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國立東華大學

教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	機率			學年/學期 Academic Year/Semester	113/2
課程名稱(英文) Course Name in English	Probability				
科目代碼 Course Code	CSIEB0130	系級 Department & Year	學二	開課單位 Course-Offering Department	資訊工程學系
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)	3.0/3.0		
授課教師 Instructor	/李官陵				
先修課程 Prerequisite					

課程描述 Course Description

The purpose of the course is to provide a comprehensive introduction to probability models most likely to be encountered and used by students in their careers in engineering and the nature sciences.

課程目標 Course Objectives

The purpose aims at giving an understanding of probability and its applications in the area of electrical engineering.

	系專業能力 Basic Learning Outcomes	課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
A	資訊專業終身學習能力Ability of lifetime learning in information profession	●
B	實驗驗證資訊科學能力Ability of validate experimental result validation in information science field	○
C	資訊工具整合運用能力Ability of integrated applications of information technology	○
D	資訊系統應用設計開發能力Ability of information application system design and development	○
E	團隊合作溝通協調能力Ability of teamwork, communication, and coordination	
F	資通訊科技問題解決能力Ability of problem solving regarding information and communication technology	
G	瞭解資訊科技多元影響能力Ability to understand information technology's multiple influences	○
H	肩負資訊人社會責任能力Ability of bearing the social responsibilities being among information professionals	

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	228
3	Probability-basic concept(I)	

4	Probability-basic concept(II)	
5	Discrete random variables and probability distributions(I)	
6	Exam 1	
7	holiday	
8	Discrete random variables and probability distributions(II)	
9	Continuous random variables(I)	
10	Continuous random variables(II)	
11	Joint probability distributions(I)	
12	Exam2	
13	Joint probability distributions(II)	
14	The distribution of the sample mean	
15	General concept of point estimation	
16	Methods of point estimation	
17	Exam3	
18	consultation	

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	7%	✓	✓						
期中考成績 Midterm Exam									
期末考成績 Final Exam									
作業成績 Homework and/or Assignments									
其他 Miscellaneous (three exams)	93%	✓					✓		

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.)

Probability and Statistics for Engineering and the sciences, Ninth Edition, International Edition, Brooks/Cole, Cengage learning
Jay L. Devore

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.)

e-learning website

其他補充說明 (Supplemental instructions)