111/2 Bilingual Education Courses (111 學年度第 2 學期雙語授課課程表)

No. 編號	Department 開課系所	Course Code 課號	Course Title 科目名稱	Required/ Elective 必修/ 選修	Credit Points 學分數	Instructor 授課老師	Weekly 每週上課節次					Classroom 上課教室	Course Plan 課程計畫
							Mon	Tue	Wed	Thu	Fri		
1.	Doctoral Degree Program in Smart IndustryTechnology Research and Development (智慧產業博士學位學程)	2548	Modal Experiments and Analysis 模態實驗與分析	Elective 選修	3	Chang, Jen-Yuan 張禎元	5-7					The First Seminar Room, Mechanical Engineering Building 2F 機械工程館 2F AME0209 第一專題研討室	Course Plan
2.	Doctoral Program in Mechanical and Electro-Mechanical Engineering, Department of Power Mechanical Engineering (動力機械工程系 機械與機電工程博士班)	2532	Dynamics of Machine System 機器系統動力學	Elective 選修	3	Hwang, Yunn-Lin 黃運琳				2-4		(BGA0760) First Assembly Building 7th floor Reverse rapid prototyping laboratory 綜合工程一館 7F BGA0760 逆向快速成型實驗室	Course Plan
3.	Graduate Institute of Aeronautical and	0296	International Aviation	Elective 選修	3	Lin, Chung-Yan				2-4		(BGC0704) 綜合工程三館	Course Plan

	Electronic Technology (飛機工程系航空與電子科技碩士班)		Regulation 國際民航法規			林中彥						7F BGC0704 飛機液氣壓實習工場 Aircraft Hydraulic System Lab. The 3rd Complex Building 7F	
4.	Graduate Institute of Aeronautical and Electronic Technology (飛機工程系航空與電子科技碩士班)	0289	SELECTED TOPICS ON AIRLINE MANAGEMENT 航空公司管理實務	Elective 選修	3	Liu, Shen-Hsiang 劉昇祥		2-4				(BGC1003) 綜合工程三館 10F BGC1003 飛機次系統實習工場 Airframe System Lab. The 3rd Complex Building 10F	Course Plan
5.	Graduate Institute of Aeronautical and Electronic Technology (飛機工程系航空與電子科技碩士班)	0298	AIRCRAFT MAINTENANCE PROGRAM DOCUMENT 飛機維修計畫管理	Elective 選修	3	Liu, Shen-Hsiang 劉昇祥				5-7		(BGC0205) 綜合工程三館 2F BGC0205 專業教室 The 3rd Complex Building 2F	Course Plan
6.	Department of Mechanical Design	0230	Mechanical Vibrations	Elective 選修	3	Hwang , Yunn-Lin		2-4				(BGA0760) Multi-Purpose	Course Plan

	Engineering (機械設計工程系碩士班)		機械振動學			黃運琳					Engineering Bldg., Reverse and Rapid Protoyping Lab.7F 綜合工程一館 7F BGA0760 逆向快速成型實驗室	
7.	Department of Precision Mechanical Engineering (精密機械工程科 五專)	2482	P-TECH Course (4) P-TECH 課程(四)	Elective 選修	3	Mao , Yen-Chieh 毛彥傑			6		(AIA0104) stair classroom, Information Building 1F 資訊大樓 1F AIA0104 階梯教室	Course Plan
8.	Department of Precision Mechanical Engineering (精密機械工程科 五專)	2501	P-TECH Course (6) P-TECH 課程(六)	Elective 選修	3	Mao , Yen-Chieh 毛彥傑			7		(AIA0104) stair classroom, Information Building 1F 資訊大樓 1F AIA0104 階梯教室	Course Plan
9.	Master's Program, Department of Automation Engineering	0053	Big Data Analysis 巨量資料分析	Elective 選修	3	Kuang-Chyi Lee 李廣齊			7-9		(BGA0330) Computer-aided Engineering Lab	Course Plan

	(自動化工程系碩士班)										First Assembly Building 3F 綜合工程一館 3F 電腦輔助工程實驗室	
10.	Master's Program, Department of Automation Engineering (自動化工程系碩士班)	0048	Creation and Innovation 創意與發明	Elective 選修	3	Roug-Feng Tsai 蔡榮鋒				2-4		(BGA0450) Lecture Room First Assembly Building 4F 綜合工程一館 4F BGA0450 專業講堂	Course Plan
11.	Department of Electro-Optical Engineering (光電工程系)	1039	Special Research Topics 特殊研究問題討論	Optional 選修	2	Huang, Hung Ji 黃鴻基	5-6					（BGA0161）Micro-computer Laboratory,First Assembly Building 1F 綜合工程一館 1F BGA0161 微電腦實驗室	Course Plan
12.	Department of Electrical Engineering (電機工程系)	0981	Industrial Electronics 工業電子學	Elective 選修	3	Wu, Sen-Tung 吳森統				5-7		BEE0403; 4F, Electronics Lab. 電機館 4F BEE0403 電子實驗室	Course Plan
13.	Department of Electrical Engineering (電機工程系)	0129	Electronic Circuit Design Practice 電子電路設計實務	Elective 選修	3	Wu, Sen-Tung 吳森統	5-7					BEE0105; 1F, Lighting Laboratory 電機館 1F	Course Plan

												BEE0105 照明實驗室	
14.	Department of Electrical Engineering (電機工程系)	0132	Technology and Practice of 5G Core Networks 5G 核心網路技術與實務	Elective 選修	3	Su, Hui-Kai 蘇暉凱					5-7		BEE0402; 4F, Smart Electronic Application Laboratory 電機館 4F BEE0402 智慧電子應用實驗室	Course Plan
15.	Department of Electrical Engineering (電機工程系)	0131	Advance SOC FPGA System Integration with Machine Learning 高等 FPGA 系設計與實務	Elective 選修	3	宋啟嘉 Wu, Sen-Tung						2-4	BEE0502; 5F, VLSI Design and Application Lab. 電機館晶片設計與應用實驗室	Course Plan
16.	Department of Electronic Engineering (電子工程系)	1728	Object-Oriented Programming Design 物件導向程式設計	Elective 選修	3	Liu Yu-Sung 劉育松						2-4	(AME0406) Mechanical Engineering Building 4F 機械工程館 4 樓 AME0406	Course Plan
17.	Department of Electronic Engineering (電子工程系)	0419	Object-Oriented Programming Design 物件導向程式設計	Elective 選修	3	Liu Yu-Sung 劉育松					2-4		(AME0406) Mechanical Engineering Building 4F 機械工程館 4 樓 AME0406	Course Plan

18.	Department of Computer Science and Information Engineering (資訊工程學系)	1949	Microprocessor practice 微處理機實習	Required 必修	3	Kuo-Yi Chen 陳國益		7-9				(BGC0601) The 3rd Assembly Building 6F IC Desing Lab. 綜合三館 6F BGC0601 IC 設計實驗室	Course Plan
19.	Department of Computer Science and Information Engineering (資訊工程學系)	1906	Multimedia Application and Design 多媒體應用與實習	Elective 選修	1	Jian, Ming-Shen 簡銘伸		2-4				(BGC0513) The 3rd Assembly Building 5F Bioinformatics Lab. 綜合三館 5F BGC0513 生物資訊實驗室	Course Plan
20.	Department of Computer Science and Information Engineering (資訊工程學系)	1905	Computer Networks 計算機網路概論	Required 必修	3	Huang, Shih-Chang 黃世昌		1		5-6		(BGC0513) The 3rd Assembly Building 5F Bioinformatics Lab. 綜合三館 5F BGC0513 生物資訊實驗室	Course Plan

No.	Department	Code	Course Name	Type	Credits	Instructor						Location	
												(BGC0601) The 3rd Assembly Building 6F IC Desing Lab. BGC0601 IC 設計實驗室	
21.	Institute of Department of Computer Science and Information Engineering(資訊工程學系)	0116	Cloud Computing and Big Data Security 雲端大數據安全	Elective 選修	3	Ji-Han Jiang 江季翰		2-4				(BGC0501) The 3rd Assembly Building 5F Basic electricity and professional certification Lab. 綜合三館 5F BGC0501 基本電學與證照實驗室	Course Plan
22.	Department of Computer Science and Information Engineering (資訊工程學系)	1907	English Reading for Science and Technology 科技文件閱讀	Elective 選修	3	Tsai, Po-Hsiang 蔡柏祥					5-7	(BGC0501) The 3rd Assembly Building 5F Basic electricity and professional	Course Plan

												certification Lab. 綜合三館 5F BGC0501 基本電學與證照實驗室	
23.	Department of Computer Science and Information Engineering (資訊工程學系)	1955	English for Science and Technology 科技英文	Elective 選修	3	Tsai, Po-Hsiang 蔡柏祥					2-4	(BGC0614) The 3rd Assembly Building 6F e-Learning Lab. 綜合三館 6F BGC0614 數位學習實驗室	Course Plan
24.	Institute of Information Management (資訊管理系碩士班)	0091	Production and Operations Management 生產與作業管理	Electives 選修	3	Wen-Hung Kuo 郭文宏				2-4		(CMA0614) ., Applied Arts, Sciences and Management Building 6F 文理暨管理大樓 6F CMA0614 企業電子化實驗室	Course Plan
25.	Institute of Information Management (資訊管理系碩士班)	0090	Database Management 資料庫管理	Electives 選修	3	Yung-Tsung Hou 侯雍聰	8	5,6				(CMA0407) ., Applied Arts, Sciences and Management Building 4F 文理暨管理大樓 4F CMA0407 智慧應用電腦教室	Course Plan

No.	Department	Code	Course	Type	Credits	Instructor						Location	
26.	Institute of Information Management (資訊管理系碩士班)	0093	Machine Learning and Big data 機器學習與大數據	Electives 選修	3	Nian-Ze Hu 胡念祖					2-4	(CMA0405) ., Applied Arts, Sciences and Management Building 4F 文理暨管理大樓 4F CMA0405 多媒體電腦教室	Course Plan
27.	Institute of Finance (財務金融系碩士班)	0031	Time Series Analysis 時間數列分析	Required 必修	3	Jo-Yu Wang 王若愚				5-7		(CHB0207) Certificate Center, Art and Humanity Building 2F 人文大樓 2F CHB0207 證照中心	Course Plan
28.	Institute of Finance (財務金融系碩士班)	0032	The Theory and Practice of Investment 投資學理論與實務	Required 必修	3	Lai , Ya-Wen 賴雅雯			6-8			(CMA0201) Seminar Room Ⅱ, Applied Arts, Sciences and Management Building 2F 文理暨管理大樓 2F CMA0201 財金研討室 Ⅱ	Course Plan
29.	Institute of Industrial Engineering and	0316	Applied Statistics 應用統計學	Elective 選修	3	Huang, Jyunping 黃俊平	2-4					(CMA0210) Computer Lab Applied Arts,	Course Plan

	Management （工業管理系工業工程與管理碩士班）											Sciences and Management Building 2F 文理及管理大樓 2F CMA0210 電腦教室	
30.	Institute of Industrial Engineering and Management （工業管理系工業工程與管理碩士班）	0315	Production Management and Practice 生產管理與實務	Elective 選修	3	Hu , Chih-Hsiung 胡智熊		2-4				(CMA0806) Seminar Room III, Applied Arts, Sciences and Management Building 8F 文理及管理大樓 8F CMA0806 專業教室 III	Course Plan
31.	Institute of Industrial Engineering and Management （工業工程與管理研究所）	0314	Networks and Logistics 網路與運籌	Elective 選修	3	Hsieh, Yi-Chih 謝益智			6-8			(CMA0806) Room ⅡI, Applied Arts, Sciences and Management Building 8F 文理暨管理大樓 8F 專業教室 III	Course Plan

No.	Department		Course	Type	Credits	Instructor						Location	
												(CMA0806)	
32.	Master Program in Business Management, Department of Business Administration （經營管理碩士班）	0337	Information Management 資訊管理	Elective 選修	3	Liang, Chih-Chin 梁直青			2-4			(CMA0207) Applied Arts, Sciences and Management Building 2F 文理暨管理大樓 2F CMA0207 電腦教室	Course Plan
33.	Master Program in Business Management, Department of Business Administration （經營管理碩士班）	0338	Behavioral Finance 行為財務	Elective 選修	3	Chi-Lin Lu 呂麒麟			5-7			(CMA0209) Management of Entrepreneurial &Technology Lab., Applied Arts, Sciences and Management Building 2F 文理暨管理大樓 2F CMA0209 創業管理實驗室	Course Plan
34.	Master Program in Business Management, Department of Business Administration （經營管理碩士班）	0339	Strategic Management 策略管理	Elective 選修	3	Yi Hsu 徐怡				5-7		(CMA0206) Market Survey Lab, Applied Arts, Sciences and Management Building 2F 文理暨管理大樓 2F CMA0206 經	Course Plan

											營模擬與數據分析實驗室	
35.	Master Program in Business Management, Department of Business Administration （經營管理碩士班）	0340	Technology Management 科技管理	Elective 選修	3	Yu-Chun Chen 陳鈺淳		5-7				(CMA0209) Management of Entrepreneurial &Technology Lab., Applied Arts, Sciences and Management Building 2F 文理暨管理大樓 2F CMA0209 創業管理實驗室	Course Plan
36.	Institute of Department of Leisure and Recreation (休閒遊憩系研究所)	0204	Park, Recreation Marketing and Management 公園遊憩行銷與管理	Elective 選修	3	Yen, Hung Hsu 顏宏旭		5-7				(CMA0505) Master classroom Ⅱ, Applied Arts, Sciences and Management Building 5F 文理暨管理大樓 5F CMA0505 碩士班教室(二)	Course Plan
37.	Graduate Institute of Digital Contentsand Creative Industries	0167	Creative Industries in Cultural Research 文化創意產業研	Elective 選修	3	Wu-Haw Jue 朱文浩				5-7		(CHB0305) Multimedia Design Studio, Art and	Course Plan

