

## 國立清華大學 109 學年第 1 學期新開課程課程大綱

科號		組別		學分	2	人數限制	無
修課年級	<input checked="" type="checkbox"/> 大學部 三 年級以上 <input checked="" type="checkbox"/> 碩士班一年級以上(含博士班) <input checked="" type="checkbox"/> 碩士班二年級以上(含博士班)						
上課時間	M5M6			教室			
科目中文名稱	傳染疾病模型特論 ( 二 )						
科目英文名稱	Special topics in infectious disease modeling II						
任課教師	張筱涵						
擋修科目	無		擋修分數		無		

### ※下列各欄由任課教師提供※

一、課程說明	This class will introduce the major concepts and mathematical models in infectious disease dynamics. Both conceptual background in infectious diseases and fundamental approaches to model infectious disease dynamics will be covered.
二、指定用書	
三、參考書籍	Selected papers from high profile journals
四、教學方式	All students are required to read all assigned chapters and papers and then participate in classroom discussion.
五、教學進度	Week 1. Introduction to infectious disease models Week 2. Basic reproductive number Week 3-5. Estimating model parameters Week 6. Influenza Week 7. COVID-19 Week 8. TB Week 9. Measles Week 10-11. Vector-borne diseases Week 12-13. Human mobility models Week 14. Network models Week 15-18. Literature presentation and discussion
六、成績考核	Class discussion: 40%. Assigned presentation: 40%. Attendance: 20%.

七、講義位址 http://	
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