City University of Hong Kong
Course Syllabus

offered by Department of Biomedical Sciences
with effect from Semester A 2023/24

Part I Course Overview

Course Title:	Infectious Disease Management
Course Code:	BMS5002
Course Duration:	One semester
Credit Units:	3
Level:	5
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

The course aims to provide students the principles and practice on the diagnosis, control and prevention of infectious diseases. Topics including (1) disease principle, diagnosis and detection; (2) epidemiology principles, outbreak, dynamics, molecular epidemiology; (3) disease management principles (I): nutrition, hospital infection, antibiotic resistance; (4) disease management principles (II): prevention of disease spread, vaccinology; (5) disease management principles (III): therapeutics, emergency responses to emerging diseases; (6) disease management principles (IV): public health policy, biosecurity threats; (7) Topic I: management of diseases with airborne transmission (e.g., COVID-19); (8) Topic II: management of diseases with fecal-oral transmission and body fluid transmission; (9) topic III: management of diseases with vector-borne transmission. In all topics, special attention will be paid on how communicable diseases and their control affects the public health locally, nationally and internationally.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs[#]	Weighting (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	Understand biological concepts that are relevant to infectious diseases, and basic principles of infectious disease epidemiology such as outbreak investigation, disease surveillance.	40	✓	✓	
2.	Understand the major infectious disease and various modes of transmission of infectious disease agents, recognize the properties of different types of pathogens and the mechanisms of pathogenesis, and the principles of healthcare management in infectious diseases.	30	✓	✓	✓
3.	Understand the control and evaluation strategies for infectious diseases, develop management skills of infectious diseases and social responsibility, apply specialized knowledge in the care of infectious diseases via critical thinking	30		✓	✓
		100%			

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)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.			Hours/week (if applicable)
		1	2	3	
Lectures	Lecture introduction on course content	✓	✓	✓	
Tutorial	To give oral presentation on a certain topic for case study	✓	✓	✓	

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.			Weighting	Remarks
	1	2	3		
Continuous Assessment: 65 %					
Oral presentation	✓	✓	✓	30%	
Mid-term Exam/Quiz	✓	✓	✓	35%	Midterm exam 35% @ 7th week, covering studies from 1-6 weeks study
Examination: 35% (Duration: 2 hours; covering studies from 8-13 weeks study).					
** The weightings should add up to 100%.*				100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
1. Oral Presentation	Ability to analyse and criticise the infectious disease management	Outstanding performance on all CILOs. Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.	Substantial performance on all CILOS. Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.	Satisfactory performance on the majority of CILOS possibly with a few weaknesses. Being able to profit from the course experience; understanding of the subject; ability to develop solutions to simple problems in the material.	Unsatisfactory performance on a number of CILOS. Failure to meet specified assessment requirements, little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited or irrelevant use of literature.
2. Examination	Ability to analyse, state and apply the principles and subject matter learnt in the course				

Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Oral Presentation	Ability to analyse and criticise the infectious disease management	Outstanding performance on all CILOs. Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.	Substantial performance on all CILOS. Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.	Satisfactory performance on the majority of CILOS possibly with a few weaknesses. Being able to profit from the course experience; understanding of the subject; ability to develop solutions to simple problems in the material.	Barely satisfactory performance on a number of CILOS. Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.	Unsatisfactory performance on a number of CILOS. Failure to meet specified assessment requirements, little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited or irrelevant use of literature.
2. Examination	Ability to analyse, state and apply the principles and subject matter learnt in the course					

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

1. Keyword Syllabus

(An indication of the key topics of the course.)

Principles of infectious diseases,
Outbreak investigation,
Disease surveillance,
Zoonotic diseases
Vector-borne diseases
Antibiotic resistance,
Vaccinology and therapeutics,
Public health policy
Emergency responses to emerging diseases
Biosecurity threats

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

	NIL.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	"Infectious Disease Epidemiology", Third Edition, edited by Kenrad Nelson and Carolyn Williams. Jones and Bartlett, 2014.
2.	"Basic infection control for health care providers", Second Edition, Clifton Park, NY: Thomson Delmar Learning, M. Kennamer, 2007.