Please consult Intellectual Property Rights before making a photocopy. Please use the textbook of copyrighted edition.

## ②國玄東華大學

## 教學計劃表 Syllabus

Cour		5稱(平文) ne in Chinese	資料探勘			學年/學期 Academic Year/Seme	1 113/1			
Cour	課程名稱(英文) urse Name in English Data Mining									
		目代碼 se Code	系級 開課單位 Course-Offering Department & Year				資訊工程學系			
	修別 Type  選修 Elective 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									
學習資料探勘相關之基礎知識以及未來之發展與應用,以上課講授為主,考試以及課堂討論為輔										
			課	程目標 Course (	bjecti	ives				
"Data Mining" is an applied tool discipline that is widely used in various fields of professional practical work, computer data processing, and scientific training. Therefore, in addition to introducing the basic concepts, characteristics, and related theorems of data mining, this course will also focus on the practical examples of applying the theoretical methods of data mining in various fields."										
Basic Learning Outcomes  Course Objective and Dept.'s Education										
				-				urse Objectives and Dept.'s Education Objectives		
A	scienc	e and information	bility to integr engineering.	ate knowledge and				and Dept.'s Education		
A B	scienc 設計技	e and information	bility to integr engineering.	ate knowledge and		logies of computer experiments and to		and Dept.'s Education		
	scienc 設計技 valida	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力	bility to integr engineering. もカAbility to de	ate knowledge and	cience	experiments and to		and Dept.'s Education		
В	scienc 設計技 valida 資訊軟 hardwa	e and information 術理論驗證實驗之怠 te hypotheses. 硬體設計開發之能力 re.	bility to integr engineering. もカAbility to de わAbility to desi	rate knowledge and esign and conduct s	cience outer s	experiments and to		and Dept.'s Education		
В	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性	e and information 術理論驗證實驗之自 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili	bility to integr engineering. も力Ability to desi 力Ability to desi ty to design and	rate knowledge and esign and conduct s gn and develop com	cience outer s	experiments and to		and Dept.'s Education Objectives		
B C D	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之 ng, and innovativ	bility to integrengineering. もカAbility to desing ty to design and まカAbility of are development.	rate knowledge and esign and conduct so gn and develop com develop team projualytical thinking,	outer sects.	experiments and to		and Dept.'s Education Objectives		
B C D	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之 ng, and innovativ	bility to integreengineering. もカAbility to desipability to desipability to design and まカAbility of are development.	rate knowledge and esign and conduct so gn and develop com develop team projualytical thinking,	puter s ects. creati	experiments and to software and ive research 度相關 Moderately		and Dept.'s Education Objectives		
B C D E	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之 ng, and innovativ	bility to integrengineering. EカAbility to desi ty to design and EカAbility of are development.  意度相關 Hi	rate knowledge and esign and conduct so gn and develop com develop team projulytical thinking, ghly correlated	puter s ects. creati	experiments and to software and ive research 度相關 Moderately	correl	and Dept.'s Education Objectives		
B C D E 圖示記	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni 說明[]	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之 ng, and innovativ	bility to integrengineering. EカAbility to desi ty to design and EカAbility of are development.  意度相關 Hi	rate knowledge and esign and conduct so gn and develop com develop team projudly tical thinking, ghly correlated 度表 Teaching Sc	puter s ects. creati	experiments and to software and ive research 度相關 Moderately	correl	and Dept.'s Education Objectives  O  All ated		
B C D E 圖示言	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni 說明 []	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之前 ng, and innovativ lustration :	bility to integrengineering. E力Ability to desirty to desirty to design and E力Ability of are development.  高度相關 Hi	rate knowledge and esign and conduct so gn and develop com develop team projudly tical thinking, ghly correlated 度表 Teaching Sc	puter s ects. creati	experiments and to software and ive research 度相關 Moderately	correl	and Dept.'s Education Objectives  O  All ated		
B C D E 圖示記	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni 說明 [1]	e and information 術理論驗證實驗之戶 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之戶 ng, and innovativ lustration :	bility to integrengineering. E力Ability to desirty to design and E力Ability of are development.  高度相關 Hir 授 課 進	rate knowledge and esign and conduct so gn and develop com develop team projudly tical thinking, ghly correlated 度表 Teaching Sc	puter s ects. creati	experiments and to software and ive research 度相關 Moderately	correl	and Dept.'s Education Objectives  O  All ated		
B C D E 圖示記	scienc 設計技 valida 資訊軟 hardwa 團隊專 批判性 planni 說明 [1]	e and information 術理論驗證實驗之 te hypotheses. 硬體設計開發之能力 re. 案開發之能力Abili 思考與創新研發之 ng, and innovativ lustration : Introduction Getting to Know	bility to integrengineering. E力Ability to design and ty to design and E力Ability of are development.  高度相關 Hi 授 課 進 內容  Your Data ing	rate knowledge and esign and conduct so gn and develop com develop team projudly tical thinking, ghly correlated 度表 Teaching Sc	puter s ects. creati	experiments and to software and ive research 度相關 Moderately	correl	and Dept.'s Education Objectives  O  All ated		

6	6 Association rule mining and Interestingness Measure (I)						
7	7 Association rule mining and Interestingness Measure (II)						
8	Classification (I)						
9	9 期中考試週 Midterm Exam						
10	Classification(II)						
11	11 Classification(III)						
12	12 Classification(IV)						
13	13 Clustering (I)						
14	14 Clustering(II)						
15	15 Clustering(III)						
16	期末考試週 Final Exam						
17							
18	consultation						
	教學策略 Teaching Strategies						
✓ 課堂講	授 Lecture						
其他Mis	scellaneous:						
	教學創新自評 Teaching Self-Evaluation						
創新教學(	Innovative Teaching)						
問題導	向學習(PBL)                            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							
在地質或Community Fractice							
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 othe	r:						

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例 Percentage	多元評量方式 Assessments							
Items		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(含出缺席) General Performance (Attendance Record)	5%		<b>~</b>						
期中考成績 Midterm Exam	35%	~							
期末考成績 Final Exam	35%	~							
作業成績 Homework and/or Assignments	25%			~			<b>~</b>		
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.)

"Data mining: concepts and techniques", third edition, Jiawei Han and Micheline Kamber, Morgan Kaufmann

"Data Mining: Practical Machine Learning Tools and Techniques", 4/e, Ian H. Witten, Eibe Frank, Mark A. Hall, Christopher J. Pal, Morgan Kaufmann.

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)

 $\label{thm:condition} \mbox{Teaching Aids \& Teacher's Website} (\mbox{Including online teaching information.}$ 

Personal website can be listed here.)

e學苑

其他補充說明(Supplemental instructions)