>5. Restrictions</b>			
Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
<b>Courses to which this module is restricted:</b>			

## LEARNING, TEACHING AND ASSESSMENT INFORMATION

### 6a. Module Description

Broaden your understanding of the implications of contemporary medical research. Gain an understanding of pathological processes and cancer and explore a range of selected topical medical issues demanding media attention (e.g. mental illness, obesity, communicable diseases e.g. Ebola, HIV). With a strong biomedical focus, we'll explore causations, pathophysiology, medical signs and symptoms and investigation, diagnosis, prevention, and treatment of illnesses/diseases. Subsequently, you'll gain awareness of diverse issues such as why cells transform from benign to invasive, the prevalence, causes, morphological and molecular changes that characterise cancer cell phenotypes and treatment/prevention to the biological basis of MRSA or key emerging science, technologies and their applications such as the Human Genome Project or stem cell technology. We'll deliver sessions in the format of a journal club, where you'll present and critically evaluate relevant primary research papers to reinforce the purpose and need for evidence-based medicine.

### 6b. Outline Content

- Basic pathology – cell injury; adaptation and death; inflammation and repair.
- Neoplasia – classification, cancer cell characteristics; oncogenesis and tumour suppressor genes; multistep pathways and selected models e.g. colorectal carcinoma; signs, symptoms and syndromes; terminologies.
- Molecular and cellular carcinogenesis – molecular nature and behaviour of cancer cells; metastatic cascade.
- Aging – ageing at the macro-level and insights into aging and ageing theories.
- Basics of molecular genetics and the human genome project, for studying, predicting and monitoring human health; therapies, including stem cell therapy.
- Topical issues – selected conditions (e.g., tuberculosis, Ebola, meticillin-resistant *Staphylococcus aureus*, pneumonia etc.) including their systemic/cellular/molecular pathogenesis, aetiology, incidence and clinical aspects; antimicrobial chemotherapy and antibiotic resistance; vulnerable patient groups (compromised states).

### 6c. Key Texts/Literature

The reading list to support this module is available at: <https://readinglists.aru.ac.uk/>

### 6d. Specialist Learning Resources

None.

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Discuss general pathological principles and the range of tissue responses upon injury and repair
2	Knowledge and Understanding	Review the biomedical basis of current topical medical issues
3	Knowledge and Understanding	Appraise evidence-based recommendations for management and treatment of selected medical conditions
4	Intellectual, practical, affective and transferrable skills	Critically evaluate current advances and interventions in medical science
5	Intellectual, practical, affective and transferrable skills	Critically analyse scientific information and research relevant to the field of medical science

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	24	1-5	2 h hours per week combining lectures and seminars
Other teacher managed learning	12	1-5	2 h x 6 tutorials and group work
Student managed learning	264	1-5	Self-directed learning
TOTAL:	300		

**9. Assessment for the above Module Occurrence**

<b>Assessment No.</b>	<b>Assessment Method</b>	<b>Learning Outcomes</b>	<b>Weighting (%)</b>	<b>Fine Grade or Pass/Fail</b>	<b>Qualifying Mark (%)</b>
010	Coursework	1-5	50 (%)	Fine Grade	30 (%)

**Review paper on a contemporary topic within the field of medical science (3000 words)**

<b>Assessment No.</b>	<b>Assessment Method</b>	<b>Learning Outcomes</b>	<b>Weighting (%)</b>	<b>Fine Grade or Pass/Fail</b>	<b>Qualifying Mark (%)</b>
011	Examination Chelmsford	1-5	50 (%)	Fine Grade	30 (%)

**Examination (2hours) equivalent to 2000 words**

**In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7\*).**

**In addition, students are required to:**

- (a) achieve the qualifying mark for each element of fine graded assessment as specified above**
- (b) pass any pass/fail elements**

**[\* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]**