	(多媒體設計系數位內容創意產業研究所碩士班)		究									Humanity Building 3F 人文大樓三樓多媒體設計實驗	
38.	Graduate Institute of Digital Contentsand Creative Industries (多媒體設計系數位內容創意產業研究所碩士班)	0176	Social Media Interaction 社交媒體互動研究	Elective 選修	3	Shen,siu tsen 沈思岑			2-4			(CHB0305) Multimedia Design Studio, Art and Humanity Building 3F 人文大樓三樓多媒體設計實驗	Course Plan
39.	Graduate Institute of Digital Contentsand Creative Industries (多媒體設計系數位內容創意產業研究所碩士班)	0169	Multimedia Presentation and Topic Oriented Research 多媒體創作與表現專題研究	Elective 選修	3	Shen,siu tsen 沈思岑		5-7				(CHB0305) Multimedia Design Studio, Art and Humanity Building 3F 人文大樓三樓多媒體設計實驗	Course Plan
40.	Department of Applied Foreign Languages	1788	Multinational Management 國際企業管理	Elective 選修	2	Chiu, Hui-Yun 邱慧昀			3-4			(AGR0301) Multi-function Auditorium,	Course Plan

	(應用外語系)											Red Building 3F 紅樓 3F AGR0301 多功能演講廳	
41.	Department of Applied Foreign Languages (應用外語系)	1824	International Marketing 國際行銷	Elective 選修	2	Chiu, Hui-Yun 邱慧昀					1-2	(AGR0302) Multimedia Language Lab., Red Building 3F 紅樓 3F AGR0302 多媒體語言實驗室	Course Plan

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	模態實驗與分析 Modal Experiments and Analysis	授課教師 Instructor	張禎元 Jen-Yuan ,Chang

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。
　Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：<u>L. Meirovitch, Analytical Methods in Vibrations, Macmillan</u> (<u>100</u>％英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)<u>100</u>% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion ■口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching □分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■期中/期末考：<u>100</u>％以上英文試題，學生以英文答題<u>　50　</u>%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■英文期中/期末報告：<u>　70　</u>%以英文表達。 　　The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have ■其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)： Problem sets will be assigned regularly and will usually be due one week later. Usually combination of analytical, computational, and graphical approaches will be expected in homework. Copy of homework is not allowed. However, you are allowed to discuss homework problems with one another in order to teach each other how to solve problems. You are NOT allowed to copy work from someone else OR to work step-by-step through a problem with someone else. The work you hand in with your name on it must be your attempt to

work through the problem. As a general guideline, oral communication regarding the homework is allowed, whereas written communication is not allowed. Because of the fast pace of the class, please avoid handing in late homework. If homework is submitted after solution set is distributed, 50% of the grade will be taken off.

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Review of Single Degree of Freedom Systems a. Free vibrations b. Response through transform methods c. Frequency response function	Chapter 1
W2	Review of Single Degree of Freedom Systems a. Free vibrations b. Response through transform methods c. Frequency response function	Chapter 1
W3	Equations of Motion for Multi-Degree of Freedom Systems a. Definitions and concepts b. Derivation of Lagrange's equation c. Small oscillations around equilibrium	Chapter 2, 3
W4	Equations of Motion for Multi-Degree of Freedom Systems a. Definitions and concepts b. Derivation of Lagrange's equation c. Small oscillations around equilibrium	Chapter 2, 3
W5	Free Vibration a. Matrix eigenvalue problems b. Properties of the eigenvalue problem c. Solution methods d. Expansion techniques e. Rayleigh's quotient	Chapter 4
W6	Free Vibration a. Matrix eigenvalue problems b. Properties of the eigenvalue problem c. Solution methods d. Expansion techniques e. Rayleigh's quotient	Chapter 4
W7	Modal Analysis a. Response problems	Chapter 7.1-7.6 and 9.1-9.5

	b. General solutions c. Steady State Harmonic Response d. Damped system response Mechanism of dissipation; Viscous damping; Rayleigh proportional damping; Modal damping	
W8	Modal Analysis a. Response problems b. General solutions c. Steady State Harmonic Response d. Damped system response Mechanism of dissipation; Viscous damping; Rayleigh proportional damping; Modal damping	Chapter 7.1-7.6 and 9.1-9.5
W9	Midterm Exams	
W10	Equations of Motion for Continuous Systems a. Transition from discrete system to continuous system b. Infinitesimal element approach Torsional Rod, longitudinal rod, and string models; Euler-Bernoulli, Rayleigh, and Timoshenko Models; Membranes c. Variational approach Hamilton's principle for a conservative discrete system; Extended Hamilton's principle; Extension to continuous systems; Applications	Course notes and Chapters 5, and 10.1-10.5
W11	Equations of Motion for Continuous Systems a. Transition from discrete system to continuous system b. Infinitesimal element approach Torsional Rod, longitudinal rod, and string models; Euler-Bernoulli, Rayleigh, and Timoshenko Models; Membranes c. Variational approach Hamilton's principle for a conservative discrete system; Extended Hamilton's principle; Extension to continuous systems; Applications	Course notes and Chapters 5, and 10.1-10.5
W12	Eigenvalue Problems of Continuous Systems a. Formulation and solution of eigenvalue problems One-dimensional, 2nd -order problems; One-dimensional, 4th order problems; Twodimensional, 2nd -order problems; Two-dimensional, 4th -order problems. b. Structure of the eigenvalue problem Essentials of functional analysis; Properties of linear operators, symmetric, and positivedefiniteness.	Course notes and Chapter 5
W13	Eigenvalue Problems of Continuous Systems a. Formulation and solution of eigenvalue problems One-dimensional, 2nd -order problems; One-dimensional,	Course notes and Chapter 5

	4th order problems; Twodimensional, 2nd -order problems; Two-dimensional, 4th -order problems. b. Structure of the eigenvalue problem Essentials of functional analysis; Properties of linear operators, symmetric, and positivedefiniteness.	
W14	Modal Analysis a. General development b. Steady state harmonic response c. Static response d. Transformations for inhomogeneous boundary conditions	Course notes and Chapter 7.7-7.17
W15	Modal Analysis a. General development b. Steady state harmonic response c. Static response d. Transformations for inhomogeneous boundary conditions	Course notes and Chapter 7.7-7.17
W16	Special topics a. Introduction to global discretization b. Introduction to constrained systems c. Introduction to elastic wave propagation d. Vibrations of rotors	a. Course notes and Chapter 6.1-6.6 b. Course notes c. Course notes and Chapter 8.1-8.8 d. Course notes
W17	Special topics a. Introduction to global discretization b. Introduction to constrained systems c. Introduction to elastic wave propagation d. Vibrations of rotors	a. Course notes and Chapter 6.1-6.6 b. Course notes c. Course notes and Chapter 8.1-8.8 d. Course notes

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	機器系統動力學 Dynamics of Machine System	授課教師 Instructor	黃運琳 / 教授 Yunn-Lin Hwang / Professor

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。
　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book： Hamilton H. Mabie, Charles F. Reinholtz, 1987, Mechanisms and Dynamics of Machinery, 4th Edition, ISBN: 978-0-471-80237-2, 656 Pages._ (_100_%英文內容 Percentage in English) 2.自製教材Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述） Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A ■問題導向 Problem Based　Learning　□協同教學Collaborative　Teaching ■分組報告 Group Report ■其他方式說明 Others： Final Project.
成績評量方式 Grading	■ 期中/期末考：_100_%以上英文試題，學生以英文答題　100　%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告： 100 %以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction of Working Model	Software demonstration, Q&A
W2	Introduction of RecurDyn	Software demonstration, Q&A
W3	Degrees Of Freedom	Lectures, Homework, Q&A
W4	Pendulum Dynamics	Lectures, Q&A
W5	Position Analysis of Machine	Lectures, Homework, Q&A
W6	Velocity Analysis of Machine	Lectures, Homework, Q&A
W7	Acceleration Analysis of Machine System	Lectures, Homework, Q&A
W8	Impact problems of Machine	Lectures, Homework, Q&A
W9	Midterm Examination	Open-Book Midterm Exam.
W10	Spur Gear Machine System	Lectures, Homework, Q&A
W11	Bevel Gear Machine System	Lectures, Homework, Q&A
W12	Worm Gear Machine System	Lectures, Q&A
W13	Belt Machine System	Lectures, Homework, Q&A
W14	Chain Machine System	Lectures, Homework, Q&A
W15	High/Low Mobility Track Machine System	Lectures, Q&A
W16	Other Types of Machine System	Lectures, Homework, Q&A
W17	Final project presentation	Oral presentations for final
W18	Final Examination	Open-Book Final Exam.

課程進度 Course

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	國際民航法規 International Aviation Regulation	授課教師 Instructor	林中彥 Lin,Chung-Yan

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。
　Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__100_% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　■協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■ 期中/期末考：_80_%以上英文試題，學生以英文答題_80_%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：80_%以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English

in grading）：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	Overview of the entire course
W2	Basic Concepts of Regulation	Regarding to the regulation, such as common law and civil law system
W3	Basic Concepts of Regulation	
W4	Freedoms of the air	Regarding to the airline right
W5	Freedoms of the air	
W6	The origin and historical evolution of FAR/EASA	History of FAA and EASA and their evolution
W7	The origin and historical evolution of FAR/EASA	
W8	FAR121 regulations	Airline Regulation
W9	Mid-term exam	Written exam in class
W10	FAR91/135 regulations	General Aviation and Charter airline regulation/Project Presentation
W11	CAA China Regulation	History of CAAC and their evolution /Project Presentation
W12	Int'l Aviation Regulation-Public Law	ICAO and IATA and international treaty /Project Presentation
W13	Int'l Aviation Regulation-Private Law	
W14	UAV Regulation in US	UAV law in US and their evolution /Project Presentation
W15	UAV Regulation in Taiwan	UAV law in Taiwan and their evolution /Project Presentation
W16	Airport Regulation	Airport regulation and their evolution /Project Presentation
W17	Airport Regulation	
W18	Final Report	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	航空公司管理實務 SELECTED TOPICS ON AIRLINE MANAGEMENT	授課教師 Instructor	劉昇祥 Liu,Shen-Hsiang

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)＿＿90＿＿％ 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	□　期中/期末考：＿＿＿％以上英文試題，學生以英文答題＿＿＿％。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■　英文期中/期末報告：＿70_％以英文表達。 　　The percentage of using English in midterm or final oral presentation ■　全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
	課程進度 Course Outline	
W1	Part 1: Airline Management Overview	Scope of Airline Operations
W2	Part 1: Airline Management Overview	Objective of Airline Management
W3	Part 1: Airline Management Overview	Airline Economics
W4	Part 1: Airline Management Overview	Airline Economics
W5	Part 2: DOC-A	Aircraft Ownership Cost
W6	Part 2: DOC-A	Aircraft Ownership Cost
W7	Part 3: DOC-M	Scheduled Maintenance Cost Analysis
W8	Part 3: DOC-M	Engine off-wing maintenance Cost Analysis
W9	Oral Presentation	Group/ Individual Project
W10	Midterm Report	Group/ Individual Project
W11	Part 4: Spare Parts Management	Spare Parts Management
W12	Part 4: Spare Parts Management	Spare Parts Management
W13	Part 5: Route Cost Analysis	Route Cost Analysis
W14	Part 5: Route Cost Analysis	Route Cost Analysis
W15	Part 5: Route Cost Analysis	Route Cost Analysis
W16	Part 5: Route Cost Analysis	Route Cost Analysis
W17	Oral Presentation	Group/ Individual Project
W18	Final Report	Group/ Individual Project

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	飛機維修計畫管理 AIRCRAFT MAINTENANCE PROGRAM DOCUMENT	授課教師 Instructor	劉昇祥 Liu,Shen-Hsiang

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__90__% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	☐　期中/期末考：＿＿＿%以上英文試題，學生以英文答題＿＿＿%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■　英文期中/期末報告：__70__%以英文表達。 　　The percentage of using English in midterm or final oral presentation ■　全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have ☐　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Part 1: Fundamentals of Maintenance	Objective of Aircraft Maintenance Program
W2	Part 1: Fundamentals of Maintenance	Regulatory Requirement for Developing Aircraft Maintenance Program
W3	Part 1: Fundamentals of Maintenance	Philosophy of Aircraft Maintenance Program－Reliability-Centered Maintenance
W4	Part 1: Fundamentals of Maintenance	Philosophy of Aircraft Maintenance Program－MSG-II Concept
W5	Part 1: Fundamentals of Maintenance	Philosophy of Aircraft Maintenance Program－MSG-III Concept
W6	Part 1: Fundamentals of Maintenance	Documentation of Aircraft Maintenance Program
W7	Part 1: Fundamentals of Maintenance	Documentation of Aircraft Maintenance Program
W8	Part 1: Fundamentals of Maintenance	Aviation Industry Certification Requirement
W9	Mid Term Report	Group/ Individual Oral Report
W10	Part 2: Maintenance Scheduling & Control	Philosophy & Organization
W11	Part 2: Maintenance Scheduling & Control	Maintenance Scheduling
W12	Part 2: Maintenance Scheduling & Control	Production Planning & Control
W13	Part 3: Reliability Control Program	Philosophy & Organization
W14	Part 3: Reliability Control Program	Statistics of Reliability Analysis
W15	Part 3: Reliability Control Program	Statistics of Reliability Analysis
W16	Part 3: Reliability Control Program	Statistics of Reliability Analysis
W17	Part 3: Reliability Control Program	Airline Reliability Program Report
W18	Final Term Report	Group/ Individual Project

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	機器系統動力學 Dynamics of Machine System	授課教師 Instructor	黃運琳 / 教授 Yunn-Lin Hwang / Professor

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book： <u>Hamilton H. Mabie, Charles F. Reinholtz, 1987, Mechanisms and Dynamics of Machinery, 4th Edition, ISBN: 978-0-471-80237-2, 656 Pages.</u> (_100_%英文內容 Percentage in English) 2.自製教材Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學Collaborative Teaching ■分組報告 Group Report ■其他方式說明 Others： Final Project.

