



**MMPH6167 Infectious Disease Epidemiology (Semester 2)**

**Coordinator: Prof J Wu**

**Course Description:**

This course covers the fundamental concepts of infectious disease epidemiology and current methods for infectious disease surveillance and control. Topics include epidemiologic triangle, transmissibility and severity of infectious diseases, outbreak investigations and responses, infectious disease surveillance, vaccination, molecular epidemiology, and epidemic modelling. Exemplary cases with focus on recent emerging infectious diseases (e.g., COVID-19, SARS, pandemic influenza, avian influenza, MERS) will be used to facilitate students' learning.

**Pre-/Co-requisite:** (i) CMED 6100 Introduction to biostatistics; (ii) Basic programming skills in R or similar languages including the use of loops and functions. Students who have little or no experience at computer programming are expected to self-learn these skills via free online courses such as R Programming on Coursera (<https://www.coursera.org/learn/r-programming>).

**Term 2 (Wednesday)**

**Contact person: Mr Jonathan Lau & Ms Vivian Leung**

Date	Time	Lecture Topic	Lecturer	Venue
18 Jan 2023	6:30–9:30 pm	1. Introduction	Prof J Wu	3SR-LT2
01 Feb 2023	6:30–9:30 pm	2. Incubation period and severity	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
08 Feb 2023	6:30–9:30 pm	3. Disease transmission	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
15 Feb 2023	6:30–9:30 pm	4. Vaccination	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
22 Feb 2023	6:30–9:30 pm	5. Disease surveillance	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
01 Mar 2023	6:30–9:30 pm	6. Evaluating evidence	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
08 Mar 2023	6:30–9:30 pm	7. Infectious disease modeling	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
15 Mar 2023	6:30–9:30 pm	8. Sexually transmitted infections	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
22 Mar 2023	6:30–9:30 pm	9. Vaccine safety and confidence	Prof J Wu	3SR-LT2
		Tutorial or Q&A		
29 Mar 2023	6:30–9:30 pm	10. Molecular epidemiology	Dr T Lam	3SR-LT1
		Tutorial or Q&A		
12 Apr 2023	6:30–8:30 pm	Final Test	-	3SR-LT2

**Course Assessment:** Coursework: 70%  
Final Test: 30%

**Recommended Textbooks:** Giesecke J. Modern Infectious Disease Epidemiology. Edward Arnold; 2001. ISBN: 0340764236.

3SR-LT1, 2: Lecture Theatre 1,2, 1/F, HKUMed Academic Building, 3 Sassoon Road, HK

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