CLINICAL IMMUNOLOGY AND IMMUNOHAEMATOLOGY - 2024/5

Module code: BMS3054

Module Overview

A series of lectures covering the immunopathology, symptoms, treatment and diagnostic tests for range of clinically relevant diseases in the area of immunology and immunohaematology will be delivered by internal and external experts in the field thus aligning with the United Nation's sustainability development goal 3: Good health and wellbeing. This will include clinical immunology consultants, Biomedical Scientists and research active experts with the chance for students to interact with active practitioners in the field, highlighting employability prospects.. The focus of the coursework is on clinical case studies and is undertaken primarily as group work with a proportion of the marks based on individual and group work contribution assessment thus building resourcefulness and resilience. The coursework culminates in an oral presentation which builds on several empl.oyability skills.

Module provider

School of Biosciences

Module Leader

MARTINEZ ESTRADA Fernando Oneissi (Biosciences)

Number of Credits: 15

ECTS Credits: 7.5

Framework: FHEQ Level 6

Module cap (Maximum number of students): N/A

Overall student workload

Workshop Hours: 2

Independent Learning Hours: 84

Lecture Hours: 24

Seminar Hours: 3

Tutorial Hours: 3

Guided Learning: 10

Captured Content: 24

Module Availability

Semester 1

Prerequisites / Co-requisites

BMS2045 Introduction to Immunology

Module content

Indicative content includes:

Introduction to the module aims and coursework assessment

Immune responses infectious diseases

Mucosal immunity

Atherosclerosis

Hypersensitivity; Allergy

Autoimmune disease

Diabetes

Immunodeficiency

NHSBT, transfusion screening and reactions

Haemoglobinopathies

Histocompatability antigens, tissue typing and transplantation

Haemopoetic cell transplantation

Cancer immunology

Coursework (case study) presentations

Assessment pattern

Assessment type	Unit of assessment	Weighting
Oral exam or presentation	CASE STUDY PRESENTATION	40
Examination	INVIGILATED EXAM (90 MINUTES)	60

Alternative Assessment

Coursework Individual completion of case study

Assessment Strategy

The assessment strategy is designed to provide students with the opportunity to demonstrate:

- Integration of knowledge of molecular mechanisms of the immune system in a range of clinically relevant diseases by studying (in detail) case studies. Upon presentation of this work, the students have the opportunity to compare their findings with those of other case studies/diseases.

- Integration of knowledge of molecular mechanisms of the immune system with the pathogenesis of a range of clinically relevant immune and immunohaematological diseases/disorders through critical discussion of these in an extended essay in the exam.

- Group work contribution forms part of coursework mark and allows students to reflect on their individual contribution and that of others to the case study presentation.

Thus, the summative assessment for this module consists of:

- Group study of a clinically relevant case study with the assessment based on an oral presentation by the group individuals during teaching week 9 or 10
- Invigilated examination in which students write 1 extended essays from a choice

Formative assessment and feedback

- Formative feedback is given on preparation of the coursework presentation tutorials

- Formative feedback on examination style essay structure and content includes class discussion of past examination questions during revision week

Module aims

- Provide students with more in depth understanding of the principles of cellular and molecular immunology by examining the immunopathology of a range of diseases of current clinical importance thus aligning with the United Nation's sustainability development goal 3 : good health and well-being.
- Provide students with a deeper appreciation of the immunopathology of immunohaematology and transplantation thus aligning with the United Nation's sustainability development goal 3 : good health and well-being.

Learning outcomes

		Attributes Developed
001	Demonstrate an in-depth knowledge of the molecular and cellular events that occur during an immune response and a range of disorders of the immune system with an awareness of the global incidence of some examples, thus enhancing students' global and cultural capabilities. This learning outcome also aligns to the United Nation's sustainability development goal 3: good health and well-being.	KCT

		Attributes Developed
002	Have the ability to identify and discuss in-depth the clinical aetiology and management of a range of clinically relevant disorders of the immune system with some reference to availability/appropriateness of some therapies globally thus enhancing students' global and cultural capabilities. This learning outcome also aligns to the United Nation's sustainability development goal 3: good health and well-being.	KCPT
003	Have the ability to identify and discuss in-depth the clinical aetiology and management of immunohaematological and transplantation disorders with some reference to incidence of these disorders globally and the availability/appropriateness of some therapies globally thus enhancing students' global and cultural capabilities. This learning outcome also aligns to the United Nation's sustainability development goal 3: good health and well-being.	KCPT
004	To enhance students' resourcefulness and resilience through undertaking a teamwork task to present a cohesive response to a case study set on a clinically important immunological disease/disorder.	KCPT

Attributes Developed

C - Cognitive/analytical

K - Subject knowledge

T - Transferable skills

P - Professional/Practical skills

Methods of Teaching / Learning

The learning and teaching strategy is designed to:

- Provide lectures delivered by experts in the field of immunology and immunohematology (clinical immunology consultants, Biomedical Scientists, research active immunologists/haematologists) across a range of clinically relevant immunological and immunohamatological diseases/disorders.

- Allow integration of knowledge of molecular mechanisms of the immune system with disease pathogenesis of a range of immunological and haematological diseases/disorders.

The learning and teaching methods include:

- Lectures

- Coursework feedback/feedforward sessions/tutorials

- Case study coursework presentations

Indicated Lecture Hours (which may also include seminars, tutorials, workshops and other contact time) are approximate and may include in-class tests where one or more of these are an assessment on the module. In-class tests are scheduled/organised separately to taught content and will be published on to student personal timetables, where they apply to taken modules, as soon as they are finalised by central administration. This will usually be after the initial publication of the teaching timetable for the relevant semester.

Reading list

https://readinglists.surrey.ac.uk
Upon accessing the reading list, please search for the module using the module code: BMS3054

Other information

Resourcefulness and Resilience

Literature searching to answer coursework clinical case studies and background research for exam preparation. Students will build on their teamwork, leadership and time management skills for preparation of the coursework.

Global and Cultural Capabilities

Lecture content covers a wide variety of diseases with differences in aetiology/incidence depending on ethnic groups/global location and considers some treatment options which vary in effectiveness and availability globally..

Sustainability

In line with the School's One Health approach the module works towards relevant UN Sustainability Development Goals such as goal 3 good health and wellbeing.

Digital Capabilities

Use of literature searching and database to resource material for each topic, various programmes such as Zoom and Panopto for online interaction and review of content. High content of digital external resources to support lectures. Use of powerpoint for coursework preparation.

Employability

Teamwork for coursework. Communication skills in coursework and powerpoint presentation.

Programmes this module appears in

Programme	Semester	Classification	Qualifying conditions
Microbiology BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module