成績評量方式 Grading	■ 期中/期末考：_100_%以上英文試題，學生以英文答題 100 %。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告： 100 %以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction of Working Model 2D	Software demonstration, Q&A
W2	Introduction of RecurDyn	Software demonstration, Q&A
W3	Degrees Of Freedom	Lectures, Homework, Q&A
W4	Pendulum Dynamics	Lectures, Q&A
W5	Position Analysis of Machine System	Lectures, Homework, Q&A
W6	Velocity Analysis of Machine System	Lectures, Homework, Q&A
W7	Acceleration Analysis of Machine System	Lectures, Homework, Q&A
W8	Impact problems of Machine System	Lectures, Homework, Q&A
W9	Midterm Examination	Open-Book Midterm Exam.
W10	Spur Gear Machine System	Lectures, Homework, Q&A
W11	Bevel Gear Machine System	Lectures, Homework, Q&A
W12	Worm Gear Machine System	Lectures, Q&A
W13	Belt Machine System	Lectures, Homework, Q&A
W14	Chain Machine System	Lectures, Homework, Q&A
W15	High/Low Mobility Track Machine System	Lectures, Q&A
W16	Other Types of Machine System	Lectures, Homework, Q&A
W17	Final project presentation	Oral presentations for final reports
W18	Final Examination	Open-Book Final Exam.

單元/主題

教學活動重點及教材內容

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	錯誤! 找不到參照來源。 錯誤! 找不到參照來源。	授課教師 Instructor	錯誤! 找不到參照來源。 錯誤! 找不到參照來源。
教學簡要說明			

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。
  Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
  Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：<u>IBM Workplace Learning Curriculum</u> (100%英文內容 Percentage in English) 2.自製教材 Self-made Materials：<u>Fundamentals of Entrepreneurial Thinking</u> 採用英文之比例 (Percentage in English)<u>100</u>% 3.其他補充說明Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	☐ 教材講述 Lecturing　☐ 小組討論 Group Discussion　☐ 口頭問答 Q&A ☐ 問題導向 Problem Based Learning ☐ 協同教學 Collaborative Teaching ☐ 分組報告 Group Report ☐ 其他方式說明 Others：　專題實作 Case study and implementation
成績評量方式 Grading	☐ 期中/期末考：_____%以上英文試題，學生以英文答題_____%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ☐ 英文期中/期末報告：_50_%以英文表達。 　　The percentage of using English in midterm or final oral presentation ☐ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have ☐其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：
課程進度 Course Outline	

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	任務專案選擇之邏輯 Project Goal Selection	Project Goal Selection and Defining Strategy
W2	定義專案目標 Project Goal Definition	Project Goal Identification and Definition
W3	定義任務細部目標與里程碑 Project Detailing	Task Definition and Milestones
W4	提出解決方案 Solution Definition	Solution Proposition
W5	溝通解決方案 Communication and Negotiation	Solution Negotiation
W6	施行解決方案 Practicing Solution	Solution Implementations
W7	追蹤解決方案執行成效 Tracking Achievements	Tracking Solution Executions
W8	激發領導力 Leadership	Leadership Observation and Stimulation
W9	期中演練 Midterm Practice	Midterm Practice
W10	承擔責任 Responsibilities	Responsibility Identification
W11	評估責任風險與自身資源 Risk Evaluations	Evaluating Risks and Resources
W12	分析責任之歸屬 Responsibility Evaluations	Responsibility Evaluation Skills and Techniques
W13	成功與否之擔責 Responsible for Results	Responsibilities of Achievements
W14	測試解決方案 Testing Solutions	Potential Solution Early Testing
W15	評估解決方案之成效 Evaluation Effectiveness	Evaluating Achievements and their Effectiveness
W16	危機之發生與評估 Risk Analysis	Risk Analysis and Prediction
W17	危機處理 Risk Solving	Dealing with Risks

W18	期末演練 Final Practice	Final Practice

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	錯誤! 找不到參照來源。 錯誤! 找不到參照來源。	授課教師 Instructor	錯誤! 找不到參照來源。 錯誤! 找不到參照來源。
教學簡要說明			

<table>
<tr><td colspan="4" align="center">教學簡要說明</td></tr>
<tr><td colspan="4">
1.請依照授課班級英文分級程度規劃課程計畫書。
  Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
  Please state bilingual instructor's teaching weeks and hours in course outline section.
</td></tr>
<tr>
<td>課程教材
Material</td>
<td colspan="3">
1.指定課本書名 Book：<u>IBM Workplace Learning Curriculum</u> (100%英文內容 Percentage in English)

2.自製教材 Self-made Materials：<u>Fundamentals of Entrepreneurial Thinking</u> 採用英文之比例 (Percentage in English)<u>100</u>%

3.其他補充說明Others：
</td>
</tr>
<tr>
<td>雙語教學方式
(可多選，或簡述)
Bilingual Teaching Strategies</td>
<td colspan="3">
■ 教材講述 Lecturing ■ 小組討論 Group Discussion □ 口頭問答 Q&A

■ 問題導向 Problem Based Learning ■ 協同教學 Collaborative Teaching

■ 分組報告 Group Report

■ 其他方式說明 Others： <u>專題實作 Case study and implementation</u>
</td>
</tr>
</table>

成績評量方式 Grading	□ 期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：_50_%以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報（含QA問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	長/近程目標之重要性 Evaluating Phased Goals	Importance of Short-/Long-term Goals
W2	長/近程目標之定義邏輯 Defining Phased Goals	Strategies of Defining Goals
W3	個人版圖規劃於職涯之角色 Personal Goals	Roles of Personal Alignments
W4	個人職場版圖之擬定邏輯 Defining Personal Goals	Strategy of Aligning Career Goals
W5	長程目標定義 Defining Long-term Goals	Evaluating and Defining Long-term Goals
W6	長程目標之近程作法 Dividing Long-term Goals	Intermediate Pathways toward Long-term Goals
W7	長程目標之追蹤 Tracking Long-term Goals	Defining and Tracking Long-term Milestones
W8	長程目標之驗證與調整 Adjusting Long-term Goals	Validation and Improvement against a Long-term Goal
W9	期中演練 Midterm Practice	Midterm Practice
W10	近程目標之定義 Defining Short-term Goals	Definitions of Short-term Goals

W11	近程目標之作法 Dividing Short-term Goals		Processing a Short-term Goal
W12	近程目標之追蹤 Tracking Short-term Goals		Tracking a Short-term Goal
W13	近程目標之驗證與調整 Adjusting Short-term Goals		Verification and Tuning-up a Short-term Goal
W14	自主性之重要性 Activeness		Importance of Activeness and its Pathways
W15	建構自主性規劃能力 Planning Skills		Active and (In-)dependent Planning
W16	挫折復原力之重要性 Taking a Fail		Recovering from a Fail and its Psychological Viewpoints
W17	調整與排解心理狀態之方法 Resolving Challenges		Tuning-up Psychological Status against Challenges
W18	期末演練 Final Practice		Final Practice

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	巨量資料分析 Big Data Analysis	授課教師 Instructor	李廣齊 Lee, Kuang-Chyi
教學簡要說明			

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：J. Han, M. Kamber & J. Pei, Data Mining: Concepts and Techniques, Morgan Kaufmann Publishers(Elsevier) (100%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English) >70% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■　期中/期末考：__70_%以上英文試題，學生以英文答題 _50_%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □　英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation ■　全英語口頭簡報 (含 QA 問答)20分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction to Data Mining.	Oral
W2	Data Preprocessing	Oral
W3	Algorithm of Perception	Oral
W4	Introduction to Linux System	Oral & Practice
W5	Introduction to Anaconda	Oral & Practice
W6	Python Programming	Oral & Practice
W7	Introduction to Neural Network	Oral
W8	Midterm Project Presentation	Oral
W9	Midterm Exam	
W10	Association　Analysis	Oral
W11	Introduction to Deep Learning	Oral
W12	Classification and Prediction	Oral
W13	MNIST dataset.	Oral & Practice
W14	Case Study(I): Get Data	Oral & Practice
W15	Case Study(II): Training	Oral & Practice

W16	Case Study(III): Inference	Oral & Practice
W17	Final Project Presentation	Oral
W18	Final Exam	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	創意與發明:簡報與討論 Creation and Innovation: Brief and Disscussion	授課教師 Instructor	蔡榮鋒 教授 Prof. Richard Tsai

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師,請於課程進度註明雙語導師授課之週次時數。 Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book:＿＿＿＿＿＿＿＿＿＿ (＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials:採用英文之比例(Percentage in English)__**90**__% 3.其他補充說明 Others:YouTube, PodCast 免費提供 英語教學社群、頻道 跟影片:例如 FUNDAY 英語教育、看影片學英文;只要切實 練習,就會進步。
雙語教學方式 (可多選,或簡述) Bilingual Teaching Strategies	□教材講述 Lecturing　■小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others:
成績評量方式 Grading	□ 期中/期末考:＿＿＿＿%以上英文試題,學生以英文答題＿＿＿＿%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告:＿＿＿＿%以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	
W2	Problem describition:1	Teaching
W3	Problem describition:2a	Interactive Practice
W4	Problem describition:2b	Interactive Practice
W5	Topics Suggestion I	Meeting SOP :Interactive discussion
W6	Topic Suggestion II	Meeting SOP :Interactive discussion
W7	Topic Suggestion III	Meeting SOP :Interactive discussion
W8	Mid Term Brief I	Internal group discussion
W9	Mid Term Brief II	Internal group discussion
W10	Information Integration I	Video, jpg collection practice
W11	Information Integration II	Video, jpg collection practice
W12	Outline Arrangement I	Group coordination:members and materials
W13	Outline Arrangement II	Group coordination:members and materials
W14	Outline Arrangement III	Group coordination:members and materials
W15	Rehersal I	Practice Q&A
W16	Rehersal II	Practice Q&A
W17	Final Presentation I	Q&A
W18	Final Presentation II	Q&A

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	特殊研究問題討論 Special research topics	授課教師 Instructor	黃鴻基 Huang,Hung Ji

	教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿＿無＿＿ (＿＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English) ＿100＿% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■　期中/期末考：＿100＿%以上英文試題，學生以英文答題＿30＿%。 　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■　英文期中/期末報告：＿100＿%以英文表達。 　The percentage of using English in midterm or final oral presentation □　全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　English oral presentation including Q&A session at least 20 minutes 　(Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introducing of Electronic Design Automation	
W2	Introduction of FreeCAD	Software setup, tutorial on basic mechanical design
W3	Introducing of raytracing simulation with "Optics" workbench	Review on Snell's law, single lens design and raytracing simulation
W4	Multi-lens simulation	
W5	Simulation of spectrometer optics	Prism-based spectrometer
W6	1st midterm exam	
W7	Simulation of brightness enhancement film of LED backlight	LED backlight simulation of
W8	Introduction of finite element simulation (FEM)	1D simulation using excel
W9	Introduction of finite element simulation (FEM)	1D simulation using excel
W10	FEM simulation using FreeCAD	Mechanical topics
W11	FEM simulation using FreeCAD	Mechanical topics
W12	2nd midterm exam	
W13	FEM simulation on electromagnetics	static electric field
W14	FEM simulation on electromagnetics	static electric field
W15	FEM simulation on electromagnetics	static magnetic field
W16	FEM simulation on electromagnetics	static magnetic field
W17	Final oral report	Oral presentation of selected topics
W18	Final oral report	Oral presentation of selected topics

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	工業電子學 Industrial electronics	授課教師 Instructor	吳森統 Wu,Sen-Tung

