BMS4008: CLINICAL IMMUNOLOGY

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Clinical Immunology

Subject Code
BMS - Biomedical Sciences
Course Number
4008

Academic Unit
Biomedical Sciences (BMS)

College/School
College of Biomedicine (BD)

Course Duration
One Semester

Credit Units
3

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
Nil

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
Nil

Part II Course Details

Abstract
This course covers basic knowledge of molecular and cellular immunology of innate and adaptive immunity, and the development of various clinical and disease conditions when abnormalities of these immune responses arise. Students will

learn the different components of the immune system and their regulation, and immune disorders including autoimmunity, immunodeficiency, allergy, transplant rejection and tumour immunology. Students will also acquire knowledge on the detection and measurement of biomarkers that aid diagnosis, monitoring and treatment of these clinical conditions.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Understand the basic functions and operations of the innate and adaptive immune systems	25		x	
2	Understand how abnormalities of the immune system leads to disease conditions	25	x	x	
3	Describe and apply various laboratory investigations for diagnosis and monitoring of diseases related to the immune system	25	x	x	x
4	Interpret and analyze laboratory results in the context of diseases relevant to the immune system	25		x	x

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Basic knowledge will be taught mainly by lectures.	1, 2, 3, 4	
2	Tutorials	A forum for problem solving by applying the knowledge learned from the lectures.	1, 2, 3, 4	
3	Group presentations	Students will be divided into groups and each group will present a topic.	1, 2, 3, 4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Participation & Assignments	1, 2, 3	10	-	Yes

2	Group presentations	1, 2, 3, 4	20	-	Yes
3	Mid-term quiz	1, 2, 3, 4	20	-	No

Continuous Assessment (%)
50

Examination (%)
50

Examination Duration (Hours)
3

Minimum Continuous Assessment Passing Requirement (%)
40

Minimum Examination Passing Requirement (%)
40

Additional Information for ATs
Minimum Passing Requirement: A minimum of 40% in continuous assessment as well as in examination.

Assessment Rubrics (AR)

Assessment Task
1.Participation

Criterion
Attendance and active participation in lectures and tutorials

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Assessment Task
2.Group presentation

Criterion
The content and style of the presentation; Handling of questions.

Excellent (A+, A, A-)
Presentation content and correct questions > 90%.

Good (B+, B, B-)
Presentation content and correct questions between 75% and 90%.

Fair (C+, C, C-)
Presentation content and correct questions between 60% and 75%.

Marginal (D)
Presentation content and correct questions between 50% and 60%.

Failure (F)
Presentation content and correct questions < 50%.

Assessment Task

3. Mid-term quiz

Criterion
The number of correct answers.

Excellent (A+, A, A-)
Correct questions > 90%.

Good (B+, B, B-)
Correct questions between 75% and 90%.

Fair (C+, C, C-)
Correct questions between 60% and 75%.

Marginal (D)
Correct questions between 50% and 60%.

Failure (F)
Correct questions < 50%.

Assessment Task
4. End-of-term examination

Criterion
To test students' basic knowledge learnt in class and see whether they can apply the knowledge in case studies

Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Less than Basic

Failure (F)
Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

- Innate Immunity
- Adaptive Immunity
- Autoimmune diseases
- Immunodeficiency
- Hypersensitivity reactions and allergic diseases
- Transplant rejection

- Tumor immunology
- Immunoassays

Reading List

Compulsory Readings

	Title
1	Assigned reading

Additional Readings

	Title
1	Janeway's Immunobiology (Tenth Edition) by Kenneth M. Murphy, Casey Weaver, Leslie J. Berg 2022
2	The Immune System (Fifth Edition) by Peter Parham 2021