

 國立東華大學  
教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	管理統計學			學年/學期 Academic Year/Semester	113/2				
課程名稱(英文) Course Name in English	Management Statistics								
科目代碼 Course Code	MSF_10350	系級 Department & Year	學三	開課單位 Course-Offering Department	管理科學與財金國際學士 學位學程				
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)		3.0/3.0					
授課教師 Instructor	/池文海								
先修課程 Prerequisite	/*統計學(二)								

課程描述 Course Description

Enhance students' abilities for the knowledge and understanding of statistical skill and application in the management domain.

課程目標 Course Objectives

Enhance students' ability for the knowledge and understanding of statistical skill and application in the management domain.

圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated

授課進度表 Teaching Schedule & Content

週次 Week	內容 Subject/Topics	備註 Remarks
1	Introduction	
2	Descriptive Statistics	Chapter 2
3	Descriptive Statistics: Numerical Measures Chapter	Chapter 3
4	Interval Estimation	Chapter 8
5	Hypothesis Testing	Chapter 9
6	Inferences about Means and Proportions with Two Populations	Chapter 10
7	Inferences about Population Variances	Chapter 11
8	Comparing Multiple Proportions, Test of Independence and Goodness of Fit	Chapter 12
9	期中考試 Midterm Exam	
10	Experimental Design and Analysis of Variance	Chapter 13
11	Experimental Design and Analysis of Variance	Chapter 13
12	Simple Linear Regression	Chapter 14
13	Multiple Regression	Chapter 15
14	Regression Analysis: Model Building	Chapter 16
15	Mediation	
16	Moderation	

17	Project Presentation	
18	Project Presentation	

### 教 學 策 略 Teaching Strategies

- 課堂講授 Lecture       分組討論 Group Discussion       參觀實習 Field Trip  
 其他Miscellaneous:

### 教 學 創 新 自 評 Teaching Self-Evaluation

#### 創新教學(Impressive Teaching)

- 問題導向學習(PBL)       團體合作學習(TBL)       解決導向學習(SBL)  
 翻轉教室 Flipped Classroom       磨課師 Moocs

#### 社會責任(Social Responsibility)

- 在地實踐Community Practice       產學合作 Industy-Academia Cooperation  
 跨域合作(Transdisciplinary Projects)       跨院系教學Inter-collegiate Teaching  
 業師合授 Courses Co-taught with Industry Practitioners

#### 其它 other:

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### 學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments						
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定
平時成績 General Performance								
期中考成績 Midterm Exam								
期末考成績 Final Exam								
作業成績 Homework and/or Assignments	50%							
其他 Miscellaneous (Term Project)	50%							

### 評量方式補充說明 Grading & Assessments Supplemental instructions

#### 教科書與參考書目 (書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

Camm, J. D., Cochran, J. J., Fry, M. J., Anderson, D. R., Sweeney, D. J. and Williams, T. A. (2024), Statistics for Business and Economics, 15th Ed., Metric Version, South-Western College Publishing, Cincinnati, Ohio.

滄海書局代理(04) 27088787

#### 課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website (Including online teaching information.

Personal website can be listed here.)

#### 1. Design of Experiment (DOE) ANOVA

<https://www.youtube.com/watch?v=ie6zp2NkHdY>  
<https://www.youtube.com/watch?v=qNUWU3YhOFQ>  
<https://www.youtube.com/watch?v=yuH35ottILU>

#### 2. Simple Regression

<https://www.youtube.com/watch?v=0AGLdgUtIJg>  
<https://www.youtube.com/watch?v=VEQPX6d-EQw>  
[https://www.youtube.com/watch?v=e6yLxpsxK\\_4](https://www.youtube.com/watch?v=e6yLxpsxK_4)  
[https://www.youtube.com/watch?v=LPOy\\_dfuTFU](https://www.youtube.com/watch?v=LPOy_dfuTFU)

#### 3. Multiple Regression

<https://www.youtube.com/watch?v=0N4Q8zZi jcI>  
<https://www.youtube.com/watch?v=IWYENu0kCYE>  
[https://www.youtube.com/watch?v=oi\\_oWh\\_4d78](https://www.youtube.com/watch?v=oi_oWh_4d78)  
<https://www.youtube.com/watch?v=1UtYadNLV3s&t=15s>  
<https://www.youtube.com/watch?v=pIgu01HwRKk>  
<https://www.youtube.com/watch?v=UiJ4G3rL1XA>