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：_____ (_____%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__50___% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	☑教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　☑協同教學 Collaborative Teaching ☑分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	☑ 期中/期末考： 30% 以上英文試題，學生以英文答題 30 %。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □ 英文期中/期末報告： _____%以英文表達。 The percentage of using English in midterm or final oral presentation □ 全英語口頭簡報 (含 QA 問答)20分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction and basic knowledge 課程介紹與建立基本先備知識	1.Explaining the lessons, learning goals, and grading rules of the course 2.Basic knowledge evaluation
W2	User guideline of instruments 儀器操作與說明	1. Testing instrument demonstration 2.Probe, oscilloscope, function generator
W3	Lecturing of simulation software (SIMPLIS) 電路模擬軟體教學(SIMPLIS)	1.The simulation environment setup 2.Practice of practical circuit
W4	Silicon Control Rectifier operation principle and application. 矽控整流器(SCR)原理介紹與應用電路	1.Luminance control with SCR 2.Characteristic discussion of SCR 3.Circuit design for driving bulb with SCR
W5	Diode for alternating current operation principle and application for pulse generator 雙向觸發二極體(DIAC)原理介紹與應用電路(脈波產生器)	1.Operation principle of DIAC 2.Pulse generator application with DIAC
W6	Triode for alternating current characteristics and phase control circuit for driving bulb 三極交流開關(TRIAC) 原理介紹與相位控制電路	1.Operation principle of TRAIC 2.Phase control application with TRAIC
W7	Photo resistor operation principle and light control circuit application 光敏電阻原理介紹與光控電路	1.Characteristic curve of photo resistor 2.Implementation and design of a light control circiut
W8	Field effect transistor touch panel sensor circuit FET 觸控電路	1.Operation principle and analysis of FET 2.Integration and design of a touch pad FET triggering lighting circuit
W9	Operation principle for photo-coupler and light control application 光耦合器原理介紹與應用電路	1. Characteristic and understanding for Photo-coupler 2.Integration circuit for the driving LED
W10	Midterm 期中考	Midterm
W11	Analysis of Uni junction transistor 單接面電晶體(UJT)原理介紹，	1.Operation principle for Uni junction transistor 2. Implementation and design of a light control circuit by using UJT
W12	Phase control IC TCA785 with SCR	1.Uuderstand the operation mode of Phase control IC

	light tuning function 相位控制 IC(TCA785)結合 SCR 調光	TCA785 2.Integration circuit by TCA785 and SCR
W13	Oscillator and saw-tooth generator 振盪器與鋸齒波產生器	Integration of oscillator and saw-tooth generator By discrete components
W14	MCU 結合手機調光 App 製作	Implementation of smart phone APP light dimming project 1 (APP editing)
W15	MCU 結合手機調光 App 製作	Implementation of smart phone APP light dimming project 2 (LED dimming control with APP)
W16	期末分組專題成果發表 1	Group final project demonstration and presentation1
W17	期末分組專題成果發表 2	Group final project demonstration and presentation1
W18	期末考	Final term

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	電子電路設計實務 Electrical Circuits Design and Applications	授課教師 Instructor	吳森統 Wu,Sen-Tung
教學簡要說明			

教學簡要說明

3.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

4.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	4.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 5.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__90___% 6.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	☑教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　☑協同教學 Collaborative Teaching ☑分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	□　期中/期末考：＿＿＿%以上英文試題，學生以英文答題＿＿＿%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □　英文期中/期末報告：＿＿＿＿%以英文表達。 　　The percentage of using English in midterm or final oral presentation ☑　全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Basic theory for electrical circuits	1.Explaining the lessons, learning goals, and grading rules of the course 2.Basic theory for EE field
W2	Components stress and characteristics curve analysis	1. To deliver the concept of components stress 2.Consideration of components selection
W3	Power amplifier circuit	1.The operation of power amplifiers 2.Practical circuit analysis for power amplifiers
W4	Filter design	1.Low pass, high pass filters 2.Band pass, band rejection filters 3.Simulation of each filter
W5	Protection circuit	1.Operation principle of passive protection components 2. Operation principle of active protection circuits
W6	AC application circuits	1.Most common AC application circuits 2.Discussion and design of AC application
W7	DC application circuits	1.Most common DC application circuits

		2.Discussion and design of DC application
W8	Sensors circuits	1.Operation principle and analysis of passive sensors 2. Implementation and design with sensors and other devices
W9	Discussion of grounding and shielding behavior	1. Characteristic and understanding for grounding 2. Characteristic and understanding for shielding behavior
W10	Midterm (Oral presentation)	Midterm
W11	MOSFET power switch driving circuit	1.Operation principle for MOSFET 2.Implementation and design of MOSFET power switch driving circuit
W12	Introduction of EMI for radiation interference	1.Understand the basic concept of EMI 2.Understand EMI for radiation interference
W13	Introduction of EMI for conduction interference	1.Understand the basic concept of EMI 2.Understand EMI for conduction interference
W14	HIPOT and isolation testing for cable/wire	1.Introduction of HIPOT testing bench 2.Understand the risk and benefits of isolation
W15	Commercial integrated circuits	1.Introduction of commercial integrated circuits 2.Design review of commercial integrated circuits
W16	Battery charger circuit	1.CC-CV charging curve analysis and discussion 2.Topologies of different battery charger circuits
W17	Design rules for consumer products	1.Introduction of each stage of the consumer products 2.Desigh rules and considerations for engineers
W18	Final term (Oral presentation)	Final term

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	物件導向程式設計 Object-Oriented Programming Design	授課教師 Instructor	劉育松 Liu Yu-Sung

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)＿＿100＿＿% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　　■小組討論 Group Discussion　　■口頭問答 Q&A ■問題導向 Problem Based Learning　　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	□　期中/期末考：＿＿＿%以上英文試題，學生以英文答題＿＿＿%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：＿＿＿%以英文表達。 　　The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	*Ch1 Getting Started and* *Ch2 Simple C++*	Introduce lesson requirements and set up the developing tools. How to write a simple C++ program.
W2	*Ch3 Basic Types and Data Dealing* *and Ch4 Operators*	Basis of data types and various operators and their priority sequence.
W3	*Ch5 Expressions and Statements and* *Ch6 Functions*	Introduce the structure and design of programs, selection statements and loops. Functions are also introduced.
W4	*Ch7 Functions Revisited and* *Ch8 Arrays and Strings*	Discuss some advanced issues about functions. Learn how to construct arrays and strings.
W5	*Ch9 Pointers*	Basic concepts of pointers. The relation of pointers to functions, arrays, and strings.
W6	*Ch10 Pointers Revisited*	Advance issues to the double pointers and dynamic memory allocation.
W7	*Ch11 Structures and Other Data Types*	Introduce how to construct structures, unions, and enumerators.
W8	*Ch12 Classes*	Basic knowledge of classes, objects, data members and function members.
W9	Midterm Examination	Oral report of project proposal
W10	*Ch13 Advanced Classes*	Introduce to the constructors of classes and static members.
W11	*Ch14 Destructor and Copy* *Constructor*	Introduce to the destructors and copy constructors of classes.
W12	*Ch15 Overloading Operators*	Discuss the concept of overloading of various operators.
W13	*Ch16 Inheritance*	Introduce the basic concept of inheritance of object-oriented programming.
W14	*Ch17 Virtual Functions and Abstract* *Classes*	Introduce virtual functions, pure virtual functions and abstract classes.
W15	*Ch18 File Operations*	How to open and close files and how to handle text and binary files.
W16	*Ch19 Templates and Exception* *Handling*	How to construct templates and handle the exception in programs.
W17	*Ch20 Large Programs*	Understand name spaces and conditional compilation for large programs.
W18	*Final Examination*	Oral report of project design

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	5G 核心網路技術與實務 Technology and Practice of 5G Core Networks	授課教師 Instructor	蘇暉凱 Su, Hui-Kai

	教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)＿＿＿＿＿% 3.其他補充說明 Others：教育部課程推廣計畫教材 The materials of MOE course promotion plan (90%英文內容 Percentage in English)
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■　期中/期末考：　100%以上英文試題，學生以英文答題20%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■　英文期中/期末報告：　80%以英文表達。 　　The percentage of using English in midterm or final oral presentation ■　全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction to Telecom Networks: The Evolution of 1G-to-5G Core Networks	Lecturing The Evolution of 1G-to-5G Core networks
W2	Introduction to Telecom Networks: The Evolution of 1G-to-5G Core Networks	Lecturing The Evolution of 1G-to-5G Core networks
W3	Introduction to 5G Core Network	Lecturing 5G Core Network
W4	Introduction to 5G Core Network	Lecturing 5G Core Network
W5	Virtualization technology	Lecturing Virtualization technology
W6	Lab 1: Linux operating system installation and Docker virtualization experiment	Experiment 1.　Linux operating system installation Docker virtualization experiment
W7	5G open-source core network - Free5GC	Lecturing Free5GC
W8	Lab 2: Free5GC installation and telecom network setup	Experiment 1.　Free5GC installation Telecom network setup
W9	Midterm	
W10	Lab 2: Free5GC installation and telecom network setup	Experiment 1.　Free5GC installation Telecom network setup
W11	Lab 3: Virtualize Free5GC core network with Docker	Experiment Virtualize Free5GC core network with Docker
W12	Lab 3: Virtualize Free5GC core network with Docker	Experiment Virtualize Free5GC core network with Docker
W13	Lab 4: Network Function SBI Deployment & Simple Network Function Implementation	Experiment 1.　Network Function SBI Deployment Simple Network Function Implementation
W14	Lab 4: Network Function SBI Deployment & Simple Network Function Implementation	Experiment 1.　Network Function SBI Deployment Simple Network Function Implementation

W15	Final Project	Practice and discussion
W16	Final Project	Practice and discussion
W17	Final Project	Practice and discussion
W18	Final Project	Project Presentation

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	高等 FPGA 系統設計與實務 Advance SOC FPGA System Integration with Machine Learning	授課教師 Instructor	宋啟嘉 教授 Prof. Dr.-Ing. Chi-Chia Sun

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

This course is designed for graduate students who are interested in advanced SoC FPGA design concepts, design methodology, and basic concept of Machine Learning. In the meantime, several Labs about the Xilinx PYNQ tutorials related to AI and Machine Learning will be demonstrated. After that, several lectures with the related topics to OpenCL FPGA tutorials will be given. Of course, we will select some state-the-art researches for computational efficient algorithm in FPGA/ARM implementation and these topics will be assigned as a small colloquium for students. At the end, graduate students shall present their final projects and its implementation on ZYNQ or PYNQ FPGA.

- 100% Lecture in English
- CEF-B2 Level
- 本課開放電資學院外籍生修課，過往約台灣學生外籍生各半

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　　Please state bilingual instructor's teaching weeks and hours in course outline section.

　　無，授課教師本人已具備有全英授課能力 CEF-C1 Level

課程教材 Material	1.自製教材 Self-made Materials：採用英文之比例(Percentage in English)<u>100</u>%

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　■小組討論 Group Discussion　■口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	□　期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■英文期中/期末報告：_100____%以英文表達。 The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction of SoC FPGA	Lecture
W2		PYNQ Lab1
W3		Lecture
W4	Introduction of Machine Learning	Lecture
W5		Lecture
W6	Open CL	Lecture
W7		PYNQ Lab2
W8		PYNQ Lab3
W9	Midterm	Oral Report
W10	Xilinx PYNQ	Lecture
W11		Lecture
W12		PYNQ Lab4
W13	Colloquium	Recent FPGA paper study
W14		Recent FPGA paper study

W15	Collaborative Teaching	Xilinx Engineer Lecture
W16	PBL Project	Group Final Project
W17		Group Final Project
W18	Final Term	Oral Report

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	物件導向程式設計 Object-Oriented Programming Design	授課教師 Instructor	劉育松 Liu,Yu-Suang

<table>
<tr><td colspan="4" align="center">教學簡要說明</td></tr>
<tr><td colspan="4">1.請依照授課班級英文分級程度規劃課程計畫書。
　Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
　Please state bilingual instructor's teaching weeks and hours in course outline section.</td></tr>
<tr><td>課程教材
Material</td><td colspan="3">4.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English)

5.自製教材 Self-made Materials：採用英文之比例(Percentage in English)＿＿100＿＿%

6.其他補充說明 Others：</td></tr>
<tr><td>雙語教學方式
(可多選，或簡述)
Bilingual Teaching Strategies</td><td colspan="3">■教材講述 Lecturing　■小組討論 Group Discussion　■口頭問答 Q&A

■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching

■分組報告 Group Report

□其他方式說明 Others：</td></tr>
</table>

成績評量方式 Grading	□ 期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	*Ch1 Getting Started and Ch2 Simple C++*	Introduce lesson requirements and set up the developing tools. How to write a simple C++ program.
W2	*Ch3 Basic Types and Data Dealing and Ch4 Operators*	Basis of data types and various operators and their priority sequence.
W3	*Ch5 Expressions and Statements and Ch6 Functions*	Introduce the structure and design of programs, selection statements and loops. Functions are also introduced.
W4	*Ch7 Functions Revisited and Ch8 Arrays and Strings*	Discuss some advanced issues about functions. Learn how to construct arrays and strings.
W5	*Ch9 Pointers*	Basic concepts of pointers. The relation of pointers to functions, arrays, and strings.
W6	*Ch10 Pointers Revisited*	Advance issues to the double pointers and dynamic memory allocation.
W7	*Ch11 Structures and Other Data Types*	Introduce how to construct structures, unions, and enumerators.
W8	*Ch12 Classes*	Basic knowledge of classes, objects, data members and function members.
W9	Midterm Examination	Oral report of project proposal
W10	*Ch13 Advanced Classes*	Introduce to the constructors of classes and static members.
W11	*Ch14 Destructor and Copy Constructor*	Introduce to the destructors and copy constructors of classes.

