City University of Hong Kong
Course Syllabus

offered by Department of Biomedical Sciences
with effect from Semester B 2017/2018

Part I Course Overview

Course Title:	**Immunology and Infectious Diseases**
Course Code:	**BMS8111**
Course Duration:	**One semester**
Credit Units:	**3**
Level:	**R8**
Proposed Area: *(for GE courses only)*	☐ Arts and Humanities ☐ Study of Societies, Social and Business Organisations ☐ Science and Technology
Medium of Instruction:	**English**
Medium of Assessment:	**English**
Prerequisites: *(Course Code and Title)*	**Nil**
Precursors: *(Course Code and Title)*	**Nil**
Equivalent Courses: *(Course Code and Title)*	**Nil**
Exclusive Courses: *(Course Code and Title)*	**Nil**

Part II Course Details

1. Abstract

This course covers advanced knowledge of innate and adaptive immunity, along with the mechanisms used by pathogens to invade, replicate and spread within human and animal populations. Students will learn the basic principles underlying host-pathogen interactions and the experimental tools required to understand those interactions. On the immunology side, this course will cover the signaling pathways in the context of infection and autoimmune dysfunction. On the pathogen side, students will study a wide variety of disease agents (ranging from viruses to bacteria, protozoal, and worms pathogens) in order to identify the mechanisms they use to establish acute and chronic infection in different host species.

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs[#]	Weighting * (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	To acquire basic knowledge on innate and adaptive immune systems	25%	✓	✓	
2.	To understand signaling pathways in the context of infection and autoimmune dysfunction	25%		✓	
3.	To understand wide variety of disease agents in order to identify the mechanisms they use to establish acute and chronic infection in different host species	25%		✓	✓
4.	To acquire basic knowledge on infectious agents for specific diseases.	25%		✓	✓
** If weighting is assigned to CILOs, they should add up to 100%.*		100%			

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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 self-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.

3. Teaching and Learning Activities (TLAs)

TLA	Brief Description	CILO No.				Hours/week (if applicable)
		1	2	3	4	
Lectures	Basic knowledge will be taught mainly by lectures.	✓	✓	✓	✓	2 hours/week (26 hours in total)
Tutorials	A forum for problem solving by applying the knowledge learned from the lectures.	✓	✓	✓	✓	1 hour/week (13 hours in total)

4. Assessment Tasks/Activities (ATs)

Assessment Tasks/Activities	CILO No.				Weighting*	Remarks
	1	2	3	4		
Continuous Assessment: 100%						
Group presentation and final report	✓	✓	✓	✓	100%	
Examination: 0%						
** The weightings should add up to 100%.*					100%	

5. Assessment Rubrics

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Coursework (Group presentation)	Mid-term Quizzes: Quiz score will be used to verify the state of students' learning progress	High	Significant	Moderate	Less than Basic	Not even reaching marginal levels
2. Final report	To test students' basic knowledge learnt in class and see whether they can apply the knowledge in case studies	High	Significant	Moderate	Less than Basic	Not even reaching marginal levels

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

Innate Immunity, Adaptive Immunity, Microbial pathogenicity, Pathogen-host interactions, Regulation of gene expression, Genetics of infectious diseases

2. Reading List

2.1 Compulsory Readings

1.	Gerald B. Pier, Jeffrey B. Lyczak, Lee M. Wetzler. Immunology, infection, and immunity. ASM Press, 2004.
2.	Hofman P. Infectious Disease and Parasites. Springer, 2016.

2.2 Additional Readings

Kay AB, Bousquet J, Holt P, Kaplan AP. Allergy and allergic diseases. Wiley-Blackwell, 2008