②国o支束華大學 教學計劃表 Syllabus

	名稱(中文) me in Chinese	機器學習			學年/學期 Academic Year/Sen	112/2			
	名稱(英文) me in English	machine learning							
科目代碼 Course Code		ECM6700	糸級 Department開課單位 G士& YearG士Course-Offering Department			經濟學系			
修 別 Type		選修 Elective	學分數/時 Credit(s)/Hou		3.	3.0/3.0			
授課教師 Instructor		/李同龢							
	equisite								
課程描述 Course Description									
This class intends to introduce students for basic techniques in machine learning using Python. This class will familiarize students with a broad cross-section of models and algorithms for machine learning, and prepare students for research or industry application of machine learning techniques.									
		課	程目標 Cour	se Object	zives				
圖示說明[]	llustration :	● 高度相關 Hi	ghly correl	ated 🔾 🕇	ア度相關 Moderatel	y corre	lated		
授課進度表 Teaching Schedule & Content									
週次Week	內容 Subject/Topics						備註Remarks		
1	Introduction and Crash course of Python								
2	Crash course of	Crash course of Python							
3	No class, national holiday,								
4	Simple ML classification algorithms								
5	Scikit-learn for ML classification								
6	Data processing for training sets								
7	Dimensionality reduction								
8	No class, holiday								
9	Midterm project presentation,								
10	Model evaluation and hyperparameter tuning								
11	Ensemble learning								
12	Sentiment analysis								
13	Web application								
14	Regression								
15	Clustering anal	Clustering analysis							

16	Artificial neural network and TensorFlow						
17	Deep convolutional neural networks and Recurrent neural networks						
18	Final 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(Innovative Teaching)							
□問題導向學習(PBL) 團體合作學習(TBL)							
─ 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	配分比例	タンゼーナン Accocomonto							
1 I tems	Percentage	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									
期中考成績 Midterm Exam	35%		~						
期末考成績 Final Exam	35%		~						
作業成績 Homework and/or Assignments	30%		~						
其他 Miscellaneous ()									
	Grading & A		量方式 ents Sup			ruction	IS		
Class etiquette: Experience indicates that students with regular attendance of class have higher grades than those who did not. Followings are basic class etiquette. Turn off your mobile phone before class. No iPad, smart phone and laptop computer are allowed to use during lecture, unless with permission from me. No loud chatting allowed in the class. Having food or drink in the class is not encouraged. No video or audio recording is not allowed. Picture taking by any electronic devices is forbidden as well. Any irrational behavior in the class will not be tolerated. Any violation of the class etiquette will be penalized by reduction in your grade. Three strikes, you' re out: If you missed three classes without any official excuses, your semester grade will be D or below D. You need an official document for not attending class. No oral or email excuses will be accepted. Therefore, please do not email me that you could not come to class, just give me the official document.									
Textbook & Otl	教科書與參考 her Reference							ks, etc.)
Introduction to Statistical Learning with applications in R (ISLR), James, Witten, Hastie and Tibshirani, 8th printing									
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.)									
其他補充說明 (Supplemental instructions)									