國立東華大學
教學計劃表　Syllabus

課程名稱(中文) Course Name in Chinese	資料分析入門			學年/學期 Academic Year/Semester		107/1
課程名稱(英文) Course Name in English	Prelude to Data Analysis					
科目代碼 Course Code	GC__63860	系級 Department & Year	校核心	開課單位 Course-Offering Department	通識教育中心	
修別 Type	選修 Elective	學分數/時間 Credit(s)/Hour(s)	3.0/3.0			
授課教師 Instructor	/曹振海					
先修課程 Prerequisite						

課程描述　Course Description

資料無所不在，由資料衍生的報告或論述也在網路、一般媒體上處處可見。資料分析已在各個層面、角度影響我們。本課程深入淺出透過主題與故事介紹資料分析在處理真實世界問題的角色，架構以及技術與理論的梗概。
Data, data analyses are everywhere. They affect us in many important ways. This course provides a prelude to data analysis, its framework, techniques and the role it plays in problem-solving.

課程目標　Course Objectives

簡介資料分析在處理真實世界問題的角色，讓學生對資料分析的架構、角色以及其技術與理論要求有一個概略的瞭解，進而使學生瞭解後續相關課程的關連性，並觸發學習動機。

This course will be served as a non-technical first course for students who are interested in statistics and data analysis. Objectives
1. 　　Overview of data analysis: Problems-solving, techniques/coding
2. 　　Theoretical framework of data analysis: Probability, Statistics, etc.
Motivating and preview of some related topics and courses.

	(校)核心能力 Learning Outcomes	課程目標與校核心能力相關性 Correlation between Course Objectives and Basic Learning Outcomes
A	自主學習與創新思考Autonomous Learning and Creative Thinking	●
B	康健身心Physical Fitness and Mental Balance	
C	互動、溝通與解決問題Interactive Communication and Problem Solving	○
D	情藝美感Artistic Feeling and Aesthetic Perception	
E	文化素養與尊重差異Cultural Literacy and Respect for Differences	○
F	在地關懷與公民責任Local Commitment and Civic Responsibility	○

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	Overview	
2	Topic/Story 1: Beer and Diapers I	

3	Topic/Story 1: Beer and Diapers II	
4	Topic/Story 2: Nightingale's Pie Chart I	
5	Topic/Story 2: Nightingale's Pie Chart II	
6	Topic/Story 3: Statistical Concepts	
7	Topic/Story 3: Statistical Concepts II	
8	Recap I	
9	期中考試週 Midterm Exam	
10	Topic/Story 3: Big Data vs Small Data I	
11	Topic/Story 3: Big Data vs Small Data II	
12	Topic/Story 4: Search and Found	
13	Topic/Story 5: Special topic	
14	Topic/Story 6: Special topic	
15	Presentation/Discussion	
16	Presentation/Discussion	
17	Presentation/Discussion	
18	期末考試週 Final Exam	

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(Innovative 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)

☐ 跨界教學Transdisciplinary Teaching　　　☐ 跨院系教學Inter-collegiate Teaching

☐ 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

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	其他
平時成績 General Performance	20%			✓					
期中考成績 Midterm Exam	20%								
期末考成績 Final Exam	30%								
作業成績 Homework and/or Assignments	30%								
其他 Miscellaneous (_____)									

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.)

課程教材網址（教師個人網址請列在本校內之網址）
Teaching Aids & Teacher's Website (Personal website can be listed here.)

To be announced.

其他補充說明（Supplemental instructions）