W12	*Ch15 Overloading Operators*	Discuss the concept of overloading of various operators.
W13	*Ch16 Inheritance*	Introduce the basic concept of inheritance of object-oriented programming.
W14	*Ch17 Virtual Functions and Abstract Classes*	Introduce virtual functions, pure virtual functions and abstract classes.
W15	*Ch18 File Operations*	How to open and close files and how to handle text and binary files.
W16	*Ch19 Templates and Exception Handling*	How to construct templates and handle the exception in programs.
W17	*Ch20 Large Programs*	Understand name spaces and conditional compilation for large programs.
W18	*Final Examination*	Oral report of project design

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title　in Mandarin and English	微處理機實習 Microprocessor Lab	授課教師 Instructor	陳國益 Kuo-Yi Chen

<table>
<tr><td colspan="4" align="center">教學簡要說明</td></tr>
<tr><td colspan="4">
1.請依照授課班級英文分級程度規劃課程計畫書。
　Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
　Please state bilingual instructor's teaching weeks and hours in course outline section.
</td></tr>
<tr><td>課程教材
Material</td><td colspan="3">
1.指定課本書名 Book：_ Embedded Systems with ARM Cortex-M Microcontrollers in Assembly Language and C _ (_100__%英文內容 Percentage in English)

2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_50_%

3.其他補充說明 Others：
</td></tr>
</table>

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching □分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■期中/期末考：_50_%以上英文試題，學生以英文答題_50_%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

<div align="center">

課程進度 Course Outline
</div>

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	NUC140 Cortex-M0Introduction	ARM Cortex-M0 Introduction
W2	NUC140 development	NUC140 and Keil C and project create
W3	SPI experiments	SPI control Flash
W4	Watchdog experiments	The timer as watchdog to protect MCU
W5	TSR experiments	TSR lab project
W6	Interrupter experiments	Interrupter lab project
W7	SRAM experiments	SRAM read/write operation
W8	Buzzer experiments	Buzzer operation
W9	File R/W experiments	Local file read/write operation
W10	Mid term	
W11	GPIO application	GPIO usage and PIN
W12	LCD experiments	LCD usage and LCD project
W13	UART experiments	UART protocol
W14	ADC experiments	ADC converter •NuMicro ADC

W15	PWM experiments	PWM controller with motor and buzzer
W16	Timer experiments	Cortex-M0 MCU Interrupt Vector,Timer,WatchDog
W17	I2C experiments	I2C access EEPROM
W18	Final term	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	多媒體應用與實習 Multimedia Application and Design	授課教師 Instructor	簡銘伸 Jian,Ming-Shen

<table>
<tr><td colspan="4">教學簡要說明</td></tr>
<tr><td colspan="4">

• 請依照授課班級英文分級程度規劃課程計畫書。

Please design the course plan by following the English using percentage of the course English level.

• 如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

Please state bilingual instructor's teaching weeks and hours in course outline section.
</td></tr>
<tr><td>

課程教材

Material
</td><td colspan="3">

• 指定課本書名 Book：_____ (_____%英文內容 Percentage in English)

• 自製教材 Self-made Materials：採用英文之比例(Percentage in English)_80__%

• 其他補充說明 Others：
</td></tr>
<tr><td>

雙語教學方式
(可多選，或簡述)
Bilingual Teaching Strategies
</td><td colspan="3">

■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A

□問題導向 Problem Based Learning　□協同教學 Collaborative Teaching

■分組報告 Group Report

□其他方式說明 Others：
</td></tr>
</table>

成績評量方式 Grading	• 期中/期末考：__100___%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. • 英文期中/期末報告：__50__%以英文表達。 The percentage of using English in midterm or final oral presentation • 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have • 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	Introduction
W2	HTML Structure	HTML Structure
W3	HTML Link Structure	HTML Link Structure
W4	Laboratory	Build individual HTML-Webpage
W5	Various Web Content Management	Various Web Content Management
W6	Control Management	Control Management
W7	Laboratory	Multiple Web pages and Website Implementation
W8	Mid-Exam	Mid-Exam
W9	CSS Introduction	CSS Control and Management
W10	CSS Implementation	CSS Implementation
W11	Laboratory	Multiple Web pages and Website Laboratory
W12	PHP/Apache/MySQL Implementation	PHP/Apache/MySQL Implementation
W13	SQL management and PHP service	Add and Query data to Database
W14	SQL management and PHP service	Rewrite and Delete data to Database
W15	Laboratory	Laboratory
W16	Web Application Management	Multiple Data read and shown from database
W17	Discussion and Report	Discussion and Report
W18	Discussion and Report	Discussion and Report

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	計算機網路概論 Computer Network	授課教師 Instructor	黃世昌 Huang,Shih-Chang

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：Network Fundamentals: CCNA Exploration Companion Guide, Mark A. Dye, Rick Mcdonald, Antoon W. Rufi. ISBN: 978-1587133480 (_100_%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_100_% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：

成績評量方式 Grading	■　期中/期末考：_90_%以上英文試題，學生以英文答題_30-60_%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □　英文期中/期末報告：_____%以英文表達。 　　The percentage of using English in midterm or final oral presentation ■　全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　　English oral presentation including Q&A session at least 20 minutes 　　(Department cores, master's degree and doctoral degree courses so must have

☐ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading）：

	課程進度 Course Outline	
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Overview of Computer Network	Network layer, topology
W2	Communicating concept	Analog and digital, baseband broadband, wired media
W3	Media and devices	UTP,CABLE, Modem, Router,Switch
W4	Protocols	Layer Protocol, TCP/UDP, OSI
W5	Local Area Network framework	Ethernet, Fast Ethernet, build the LAN/WLAN
W6	Network Planning	Layout, backbone, case study
W7	Layer 2 Protocol	CS/MACD, Frame format, collision
W8	IP protocol	IP class, CIDR, DHCP, DNS, IPV6
W9	Midterm	Midterm exam
W10	Addressing and Network I	IP Classification CIDR, Network Mask,
W11	Addressing and Network II	Subnet Scheduling
W12	TCP Protocol I	UDP/ TCP. TCP
W13	TCP Protocol II	Segment format, TCP connection
W14	ARP,RARP, ICMP	ARP,RARP, ICMP, header format
W15	Routing Protocols I	OSPF, RIP, DSRV, AODV
W16	Routing Protocols II	Static route, dynamic route
W17	Security	Firewall, digital signatual, hacker,
W18	Final	Final exam

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	雲端大數據安全 Big Data Security	授課教師 Instructor	江季翰 Ji-Han Jiang

<table>
<tr><td colspan="4" align="center">教學簡要說明</td></tr>
<tr><td colspan="4">1.請依照授課班級英文分級程度規劃課程計畫書。
   Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
   Please state bilingual instructor's teaching weeks and hours in course outline section.</td></tr>
<tr><td>課程教材
Material</td><td colspan="3">4.指定課本書名 Book：<u>Security and Data Storage Aspect in Cloud Computing</u> (<u>100</u>%英文內容 Percentage in English)

5.自製教材 Self-made Materials：採用英文之比例(Percentage in English) <u>100</u>%

6.其他補充說明 Others：Study and report technical paper in English</td></tr>
<tr><td>雙語教學方式
(可多選，或簡述)
Bilingual Teaching Strategies</td><td colspan="3">■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A

■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching

■分組報告 Group Report

□其他方式說明 Others：</td></tr>
<tr><td>成績評量方式
Grading</td><td colspan="3">■ 期中/期末考：100 %以上英文試題，學生以英文答題 <u>20</u> %。
   The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper.

■ 英文期中/期末報告：<u>20</u> %以英文表達。

   The percentage of using English in midterm or final oral presentation

■ 全英語口頭簡報 (含 QA 問答) 20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式)
   English oral presentation including Q&A session at least 20 minutes
   (Department cores, master's degree and doctoral degree courses so must have

□ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：</td></tr>
</table>

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	• Course Introduction
W2	Introduction to Cloud Computing	• NIST Cloud Computing Standards Roadmap
W3	Importance of Big Data	• Introduction to Big Data
W4	Big Data in the Cloud	• Storage and Database Management for Big Data • Big Data in the Cloud A Survey • Big Data Security Industry Trends
W5	Security and Privacy Issues	• Cryptography Background • Network Security Issues and Challenges
W6	Security in Cloud Computing	• A Survey of Security in Cloud Computing
W7	Big Data Security Threats	• Big Data Security Issues and Challenges
W8	Understanding Big Data Security	• Big Data Security—Challenges Recommendations and Solutions
W9	Midterm	• Midterm exam
W10	Cases Study: Big Data and Cloud Computing Security	• (Problem Based Learning) • CHARON A Secure Cloud of Clouds System.pdf
W11	Analysis Tools: Introduction to ELK stack	• (Problem Based Learning) • 15 Minute Introduction to ELK
W12	Big Data Security Application Practice	• (Problem Based Learning) • Building an IoT Data Hub with Elasticsearch, Logstash and Kibana
W13	Big Data Security Management	• Big Data Security Assurance Technology • Data Security Assurance Practice • Big Data Security Application Technology
W14	Security and Data Storage Aspect in Cloud Computing	• On cloud security attacks a taxonomy and intrusion detection and prevention as a service
W15	Intrusion detection techniques	• Intrusion detection techniques in cloud environment A survey
W16	Intelligent Management and Efficient Operation of Big Data	• A deep learning approach for proactive multi-cloud cooperative intrusion detection system
W17	Final Report	• Group Oral Report and Discussion (in English)
W18	Final Report	• Group Oral Report and Discussion (in English)

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	科技文件閱讀 English Reading for Science and Technology	授課教師 Instructor	蔡柏祥 Tsai,Po-Hsiang

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：_科技英文導讀(5th)，李開偉，全華，2016 (__80___%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　　■小組討論 Group Discussion　　■口頭問答 Q&A ■問題導向 Problem Based Learning　　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：

成績評量方式 Grading	■ 期中/期末考：__30___%以上英文試題，學生以英文答題__30___%。 　The percentage of English using in designing midterm/final exam; the percentage of English 　using in answering the exam paper. ■ 英文期中/期末報告：__30___%以英文表達。 　The percentage of using English in midterm or final oral presentation □ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此** 　**評量方式)** 　English oral presentation including Q&A session at least 20 minutes 　(Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in

grading）：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	Overview, Syllabus
W2	Tablets	Issue about Tablet
W3	Touchscreens	Issue about Touchscreens
W4	Unmanned Aerial Vehicle	Issue about Unmanned Aerial Vehicle
W5	Accelerometer and Gyroscope	Issue about Accelerometer and Gyroscope
W6	Knowledge Management	Issue about Knowledge Management
W7	What are Trademarks?	Issue about What are Trademarks?
W8	What is Copyright?	Issue about What is Copyright?
W9	Mid-Term Exam	Mid-Term Exam
W10	Patents in the USA	Issue about Patents in the USA
W11	Filing a Design Paten	Issue about Filing a Design Paten
W12	Non-Provisional Utility Paten Application	Issue about Non-Provisional Utility Paten Application
W13	Development of E-commerce in Manufacturing Operations	Issue about Development of E-commerce in Manufacturing Operations
W14	Digitization in Telecommunications	Issue about Digitization in Telecommunications
W15	Origin of Integrated Circuit	Issue about Origin of Integrated Circuit
W16	Virtual Reality	Issue about Virtual Reality
W17	Applications of Nanotechnology in Bio-Engineering	Issue about Applications of Nanotechnology in Bio-Engineering
W18	Final-Term Exam	Final-Term Exam

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	科技英文 (English for Science and Technology)	授課教師 Instructor	蔡柏祥 Tsai,Po-Hsiang

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：_科技英文，陳志的，高立， 2006(Reference Book (__80___%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　　■小組討論 Group Discussion　　■口頭問答 Q&A ■問題導向 Problem Based Learning　　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■ 期中/期末考：__30___%以上英文試題，學生以英文答題__30___%。 　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：__30___%以英文表達。 　The percentage of using English in midterm or final oral presentation □ 全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　English oral presentation including Q&A session at least 20 minutes 　(Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	Overview, Syllabus
W2	Liquid Crystals	Liquid Crystals
W3	Artificial Intelligence	Artificial Intelligence
W4	Balloon Flight	Balloon Flight
W5	Banner Ads	Banner Ads
W6	Domino's Store Management	Domino's Store Management
W7	Dow Chemical	Dow Chemical
W8	Expert Systems	Expert Systems
W9	Mid-Term Exam	Mid-Term Exam
W10	Hen's Egg	Issue about Hen's Egg
W11	Hindenburg	Issue about Hindenburg
W12	Jaw Crusher: Coarse Range	Issue about Jaw Crusher: Coarse Range
W13	Leadscrew Linear Actuators	Issue about Leadscrew Linear Actuators
W14	Superconductors	Issue about Superconductors
W15	Systems Software	Issue about Systems Software
W16	The Transformer	Issue about The Transformer
W17	Transistor Appliers	Issue about Transistor Appliers
W18	Final-Term Exam	Final-Term Exam

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	生產與作業管理 Production and Operations Management	授課教師 Instructor	郭文宏 Wen-Hung,Kuo

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 Please design the course plan by following the English using percentage of the course English level. This course covers the core topics of production and operations management, including forecasting, capacity planning, inventory, scheduling, MRP and ERP. Lecture, software programming, and project presentation will be used in this course. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	指定課本書名 Book：Operations Management, William J. Stevenson (100 %英文內容 Percentage in English) 1.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__100_% 2.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching □分組報告 Group Report ■其他方式說明 Others：期末英文報告 (Final project presentation)
成績評量方式 Grading	■ 期中/期末考：__100_%以上英文試題，學生以英文答題__100_%。 　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：_90_%以英文表達。 　The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　English oral presentation including Q&A session at least 20 minutes

☐ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading）：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction to Operations Management	Introduction to the architecture of operation management
W2	Competitiveness, Strategy, and Productivity	How a company get competitiveness and productivity.
W3	Forecasting	The features of forecasting. Introduction to qualitative forecasting
W4	Forecasting	Introduction to quantitative forecasting
W5	Strategic Capacity Planning for Products and Services	Introduction to capacity planning of three planning horizons
W6	Strategic Capacity Planning for Products and Services	Different strategic capacity planning
W7	Process Selection and Facilities Layout	Process types, process selection, and automation.
W8	Process Selection and Facilities Layout	Classification of production systems and (corresponding) types of layouts.
W9	Midterm exam	
W10	Inventory Management	The importance of inventory management and key inventory issues
W11	Inventory Management	Some mathematical models of inventory management
W12	BOM	Introduction to bill of material and the role of BOM
W13	MRP and ERP	Introduction of MRP and the relation of BOM and MRP
W14	MRP and ERP	How to perform an MRP. Introduction to ERP
W15	Scheduling	Introduction to scheduling activities
W16	Scheduling	Element of scheduling problems
W17	Final project presentation	English oral presentation

W18	Final project presentation	English oral presentation

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	資料庫管理 Database Management	授課教師 Instructor	侯雍聰 Yung-Tsung Hou

教學簡要說明

This course aims at giving students an understanding of basic database concepts, terminologies and technologies. The student will learn the theoretical and practical knowledge from both the technical and organization perspectives.

