中國醫藥大學九十六學年度第二學期教學進度表

課目：流行病學建模與分析(下)　　　教師：謝英恆教授

學分： 二 （選修）　　　　　　　　班級：環醫所 研一

時間：周四(10:10-12:00 AM)　　　　地點： 1504 室

課程目標：

時間		主題	負責人
1	2/25	Course Introduction/Public health-related modeling: Evaluation of interventions measures (lecture 10)	謝英恆
2	3/4	"	"
3	3/11	Modeling HIV Underreporting (lecture 11)	"
4	3/18	**Project proposal/** Pair-formation models for STD: Introduction (lecture 12)	"
5	3/25	**Project proposal/** Pair-formation models: HIV as an example, Part I (lecture 13)	"
6	4/1	Pair-formation models: HIV as an example, Part II (lecture 14)	"
7	4/8	Public health-related modeling: Estimation of infected population size in hidden populations (lecture 15)	"
8	4/15	"	"
9	4/22	Public health-related modeling: Herd immunity and vaccination strategy (lecture 16)	"
10	4/29	**Project progress report**	"
11	5/6	**Project progress report/**More Compartment Models: Spatial Spread and Patch Model (lecture 17)	"
12	5/13	No class	"
13	5/20	"	"
14	5/27	"	"
15	6/3	"	"
16	6/10	**Project discussions/** More Compartment Models: Spatial Spread and Patch Model (lecture 17 cont.)	"
17	6/17	**Final project presentation**	"
18	6/24	''	"

參考書籍： Anderson, R., and May, R. (1991). Infectious Diseases of Humans: Dynamics and

Control. Oxford University Press, Oxford. 2. Brauer, F., van den Driessche, P., and Wu, J. (2008) Mathematical Epidemiology. Springer-Verlag, Berlin.

評量標準：A class project should consist of a combination of the followings: (i) analysis of a data set using methods studied in this course; (ii) development of a mathematical model to describe the transmission dynamics of an infectious disease; (iii) detailed modeling study of either a specific public health issue or a specific disease. Project proposal/progress report: 40%; Project presentation 30%; Final project 30%.