

## STAT2020: 統計學 I

**Lecture:** M789  
綜合三館 203

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**Textbook:** Introductory Statistics (3rd), Sheldon M. Ross.  
統計學 I & II 使用同一本教科書

**Software:** R and RStudio  
<http://cran.r-project.org/>  
<http://rstudio.org/>

**Grading:** 2 midterms (25% each), final (30%), hw+lab (20%)

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

### Topics & Tentative Schedule:

week	date	Topics (chapters in Textbook)		R Lab
1	9/14	Lecture1: Intro to the course of statistics	Ch1	Lab1: Introduction to R and basics
2	9/21	Lecture2: Data summary	Ch2-3	Lab2: basic data summary and plots
3	9/28	教師節放假		
4	10/5	Lecture3: Probability and random variable	Ch4	Lab2: Random number generation
5	10/12	Lecture4: Discrete random variables	Ch5	
6	10/19	Lecture5: Continuous random variables and normal distribution	Ch6	
7	10/26	Exam I (Lectures 1-4)		
8	11/2	Lecture6: Sampling distribution and CLT	Ch7	
9	11/9	Lecture6: Sampling distribution and CLT	Ch7	Lab3: Experiment for CLT
10	11/16	Lecture7: Point estimation	Ch8	
11	11/23	Lecture8: Interval estimation	Ch8	

12	11/30	Exam II (Lectures 5-7)		
13	12/7			
14	12/14	Lecture9: Hypothesis testing (1 population)	Ch9	
15	12/21	Lecture10: Hypothesis testing (2 population)	Ch10	
16	12/28	Lecture10: Hypothesis testing (2 population)	Ch10	Lab4: Testing-related analysis
17	1/4	Review		
18	1/11	Final exam (Lectures 8-10)		