課程教材 Material	1.指定課本書名 Book：__Fundamentals of Database Systems _____ 　　(__100___%英文內容 Percentage in English) 2.自製教材 Self-made Materials：補充講義 Lecture Notes，採用英文之比例(Percentage in English)___100___%
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：

成績評量方式 Grading	□ 期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：__100___%以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Database System Introduction	An overview of database systems
W2	Architecture of Database Systems	Learning data, schemas and instances
W3	Relational Model of Data	Introduction of conceptual data modeling
W4	Algebraic Query Language	Mathematics behind databases
W5	Design Theory of Relational Database	The design issues of databases
W6	Database Schema	Learning entity, attribute and key
W7	High-Level Database Model	Using high-level conceptual model to design DBs.
W8	ER Model	ER diagrams, naming and design
W9	Midterm	
W10	Logical Query Language	Introduction of query languages
W11	SQL I	Basic SQL
W12	SQL II	Complex SQL
W13	SQL III	Advanced SQL
W14	Normalization I	First and second Normal Forms
W15	Normalization II	BCN form
W16	Views and Indexes	DB file structures and indexing
W17	Advanced Topics in Relational Databases	Query processing and Optimization
W18	Final Exam	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	機器學習與大數據 Machine Learning and Big Data	授課教師 Instructor	胡念祖 Nian -Ze Hu

教學簡要說明

3.請依照授課班級英文分級程度規劃課程計畫書。

This introductory course gives an overview of many concepts, techniques, and processes in Big Data, beginning with topics such as business process and data business matrix and ending up with more recent topics such as slowly changing dimension, bridge tables and some advance fact table techniques.. The course will give the students the basic ideas and intuition behind modern data modeling methods as well as a bit more formal understanding of how, why, and when they work. The underlying theme in the course is ETL method as it provides the data flow for most of the scenarios covered.

Help students obtain the skills of:

The goal of this course is to give an introduction to the modeling technique of Big Data. The course will teach student basic skills to decide which approaches to use for what scenarios, build up your own data warehouse structure., etc

Instructor introduces the concepts and provides some workshop for students.

4.如有聘請雙語導師,請於課程進度註明雙語導師授課之週次時數。

Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	7.指定課本書名 Book:Data Science from Scratch, Joel Grus, O'Reilly (100 %英文內容 Percentage in English) 8.自製教材 Self-made Materials:採用英文之比例(Percentage in English)_____% 9.其他補充說明 Others:
雙語教學方式 (可多選,或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　■小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others:

成績評量方式 Grading	■期中/期末考： _30_ %以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■英文期中/期末報告： _30_ %以英文表達。 The percentage of using English in midterm or final oral presentation □ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have ■其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：Attendance 20%, Workshop 20%

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Big Data	
W2	•Introduction to Big Data	
W3	•Architecture	
W4	•Database fundamental	
W5	•Data Modeling	
W6	•Dimensions	
W7	•Modeling Myths	
W8	• Project and team group discussion	
W9	Midterm	
W10	• Fact Table Techniques	
W11	• Dimension Table Techniques	
W12	Machine Learning	
W13	• Design for various Scenarios	
W14	• ETL Modeling	
W15	•ETL Plan	
W16	•ETL Implmentation	
W17	•Project and team group discussion	
W18	Final Exam	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	時間數列分析 Time Series Analysis	授課教師 Instructor	王若愚 Jo-Yu Wang

<table>
<tr><td colspan="4" align="center">教學簡要說明</td></tr>
<tr><td colspan="4">1.請依照授課班級英文分級程度規劃課程計畫書。
    Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
    Please state bilingual instructor's teaching weeks and hours in course outline section.</td></tr>
</table>

課程教材 Material	1.指定課本書名 Book：_ *Time Series Analysis and Its Applications: With R Examples* ___ (_100____%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_100_____% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	☑教材講述 Lecturing ☑小組討論 Group Discussion ☑口頭問答 Q&A ☐問題導向 Problem Based Learning ☐協同教學 Collaborative Teaching ☐分組報告 Group Report ☑其他方式說明 Others：

成績評量方式
Grading
	☑期中/期末考：__100___%以上英文試題，學生以英文答題_____%。
	    The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper.
	
	☑英文期中/期末報告：_100____%以英文表達。
	
	    The percentage of using English in midterm or final oral presentation
	
	☑全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)**
	    English oral presentation including Q&A session at least 20 minutes
	    (Department cores, master's degree and doctoral degree courses so must have
	
	☐ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction of the course, and the assessment method of the learning performance. Characteristic of Time Series Data, including the basic models and how we use them.	
W2	Introduction of R packages and reproducibility, and why we use R package in this course. Introductions of time series analysis with R, and Taiwan Economic Journal (TEJ) database.	
W3	Time Series Regression and Exploratory Data Analysis. 3.1 Classical Regression in the Time Series Context. 3.2 Akaike's Information Criterion (AIC) and Bayesian Information Criterion (BIC) applications. 3.3 Exploratory Data Analysis and the codes in R packages.	
W4	Autoregressive moving average (ARMA) models and the function of autoregressive integrated moving average (ARIMA) model. 4.1 The insights of AR and MA models, and their applications in Taiwanese Stock market or world equity indices. 4.2 Box-Jenkins methods. 4.3 How to apply ARMA and ARIMA model in R package.	Assignment: R installation and activate in personal laptop
W5	In class practical exercises (I) with R language and TEJ database.	Assignment: download data from TEJ and read the data into R environment.
W6	Stationary and Non-stationary Data	Assignment: download data from TEJ and read the data

	5.1 Why the issue (Stationary or not) is important, and unit root testing. 5.2 How to test and identify it.	into R environment.
W7	5.3 How to cure the issue of non-stationary. 5.4 Building ARIMA Models with R: models, diagnosis, drawing diagrams, and explanations.	Assignment: download data from TEJ and read the data into R environment.
W8	In class practical exercises (II) with R language and TEJ database.	
W9	midterm	Midterm presentation: 10 minutes for each student
W10	In class practical exercises (III) with R language and TEJ database. One case study demonstrated by the lecturer.	In class assignment and practice.
W11	Volatility models of time series data 6.1 Why we need to consider volatility of time series data? 6.2 The features of time series data, particularly to financial or economic data. 6.3 Generalized autoregressive conditionally heteroscedastic (GARCH) model, and its applications.	
W12	6.4 Example: analysis of G7 GNP. 6.5 Threshold Models 6.5.1 Why and how to use threshold model. 6.5.2 How to build a threshold model with GARCH model.	
W13	State-Space Models 7.1 Filtering, Smoothing, and Forecasting. 7.2 The Kalman Filter and its applications.	
W14	7.3 Maximum Likelihood Estimation (MLE) application to Kalman filter. 7.4 Missing Data Modifications.	

	Other topics of analysis of time series data. 8.1 Bootstrapping State-Space Models 8.2 Dynamic Linear Models with Switching. 8.3 Nonlinear and Non-normal State-Space Models Using Monte Carlo Methods	
W15		
W16	Term paper--personal presentation I	20 minutes for each students
W17	Term paper--personal presentation II	20 minutes for each students
W18	Term paper--personal presentation III	20 minutes for each students

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	投資學理論與實務 The Theory and Practice of Investment	授課教師 Instructor	賴雅雯 Ya-Wen Lai

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

Please design the course plan by following the English using percentage of the course English level.

This course is a graduate-level investment course that focuses on practical applications as well as analytical analyses of investment theories. The major topics include portfolio theory, factor pricing models and investment evaluation.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：Essentials of Investments (100%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	Ｖ教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching Ｖ分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	Ｖ 期中/期末考：_100____%以上英文試題，學生以英文答題__5___%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □　英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation Ｖ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

<div align="center">

課程進度 Course Outline

</div>

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Course Introduction	Syllabus & Quantitative methods
W2	Risk and Return	Chapter 5
W3	Risk and Return	Chapter 5
W4	Diversification	Chapter 6
W5	Diversification	Chapter 6
W6	Diversification	Chapter 6
W7	CAPM and APT	Chapter 7
W8	CAPM and APT	Chapter 7
W9	Mid-term Exam	
W10	Implementation: Build efficient frontier using Excel	Homework Assignment
W11	Efficient Market Hypothesis	Chapter 8
W12	Efficient Market Hypothesis	Chapter 8
W13	Presentation	Research articles
W14	Presentation	Research articles

W15	Equity Valuation	Chapter 13
W16	Equity Valuation	Chapter 13
W17	Equity Valuation	Chapter 13
W18	Final Exam	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	應用統計學 Applied Statistics	授課教師 Instructor	黃俊平 Huang, Jyunping

<table>
<tr><td colspan="4" align="center">教學簡要說明</td></tr>
<tr><td colspan="4">1.請依照授課班級英文分級程度規劃課程計畫書。
    Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
    Please state bilingual instructor's teaching weeks and hours in course outline section.</td></tr>
<tr><td>課程教材
Material</td><td colspan="3">1.指定課本書名 Book：Probability and Statistics with Integrated Software Routines (100%英文內容 Percentage in English)

2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)100%

3.其他補充說明 Others：</td></tr>
<tr><td>雙語教學方式
(可多選，或簡述)
Bilingual
Teaching
Strategies</td><td colspan="3">■教材講述 Lecturing　□小組討論 Group Discussion　□口頭問答 Q&A

□問題導向 Problem Based Learning　　□協同教學 Collaborative Teaching

□分組報告 Group Report

□其他方式說明 Others：</td></tr>
</table>

成績評量方式 Grading	■期中/期末考：100%以上英文試題，學生以英文答題100%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □ 英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation □ 全英語口頭簡報 (含 QA 問答)20分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	VBA and Statistical theory
W2	Interval Estimation	Basic theory of Interval Estimation
W3	Interval Estimation	VBA Programming in Interval Estimation
W4	Statistical Test of Mean Value	Population Mean Value test theory
W5	Statistical Test of Proportion	Population Proportion test theory
W6	Statistical Test of Variation	Population Variation test theory
W7	Statistical Test of two Population	Test of two population mean and proportion
W8	Statistical Test of two Population	Programming for two population tests
W9	Chi-square Test	Chi-square test of several proportion values
W10	Chi-square Test	Programming for Chi-square test
W11	Analysis of Variance	Theory of ANOVA
W12	One-way Analysis of Variance	Theory of one and two way ANOVA
W13	Two-way Analysis of Variance	Programming for ANOVA
W14	Regression Analysis	Theory of Regression Analysis
W15	Regression Analysis	Programming for Regression Analysis
W16	Chart	Programming of Chart
W17	Cluster Analysis	Cluster analysis theory
W18	Cluster Analysis	Programming of Cluster analysis

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	生產管理與實務 Production Management and Practice	授課教師 Instructor	胡智熊 Hu, Chih-Hsiung

	教學簡要說明
	1.請依照授課班級英文分級程度規劃課程計畫書。 　　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　　Please state bilingual instructor's teaching weeks and hours in course outline section.
課程教材 Material	1.指定課本書名 Book：Operations Management/ William J. Stevenson /14th Edition (100%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)100% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　　■小組討論 Group Discussion　　■口頭問答 Q&A □問題導向 Problem Based Learning　　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	■期中/期末考：100% 以上英文試題，學生以英文答題 100%。 　　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■英文期中/期末報告： 100% 以英文表達。 　　The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式)

English oral presentation including Q&A session at least 20 minutes

(Department cores, master's degree and doctoral degree courses so must have

☐ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Course Introduction	Lecturing / Q&A
W2	Chapter 1 Introduction to Operations Management	Lecturing / Q&A
W3	Chapter 2 Competitiveness, Strategy, and Productivity	Lecturing / Q&A
W4	Chapter 3 Forecasting	Lecturing / Q&A
W5	Chapter 6 Process Selection and Facility Layout	Lecturing / Q&A
W6	Chapter 11 Aggregate Planning and Master Scheduling	Lecturing / Q&A
W7	Chapter 12 Inventory Management	Lecturing / Q&A
W8	Chapter 16 Scheduling	Lecturing / Q&A
W9	Mid-term	
W10	Chapter 16 Scheduling	Lecturing / Q&A
W11	Scheduling case practice introduction	Lecturing / Q&A
W12	Scheduling case scenario 1 and 2 report and discussion	Group Discussion and Report/Q&A Scheduling Assignment 1,2
W13	Scheduling case scenario 3 report and discussion	Group Discussion and Report/Q&A Scheduling Assignment 3
W14	Scheduling case scenario 4 report and discussion	Group Discussion and Report/Q&A Scheduling Assignment 4
W15	Scheduling case scenario 5 report and discussion	Group Discussion and Report/Q&A Scheduling Assignment 5
W16	Scheduling case scenario 6 report and discussion	Group Discussion and Report/Q&A Scheduling Assignment 6

| W17 | Scheduling case scenario 7 report and discussion | Group Discussion and Report/Q&A Scheduling Assignment 7 |
| W18 | Conclusion | Lecturing / Comments on Performance |

