

STAT2621: 生物統計學

Lecture: M2 W56
生科二館 105

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Textbook: Fundamentals of Biostatistics (6th edition), by Rosner
統計科普書籍: 統計改變了世界 (天下文化)

Lab: 統計軟體 R 操作教學及實作，視課程需要安排在星期一的課堂，
在電腦室上課。

Grading: homework (30%), lab (20%), midterm (25%), final (25%),
彈性加減分(+/- 5%)
無正當理由作業不得遲交 (遲交者以 0 分計算)

Course Info: 置於 iLMS 數位學習系統 (<http://lms.nthu.edu.tw>)

Software: R (window-type working environment: RStudio)
<http://cran.r-project.org/>
<http://rstudio.org/>

Class Schedule:

Week	date	Topic	備註
1	9/16, 9/18	Introduction (ch1-3) Review 高中機率與統計的內容	
2	9/23	Lab 1: 簡介 R & 計算基本統計量及資料呈現	電腦室上課
2	9/25	Exploratory Data Analysis (ch2)	
3	9/30, 10/2	Normal distribution (ch5) Estimation for mean and variance (ch6)	
4	10/7, 10/9	Hypothesis testing for mean and variance (ch7-8) Central limit theorem	
5	10/14, 10/16	Hypothesis Testing for the mean (ch7-8)	

6	10/21	Lab 2: 連續型資料分析實作	電腦室上課
6	10/23	Comparisons between more groups (ANOVA)	
7	10/28, 10/30	Case Study: one/two population problems	10/30 期中考
8	11/4	期中考講解	
8	11/6	Binomial distribution (ch4) & related inference	
9	11/11,11/13	Inference for proportion (ch7.10) Case Study	
10	11/18,	Description for categorical data (ch10)	11/20 運動會停課一次
11	11/25, 11/27	Chi-square test for independence and odds ratio Case Study	
12	12/2	Lab 3: 離散型資料分析實作	電腦室上課
12	12/4	Regression (ch11)	
13	12/9, 12/11	Regression	
14	12/16	Regression	
14	12/18,	Lab 4: 迴歸分析實作 (電腦室上課), 由助教代課	12/18 & 12/23 老師請事假
15	12/25	Regression:	
16	12/30	Case Study: Regression	1/1 放假
17	1/6, 1/8	Biostatistics and more...	
18	1/15	期末考	