#### Multiple Regression using Dummy Coding of Multi-Categorical Predictors in SPSS

<https://www.youtube.com/watch?v=PVYCpeRMvp8>

#### 4. Multi-collinearity

<https://www.youtube.com/watch?v=Ybzc3AB1E-E&t=83s>  
[https://www.youtube.com/watch?v=Z\\_03ZPvM1fM&t=43s](https://www.youtube.com/watch?v=Z_03ZPvM1fM&t=43s)  
<https://www.youtube.com/watch?v=U8Ldpisthso>  
<https://www.youtube.com/watch?v=Cba9LJ91S8s>  
<https://www.youtube.com/watch?v=pZhm1GMn2GY>  
<https://www.youtube.com/watch?v=Ybzc3AB1E-E>  
[https://www.youtube.com/watch?v=Z\\_03ZPvM1fM](https://www.youtube.com/watch?v=Z_03ZPvM1fM)  
<https://www.youtube.com/watch?v=pZs0n6wnGSo>

<https://www.youtube.com/watch?v=Ybzc3AB1E-E>

## 5. Hierarchical Multiple Regression

<https://www.youtube.com/watch?v=RyDteu6E7HY>

<https://www.youtube.com/watch?v=xgA8qY63dX0>

<https://www.youtube.com/watch?v=pkM4nXvP5Bo&t=242s>

<https://www.youtube.com/watch?v=VHOLF6tyMVC&t=2s>

[https://www.youtube.com/watch?v=\\_usDT11r9cQ&t=3s](https://www.youtube.com/watch?v=_usDT11r9cQ&t=3s)

<https://www.youtube.com/watch?v=YxPRN4nG07w&t=24s>

[https://www.youtube.com/watch?v=pkM4nXvP5Bo&t=232s \(part 1\)](https://www.youtube.com/watch?v=pkM4nXvP5Bo&t=232s (part 1))

https://www.youtube.com/watch?v=VHOLF6tyMVC (part 2)

https://www.youtube.com/watch?v=\_usDT11r9cQ (part 3)

https://www.youtube.com/watch?v=YxPRN4nG07w (part 4)

## 6. Curvilinear Regression - SPSS

https://www.youtube.com/watch?v=HtzE-HmAcwk (part 1)

https://www.youtube.com/watch?v=6TL4qp5Jt\_k (part 2)

https://www.youtube.com/watch?v=Q8buA3-bxRs&amp;t=23s (part 3)

https://www.youtube.com/watch?v=NYHwxnvVu2Y (part 4)

https://www.youtube.com/watch?v=zcjm5eDcy6M (part 5)

## 7. Spotlight Regression

https://www.youtube.com/watch?v=Ymxqa874qB4&amp;t=204s

https://www.youtube.com/watch?v=e-IcyjVCm9o&amp;t=33s

https://www.youtube.com/watch?v=Ymxqa874qB4&amp;t=471s

## 8. Mean Center

https://www.youtube.com/watch?v=kYQrbWXLL4k&amp;t=22s

https://www.youtube.com/watch?v=gr8-8LD3bKo&amp;t=363s

https://www.youtube.com/watch?v=FYjuu9\_5oMQ

https://www.youtube.com/watch?v=gr8-8LD3bKo&amp;t=47s

https://www.youtube.com/watch?v=yk1Uq1VHjpY&amp;t=70s

## 9. Interaction - SPSS

https://www.youtube.com/watch?v=13Aoikhaxtg (part 1)

https://www.youtube.com/watch?v=aeT8MkG3bx8 (part 2)

https://www.youtube.com/watch?v=aVV7KnAr-qY (part 3)

https://www.youtube.com/watch?v=vYsjJpyrHFc (part 4)

https://www.youtube.com/watch?v=Sd0rkPn7d8Y&amp;t=15s (part 5)

## 10. Mediation/Moderation

https://www.youtube.com/watch?v=WZr1j1Ki\_s0

https://www.youtube.com/watch?v=NmqdpCTTxEw

https://www.youtube.com/watch?v=RqkGMqDU20Q

## 11. Moderation

https://www.youtube.com/watch?v=sj2XWfZaxek (Categorical Moderator)

https://www.youtube.com/watch?v=y10gMSoJ7Nc&amp;t=11s (Categorical Moderator)

https://www.youtube.com/watch?v=MCGy5psVc9o (Categorical Moderator)

https://www.youtube.com/watch?v=7KCuumQmsxk (Categorical Moderator)

https://www.youtube.com/watch?v=zACzya0pyyw (AMOS)

https://www.youtube.com/watch?v=Q\_3xD2h9La0&amp;t=270s

其他補充說明 (Supplemental instructions)

1. Office: Management Building C417

2. Office Hour: 12:00~14:00 pm (Thursday)

3. Telephone: 8903022

4. E-Mail: whchih@gms.ndhu.edu.tw