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	網路與運籌 Networks and Logistics	授課教師 Instructor	謝益智 Hsieh,Yi-Chih

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：_____ (_____%英文內容 Percentage in English) 2.自製教材自製教材 (Free handouts of lecture)：採用英文之比例 100 % 3.其他補充說明 Others：
雙語教學方式 (可多選,或簡述) Bilingual Teaching Strategies	☑教材講述 Lecturing　□小組討論 Group Discussion　☑口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ☑分組報告 Group Report □其他方式說明 Others：

成績評量方式 Grading	☑ 期中/期末考：<u>100</u> %以上英文試題，學生以英文答題 <u>70</u> %。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ☑ 英文期中/期末報告：<u>60%</u> 以英文表達。 The percentage of using English in midterm or final oral presentation ☑ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have ☐ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	1.Introduction of Graphs & Networks	Lecturing
W2	1.Introduction of Graphs & Networks	Lecturing
W3	2.Assignment problem	Lecturing
W4	2.Assignment problem	Lecturing
W5	3.Transportation problem	Lecturing, Presentation
W6	3.Transportation problem	Lecturing, Presentation
W7	4.Complexity	Lecturing, Presentation
W8	4.Complexity	Lecturing, Presentation
W9	Midterm exam	Midterm exam
W10	5.Location Problem	Lecturing, Presentation
W11	5.Location Problem	Lecturing, Presentation
W12	6.Center Problem	Lecturing, Presentation
W13	5.Center Problem	Lecturing, Presentation
W14	7.Set Covering Problem	Lecturing, Presentation
W15	7.Set Covering Problem	Lecturing, Presentation
W16	8.Assembly Line Balancing	Lecturing, Presentation
W17	8.Assembly Line Balancing	Lecturing, Presentation
W18	Final exam	Final exam

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱（中）課程名稱（英）Course title in Mandarin and English	行為財務 Behavioral Finance	授課教師 Instructor	呂麒麟 Chilin Lu

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　　Please design the course plan by following the English using percentage of the course English level.

　　Behavioral finance plays a more and more important role in the development of financial management and investment. This course focused on the behavioral factors which influence financial markets and investors. People are all prone to having psychological preconceptions or biases that make us behave in certain ways. These biases influence how we assimilate the information we come in contact with on a daily basis. This course targets the link between the peculiarities of human behavior and aspects of financial and investment management, as well as corporate and risk management. Students should understand and develop skills for taking into account behavioral factors in various aspects of financial markets and operation of corporations.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：＿Investment Madness＿（_100 ％英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)＿100_% 3.其他補充說明 Others： 4.Reference book: Ackert and Deaves, 2010, *Behavioral Finance: Psychology, Decision-Making, and Markets*, South-Western.
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　□小組討論 Group Discussion　■口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching □分組報告 Group Report ■其他方式說明 Others：Paper presentation and discussion

成績評量方式 Grading	☐ 期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■ 英文期中/期末報告：_100__%以英文表達。 The percentage of using English in midterm or final oral presentation ■ 全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have ☐ 其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading）：	

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction	Lecturing
W2	Your Behavior matter	Lecturing and discussion
W3	Overconfidence	Lecturing and discussion
W4	Overconfidence and investing	Lecturing and discussion
W5	Status quo- or what I own is better	Lecturing and discussion
W6	Seeking pride and avoiding regret	Lecturing and discussion
W7	Double or nothing	Lecturing and discussion
W8	Social aspects of investing	Lecturing and discussion
W9	Mid-term discussion	Paper presentation
W10	Mental accounting	Paper presentation
W11	Mental accounting and diversification	Paper presentation
W12	That's not the way I remember it	Paper presentation
W13	What I know is better	Paper presentation
W14	The internet investor	Paper presentation
W15	I. Exuberance on the net	Paper presentation
W16	Self-control or the lack of it	Paper presentation
W17	I. Battling your biases	Paper presentation
W18	Final report	Report writing

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	策略管理 Strategic Management	授課教師 Instructor	徐怡 Yi Hsu

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book： Strategic Management-An Integrated Approach Theory and Cases (100%英文內容100% in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English) 100% 其他補充說明 Others： Harvard Business Review：Current academic literature review (100%英文內容 100% in English) Wall Street Journal：Current economic news (100%英文內容 100% in English) You Tube：Current innovated cases (100%英文內容 100% in English) DW：Current innovated cases (100%英文內容 100% in English)
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　■小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　■協同教學 Collaborative Teaching ■分組報告 Group Report ■其他方式說明 Others：參觀見學 Field Trip

成績評量方式 Grading	□　期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■英文期中/期末報告：___100___%以英文表達。 The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have ■其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：參觀見學 Field Trip 以 100%英文解說

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction to the cause Ch1　Strategic Leadership	Ch1 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W2	Ch1　Strategic Leadership Case 1: The Evolution of Wal-Mart	Ch1 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W3	Ch2　External Analysis Case 2: The market for large commercial aircraft	Ch2 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W4	Ch3　Internal Analysis Case 3: Verizon wireless	Ch3Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W5	Ch4　Building Competitive Advantage Through Functional-Level Strategy Case 4: Amazon.com	Ch4 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W6	Ch5　Building Competitive Advantage Through Business-Level Strategy Case 5: Nordstrom	Ch5 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W7	Ch5　Building Competitive Advantage Through Business-Level Strategy Case 5: Nordstrom	Ch5 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report

W8	Ch6 Business- Level Strategy and the Industry Environment	Ch6 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W9	Field trip	
W10	Ch6 Business- Level Strategy and the Industry Environment Case 6: How to make money in newspaper advirtising	Ch6 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W11	Ch7 Strategy and Technology Case 7: A battle emerging in mobile payment	Ch7 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W12	Ch7 Strategy and Technology Case 7: A battle emerging in mobile payment	Ch7 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W13	Ch8 Global Strrategy Case 8: Ford's global strategy	Ch8 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W14	Ch9 Corporate-Level Strategy: Horizontal Integration, Vertical Integration, and Strategic Outsourcing Case 9: Outsourcing and vertical integration at apple	Ch9 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W15	Ch10 Corporate-Level Strategy: Formulating and Implementing Related and Unrelated Diversification Case 10: Citigroup: The opportunities and risks of diversification	Ch10 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W16	Corporate Governance, Social Responsibility, and Ethics Case11: HP's disastrous acquisition of autonomy	Ch11 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W17	Implementing Strategy Through Organization Case12: Organization at Apple	Ch12 Lecturing; Group Discussion; Q&A; Problem Based Learning; Group Report
W18	Final Project	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	科技管理 Technology Management	授課教師 Instructor	陳鈺淳 Chen,Yu-Chun

教學簡要說明			
1.請依照授課班級英文分級程度規劃課程計畫書。 　　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　　Please state bilingual instructor's teaching weeks and hours in course outline section.			

課程教材 Material	1.指定課本書名 Book： 　Schilling, M. A., & Shankar, R. (2019). Strategic Management of Technological Innovation. McGraw-Hill Education　(_100_%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__100___% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　■小組討論 Group Discussion　□口頭問答 Q&A □問題導向 Problem Based Learning　　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：

成績評量方式 Grading	■期中/期末考：__100__%以上英文試題，學生以英文答題__100___%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ■英文期中/期末報告：_100__%以英文表達。 The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have

<table>
<tr><td colspan="3">□　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：</td></tr>
</table>

□　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：		

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Overview of class Chapter 1: Introduction	The purpose of this chapter is to set the stage for the course by establishing the importance of managing technological innovation strategically.
W2	Chapter 2: Sources of Innovation	This chapter focuses on the sources of innovation. The questions addressed include: Where do great ideas come from? How can firms harness the power of individual creativity? What role do customers, government organizations, universities, and alliance networks play in creating innovation?
W3	Chapter 2: Sources of Innovation	
W4	Chapter 3: Types and Patterns of InnovationI	This chapter considers the types and patterns of innovation. The questions addressed include: Why are some innovations much harder to create and implement than others? Why do innovations often diffuse slowly even when they appear to offer a great advantage? What factors influence the rate at which a technology tends to improve over time?
W5	Chapter 3: Types and Patterns of InnovationII	
W6	Chapter 4: Standards Battles and Design DominanceI	This chapter focuses on industries characterized by increasing returns. The questions addressed include: Why do some industries choose a single dominant standard rather than enabling multiple standards to coexist? What makes one technological innovation rise to dominate all others, even when other seemingly superior technologies are on offer? How can a firm avoid being locked out? Is there anything a firm can do to influence the likelihood of having its technology chosen as the dominant design?
W7	Chapter 4: Standards Battles and Design DominanceII	
W8	Chapter 4: Standards Battles and Design DominanceIII	
W9	**Midterm Exam**	
W10	Chapter 5: Timing of Entry	This chapter highlights the importance of entry timing. The questions addressed include:　What are the advantages and disadvantages of being first to market, early-but-not-first, and late? What determines the optimal timing of entry for a new innovation?
W11	Chapter 6: Defining the Organization's Strategic DirectionI	This chapter reviews the basics of how a firm can assess its current position and define its strategic direction. The questions addressed include: What are the firm's sources of sustainable competitive advantage? Where in the firm's value chain do its strengths and weaknesses lie? What are the firm's core competencies, and how should it leverage and build upon them? What is the firm's strategic intent -- that is, where do we want to be ten years from now?
W12	Chapter 6: Defining the Organization's Strategic DirectionII	
W13	Chapter 7: Choosing Innovation Projects	This chapter examines a variety of methods for choosing among innovation projects including both quantitative and qualitative methods.
W14	**IoT Workshop**	
W15	Chapter 8: Collaboration StrategiesI	This chapter focuses on the important role collaboration can play in the development of new products and processes. The questions addressed include: Should the firm partner on a particular project or go solo? How does the firm decide which activities to do in house and which to access through collaborative arrangements? If the firm chooses to work with a partner, how should the

		partnership be structured? How does the firm choose and monitor partners?
W16	Chapter 8: Collaboration StrategiesII	
W17	Chapter 9: Protecting Innovation	This chapter provides an overview of the options a firm has for appropriating the returns to its innovation efforts. The questions addressed include: Are there ever times when it would benefit the firm to not protect its technological innovation so vigorously? How does a firm decide between a wholly proprietary, wholly open, or partially open strategy for protecting its innovation? When will "open" strategies have advantages over wholly proprietary strategies?
W18	Final Presentation	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	公園遊憩行銷與管理 Park, Recreation Marketing and Management	授課教師 Instructor	顏宏旭 Hung-Hsu Yen

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book： **Marketing part:** Kotler, P., Bowen, J. T., and Makens, J. C. (2006). *Marketing for Hospitality and Tourism*, Pearson Education, N. J. Middleton, V. T. C. & Clarke, J. (2001). *Marketing in Travel and Tourism 3rd Ed.*, Butterworth-Heinemann, MA. **Management part:** Jubenville, A. & Twight, B. W. (1993). *Outdoor Recreation Management: Theory and Application 3rd Ed.*, Venture Publishing, PA. Hammitt, W. E. & Cole, D. N. (1998). *Wildland Recreation: Ecology and Management 2nd Ed.*, John Wiley & Sons, NY.

