## Course Title/Code: Infectious Diseases in Public Health (MMPH6207)

**Department:** 

School of Public Health

**Objective:** 

This course aims to

- 1. Explore/ illustrate/examine the role of microorganism on infectious disease;
- 2. Illustrate the breath major human infectious diseases, explore how (or in what different ways) human infectious diseases are transmitted, and in what community settings;
- 3. Consider the multi-disciplinary approaches for infectious disease control.

**Content:** 

Topics include:

- Basic microbiology
- Pathogen lifecycle and transmission modes
- The mechanisms of microbial pathogenesis & immune responses against microbial infectious
- Common microbes causing communicable or foodborne diseases, their transmission and control
- Common microbes in healthcare settings, their transmission and control
- Drug resistant Microbial and its disease burden
- Global infectious disease surveillance and investigation
- Methods for microbial diagnosis and surveillance
- Immunization and treatment
- Control of influenza virus as an example
- Case studies I
- Case studies II

**Learning Outcomes:** 

On completion of the module, the students are expected to:

- 1. Describe the diversity of microbes and their impacts to public health.
- 2. Explain pathogen life cycles and transmission modes.
- 3. Describe common microbes causing communicable or foodborne diseases; explain their transmission and control.
- 4. Describe common microbes in healthcare settings; explain their transmission and control.
- 5. Examine the mechanisms of microbial pathogenesis & immune responses against microbial infections.
- 6. Compare and contrast the methods used for microbial diagnosis and surveillance.
- 7. Describe biological principles underlying immunization.
- 8. Apply multi-disciplinary approaches to control infectious disease

**Prerequisite:** 

None

**Duration:** 

3 hours/week: 30 contact hours

Continuous assessment/ examination ratio:

In-course assessment: 40% Final exam: 60%

Examination method/

duration:

Written examination / 2 hours

**Remarks:** Also offered to RPg from other Faculties at HKU.