	（　100　％英文內容 Percentage in English）
	2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)　100　%
	3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■教材講述 Lecturing　■小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　□協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	□　期中/期末考：＿＿＿%以上英文試題，學生以英文答題＿＿＿%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □　英文期中/期末報告：＿＿＿%以英文表達。 The percentage of using English in midterm or final oral presentation ■　全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Introduction of Course	Course description
W2	Introduction of Park and Recreation, Leisure, Tourism, Sports	What are park and recreation, leisure, tourism, sports?
W3	The Concept of Marketing	The meaning of marketing
W4	The Concept of Marketing	Marketing environment analysis
W5	The Concept of Marketing	Consumer behavior
W6	The Concept of Marketing	Satisfaction
W7	The Concept of Marketing	Segmentation, Targeting, Positioning
W8	The Concept of Marketing	Marketing Strategy
W9	Mid-term report	Mid-term report

W10	The Issues in Management	Carrying Capacity
W11	The Issues in Management	ROS and LAC
W12	The Issues in Management	Carrying capacity and crowding issues
W13	The Issues in Management	Carrying capacity and crowding issues
W14	The Issues in Management	Management strategy
W15	Group Discussion	The research design for marketing or management in the field of park and recreation
W16	Group Discussion	The research design for marketing or management in the field of park and recreation
W17	Group Discussion	The research design for marketing or management in the field of park and recreation
W18	Research project report	Final report

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	文化創意產業研究 Creative Industries in Cultural Research	授課教師 Instructor	朱文浩 Jue,Wu-Haw

教學簡要說明

Introduction painting, sculpture, other art creation, art auction and retail, galleries, art exhibitions, and other industries. Spanning a wide range of different fields – from architecture and music to advertising, visual or performing arts, architects, designers or developers of computer games

課程教材 Material	1.指定課本書名 Book：＿＿＿＿＿＿＿＿＿＿＿＿ (＿＿＿%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例100_% 3.其他補充說明 Others：design performance, technology and innovative product design

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	■材講述 Lecturing　■小組討論 Group Discussion　■口頭問答 Q&A ■問題導向 Problem Based Learning　■協同教學 Collaborative Teaching ■分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	□　期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. □　英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation ■全英語口頭簡報 (含 QA 問答)20 分鐘以上**(一般科系專業課、碩博專業課程必須包含此評量方式)** English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline

週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	文化創意產業概況 Overview of Cultural and Creative Industries	介紹文化創意產業定義 Introduce the definition of cultural and creative industries
W2	視覺藝術產業 Visual arts industry	介紹視覺藝術產業 Introducing the visual arts industry
W3	音樂及表演藝術產業 Music and performing arts industry	各國音樂及表演藝術產業 Music and performing arts industries of various countries
W4	文化資產應用及展演設施產業 Cultural asset application and exhibition facility industry	各國展演分享 International performance sharing
W5	工藝產業 Craft industry	各國工藝產業分享 Sharing of craft industries from various countries
W6	電影產業 Film Industry	各國電影產業 National Film Industry

W7	廣播電視產業 Broadcasting industry	各國電視產業分享 TV industry sharing from various countries
W8	視覺傳達設計產業 Visual Communication Design Industry	各國視覺傳達設計產業分享 Sharing of visual communication design industry from various countries
W9	廣告產業 Advertising industry	商業包裝設計包括食品、民生用品、伴手禮產品等包裝 Commercial packaging design includes packaging for food, people's livelihood products, souvenir products, etc.
W10	產品設計產業 Product design industry	各國產品設計分享 Product design sharing from various countries
W11	設計品牌時尚產業 Design brand fashion industry	設計品牌時尚產業分析 Design brand fashion industry analysis
W12	數位內容產業 Digital Content Industry	將圖像、文字、影像或語音等資料，運用資訊科技加以數位化 Use information technology to digitize data such as images, text, video or voice
W13	創意生活產業 Creative life industry	創意生活實踐分享 Creative life practice sharing
W14	流行音樂及文化內容產業 Pop music and cultural content industry	各國特色之音樂及文化之分享 Sharing of music and culture with national characteristics
W15	各國美食文化 Food culture of various countries	各國美食文化交流分享 International food and cultural exchange and sharing
W16	各國特色文化 Unique cultures of various countries	各國特色文化分享 Sharing of cultural characteristics of different countries
W17	文創產業分組討論 Cultural and creative industry group discussion	文創產業分組討論 Cultural and creative industry group discussion
W18	期末報告 Final report	各組期末報告 Final report

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	社交媒體互動研究 Social Media Interaction	授課教師 Instructor	沈思岑 Siu-Tsen Shen
\多列，或簡

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book: Stories and Social Media: Identities and Interaction by Ruth E. Page; Routledge; ISBN 978- 041-583-702-6 (_100_%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	☐ v 教材講述 Lecturing　☐ v 小組討論 Group Discussion　☐ v 口頭問答 Q&A ☐問題導向 Problem Based Learning　☐協同教學 Collaborative Teaching ☐ v 分組報告 Group Report ☐其他方式說明 Others：
成績評量方式 Grading	☐　期中/期末考：_____%以上英文試題，學生以英文答題_____%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ☐　英文期中/期末報告：_____%以英文表達。 The percentage of using English in midterm or final oral presentation ☐ **V 全英語口頭簡報 (含 QA 問答)20分鐘以上****(一般科系專業課、碩博專業課程必須包含此評量方式)** **English oral presentation including Q&A session at least 20 minutes** **(Department cores, master's degree and doctoral degree courses so must have** ☐　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Topics covered: Background and introduction to presenting in Stories and Social Media in Context (I)	Stories and Social Media in Context (I)
W2	Stories and Social Media in Context (II)	Stories and Social Media in Context (II)
W3	Reading assignments	Chapter 1-3 of text.
W4	Second Stories Told in Discussion Forums (I)	Second Stories Told in Discussion Forums (I)
W5	Second Stories Told in Discussion Forums (II)	Second Stories Told in Discussion Forums (II)
W6	Reading assignments	Chapter 4-6 of text.
W7	Narratives of Illness and Personal Blogs (I)	Narratives of Illness and Personal Blogs (I)
W8	Narratives of Illness and Personal Blogs (II)	Narratives of Illness and Personal Blogs (II)
W9	Mid Term Assessment	
W10	Storytelling Styles in Facebook Updates (I)	Storytelling Styles in Facebook Updates (I)
W11	Storytelling Styles in Facebook Updates (II)	Storytelling Styles in Facebook Updates (II)
W12	Reading Assignments	Chapter 7-9 of text
W13	Celebrity Practice: Stories Told in Twitter	Celebrity Practice: Stories Told in Twitter
W14	Narrative and Commentary in Collaborative Storytelling	Narrative and Commentary in Collaborative Storytelling
W15	Space and Identity in Stories on the Move	Space and Identity in Stories on the Move
W16	Fakes, Fictions, and FB "Rape": Narrative authenticity	Fakes, Fictions, and FB "Rape": Narrative authenticity
W17	Familiar, Reconfigured,& Emergent Dimensions of Narrative	Familiar, Reconfigured,& Emergent Dimensions of Narrative
W18	Final Term Exam	Oral Presentation

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	多媒體創作與表現專題研究 Multimedia Presentation and Topic Oriented Research	授課教師 Instructor	沈思岑 Siu-Tsen Shen

教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。 　Please design the course plan by following the English using percentage of the course English level. 2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。 　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book: Presentation Zen: Simple Ideas on Presentation Design and Delivery by Garr Reynolds; New Riders Publisher; ISBN 978-032-152-565-9 (100%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)_____% 3.其他補充說明 Others：

雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	☐ ∨ 教材講述 Lecturing　☐ ∨ 小組討論 Group Discussion　☐ ∨ 口頭問答 Q&A ☐問題導向 Problem Based Learning　☐協同教學 Collaborative Teaching ☐ ∨ 分組報告 Group Report ☐其他方式說明 Others：

成績評量方式 Grading	☐　期中/期末考：_____%以上英文試題，學生以英文答題_____%。 　The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. ☐　英文期中/期末報告：_____%以英文表達。 　The percentage of using English in midterm or final oral presentation ☐　V 全英語口頭簡報 (含 QA 問答)20分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) 　**English oral presentation including Q&A session at least 20 minutes** 　**(Department cores, master's degree and doctoral degree courses so must have** ☐　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and

	English in grading）：	

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Topics covered: Background and introduction to presenting in Today's world (I)	Presenting in Today's world (I)
W2	Presenting in Today's world (II)	Presenting in Today's world (II)
W3	Reading assignments	Chapter: Introduction and Preparation of text.
W4	Preparation: Creativity, Limitations and Constraints (I)	Creativity, Limitations and Constraints (I)
W5	Creativity, Limitations and Constraints (II)	Creativity, Limitations and Constraints (II)
W6	Reading assignments	Chapter: Design of text.
W7	Planning Analog (I)	Planning Analog (I)
W8	Planning Analog (II)	Planning Analog (II)
W9	Mid Term Assessment	
W10	Crafting the Story (I)	Crafting the Story (I)
W11	Crafting the Story (II)	Crafting the Story (II)
W12	Reading Assignme nts	Chapter: Delivery of text
W13	Simplicity: Why it matters	Simplicity: Why it matters
W14	Presentation Design: Principles and Techniques	Presentation Design: Principles and Techniques
W15	Sample slides Demo	Sample slides Demo
W16	The Art of Being Completely Present	The Art of Being Completely Present
W17	Connecting with an Audience	Connecting with an Audience
W18	Final Term Exam	Oral Presentation

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	國際企業管理 Multinational Management	授課教師 Instructor	邱慧昀 Candy H.Y. Chiu

<table>
<tr>
<td colspan="4" align="center">教學簡要說明
1.請依照授課班級英文分級程度規劃課程計畫書。
　Please design the course plan by following the English using percentage of the course English level.
2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。
　Please state bilingual instructor's teaching weeks and hours in course outline section.</td>
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課程教材 Material	1.指定課本書名 Book：___Global Business Today (100%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)100% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	V 教材講述 Lecturing　V 小組討論 Group Discussion　V 口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching V 分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	V 期中□期末考：__100___%以上英文試題，學生以英文答題__100___%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. V 英文期中/期末報告：__100___%以英文表達。 The percentage of using English in midterm or final oral presentation V 全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Overview	
W2	Globalization	CH 1
W3	National differences in political, economic, and legal systems	CH 2
W4	National differences in economic development	CH 3
W5	Differences in culture	CH 4
W6	Ethics, corporate social responsibility, and sustainability	CH 5
W7	International trade theory	CH 6
W8	Review	
W9	Midterm exam	
W10	Foreign direct investment	CH 8
W11	The strategy of IB	CH 12
W12	Entering developed and emerging economies	CH 13
W13	Global marketing and business analytics	CH 16
W14	Government policy and international trade	Ch 7
W15	Group presentation	Groups who present in week 15, please send your slides to me and to other classmates by 18:00. Teams fail to send will be deducted 5 % from the presentation.
W16	Group presentation	Groups who present in week 16, please send your slides to me and to other classmates by 18:00. Teams fail to send will be deducted 5 % from the presentation.
W17	Review	
W18	Final exam	

國立虎尾科技大學雙語教學課程計畫書

Bilingual Education Course Plan

課程名稱(中) 課程名稱(英) Course title in Mandarin and English	國際行銷 International Marketing	授課教師 Instructor	邱慧昀 Candy H.Y. Chiu

教學簡要說明

1.請依照授課班級英文分級程度規劃課程計畫書。

　Please design the course plan by following the English using percentage of the course English level.

2.如有聘請雙語導師，請於課程進度註明雙語導師授課之週次時數。

　Please state bilingual instructor's teaching weeks and hours in course outline section.

課程教材 Material	1.指定課本書名 Book：___Global Marketing Management _____(_100____%英文內容 Percentage in English) 2.自製教材 Self-made Materials：採用英文之比例(Percentage in English)__100____% 3.其他補充說明 Others：
雙語教學方式 (可多選，或簡述) Bilingual Teaching Strategies	Ⅴ教材講述 Lecturing　Ⅴ小組討論 Group Discussion　Ⅴ口頭問答 Q&A □問題導向 Problem Based Learning　□協同教學 Collaborative Teaching Ⅴ分組報告 Group Report □其他方式說明 Others：
成績評量方式 Grading	Ⅴ期中□期末考：__100___%以上英文試題，學生以英文答題__100___%。 The percentage of English using in designing midterm/final exam; the percentage of English using in answering the exam paper. Ⅴ英文期中/期末報告：__100___%以英文表達。 The percentage of using English in midterm or final oral presentation Ⅴ全英語口頭簡報 (含 QA 問答)20 分鐘以上(一般科系專業課、碩博專業課程必須包含此評量方式) English oral presentation including Q&A session at least 20 minutes (Department cores, master's degree and doctoral degree courses so must have □　其他方式(請說明中英文比例)Others(please state the proportion of Mandarin and English in grading)：

課程進度 Course Outline		
週次 Week	單元/主題 Unit/Topic	教學活動重點及教材內容 Teaching Activities
W1	Course introduction	
W2	Ch 1. Introduction to global marketing	1. Identify and briefly describe some of the forces that have resulted in increased global integration and the growing importance go global marketing.
W3	Ch. 2 The global economic environment	1. A manufacturer of an online gaming device is assessing the world market potential for her product. She asks you if she should consider emerging countries as potential markets. What advice would you give her?
W4	Ch. 4 the global cultural environment	Group presentation about the interviews.
W5	Ch. 5 global customers	1. What is the difference between a low-context culture and a high-context culture? Give an example of a country that is an example of each type, and provide evidence for your answer. How does this apply to marketing?
W6	Ch. 7 segmentation, targeting, and positioning	Group presentation about the chosen country
W7	Ch. 8 global entry expansion and strategies	Research on presidential palace of Taiwan. What are the marketing plans it has been implemented in order to attract foreign tourists? In your opinion, do them work? If yes, explain why, and if it is no, explain why not.
W8	Presidential palace visit	Interview three foreign tourists, why they come to visit presidential palace? Or other questions you would like to ask.
W9	Midterm Exam	
W10	Ch. 9 competitive analysis and strategy	Visit https:// admin.taiwan.net.tw/ English/index.aspx. Understanding how Taiwan government has tried to attract more visitors from Southeast Asia countries, the socalled "Go South Policy". Examine the government's marketing strategies on these countries. Critical criticize the current strategies.

W11	Ch. 10　Product decisions	Choose a country from Southeast Asia regions which Go South Policy has focused on. Target on the country's tourists. Your main duty is to attract them to visit Taiwan
W12	National Palace Museum visit	Interview three foreign tourists, why they come to visit presidential palace? Or other questions you would like to ask
W13	Ch. 11 Pricing decisions	Group presentation about your findings from the interviews.　Hand-in your group's discussion about the report.
W14	Ch. 12 global marketing channels	Hand-in your group's discussion about the report
W15	Ch. 13 global integrated marketing communications	Hand-in your group's discussion about the report
W16	Ch. 14 global organization and leadership: managing the global marketing effort	Hand in your final report
W17	Report discussion	
W18	Report presentation	