

107 學年度第 2 學期第 1 次 校課程委員會議

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傳閱附件 1-1--本校各學院所屬各系(所)課程中英文摘要-語言中心

一、 語言中心新增課程中英文摘要

進階英語檢定

2 選

許耿誌

本課程旨在協助同學提升國際商務英語溝通能力，並取得理想英語檢定證照，增加日後就業競爭力。課程內容將針對聽力、文法、閱讀三部份，進行題型分析，協助同學掌握常見商業字彙及答題技巧。每週針對不同單元、題型演練與講解，以提升同學答題自信和速度。

Training for Advanced English Proficiency Test

2 E

K. C. Hsu

This course is aimed at assisting students passing English proficiency tests. Tactics in answering the questions will be introduced in the course. Students are expected to develop their international business communication skills as well as competitiveness in the job market.

新聞英文

2 選

楊宗樺

課程的目標為使學生熟悉新聞英文的結構與風格特色。幫助學生了解新聞英文標題、分析新聞首段、發展批判性閱讀，以及從閱讀中擴大字彙量。學生將學習如何閱讀不同主題的英文新聞，並學習如何藉由閱讀英文新聞改善英語能力。學生必須要完成指定的閱讀，並在課堂外閱讀網路英文新聞文章。

學習目標：

- (1) 了解當前的全球花卉市場
- (2) 了解生產優質花卉的原則
- (3) 了解採後處理如何影響花卉的保存期限。

Journalistic English

2 E

T. H. Yang

This course aims to familiarize students with the structural and stylistic features of journalistic English. It aims to help students understand headlines, analyze newspaper leads, read news stories critically, and develop a wider vocabulary. Students will learn how to read English news on a variety of topics and how to improve their command of English by reading newspapers. Students are required to read assigned texts and look for online news articles on their own outside of the classroom.

旅遊泰語會話

2 選

林綉玉

旅遊泰語會話課程，主要是教學泰語子音、長短韻母以及聲調之發音方法，對外國人採用英文音標拼音進行泰語教學，講解與分析中文與泰文不同發音之處。本課程旨在透過講授泰語單字之涵義，分析如何正確應用泰語語法，以及泰語句型等練習方式，使學生正確了解基本的發音方法，應用於生活，而具有泰語旅遊相關基礎之會話能力。此課程能夠提升學生外語能力，並透過此課程發展學生之多元價值觀。

Thai for Tourism**2 E****N. Limdamrongchit**

Thai for tourism. A basic pronouncing Thai consonants, vowels, and tone marks by using English language to help foreign students study Thai language easier. Students could understand the difference of pronunciation between Chinese and Thai language. In this course, students would know Thai vocabularies and Thai grammar for practicing listening and speaking skills. In addition, students will learn about making Thai conversational sentences to apply in their daily life which enhances the ability of the third language and the job opportunity for students. And yet to open students' eyes to learn new thing.

商業泰語會話**2 選****林綉玉**

基礎商用泰語會話課程，主要是教學商務情景相關用語，對外國人採用英文音標拼音進行泰語教學，本課程旨在提升學生泰語會話能力，進一步了解泰國文化，並透過講授泰語單字之涵義，分析如何正確應用泰語語法，以及泰語句型等練習方式，使學生能夠應用在職場上，具有商用泰語相關基礎會話能力。

Basic Thai for Business**2 E****N. Limdamrongchit**

Basic Thai for business, Various Thai business vocabularies for foreign students, English letters are used for pronunciation. The objective of this subject is developing and strengthening of Thai oral skill in business context, as well as raising a consciousness of language business culture. Vocabularies, Sentences, and Grammar structures are used for practicing Basic Thai for business speaking skill. Students will use basic Thai for business for working in the future.

各系(所)中心新增課程中英文摘要

二、 農學院

(一) 食品科學系科技農業組：

食品行銷管理

2 選

吳敏華

課程內容首先介紹食品工廠或經營之主要因素一人之相關問題，如員工、顧客心理、人際關係、溝通技巧、領導統御。進而說明企業單位人事組織、架構與運作方式。另外涵概產品行銷策略、食品市場特色、市場調查技巧及生產管理，讓學生培養未來在管理階層中，應具備之決策能力與掌握媒體宣導能力。

Food Marketing Management

2 E

Ming-Hua Wu

The course content first introduces the main factors of the food factory or the business, such as employees, customer psychology, interpersonal relationships, communication skills, leadership and leadership. Then explain the personnel organization, structure and operation mode of the enterprise unit. In addition, the product marketing strategy, food market characteristics, market research skills and production management enable students to develop the decision-making ability and interments of media advocacy in the management.

農業藥劑學

2 選

楊永裕

介紹殺蟲劑、殺菌劑、除草劑及其他農藥的特性，劑型及作用機制，並討論農藥使用後對人畜，作物及環境的影響。

Agricultural Pharmacy

2 E

Yang Yung-Yu

Managerial, physiological and ecological effects of chemicals applied to crops and soils. Includes insecticides, fungicides, herbicides and other pesticides. Types of formulations, proper application, safety, environmental aspects and historical aspects are covered.

農業藥劑學實習

2 選

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Agricultural Pharmacy Practice

2 E

Yang Yung-Yu

Introduce different kinds of toxicity test, formulation, calibration, safe use of pesticides, labeling and pesticide residue analysis. Working in the experimental farm to get practical experience in conducting toxicity trials in the field.

(二) 科技農業學士學位學程：

食品行銷管理

2 選

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概產品行銷策略、食品市場特色、市場調查技巧及生產管理，讓學生培養未來在管理階層中，應具備之決策能力與掌握媒體宣導能力。

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APP 程式設計

2 選

陳建宏

本課程是要幫助學生學習如何發展 APP 程式設計，發展工具採用 Android APP Inventor 引導學生創建簡單的應用程式。課程內容包括：手機應用程式設計、拼塊語法、APP 專題實作。

APP Topics Implementation

2 E

Jian Hong Chen

This course is to help students learn how to development of smartphone programming. The development is using Android App Inventor allows students to create simple applications. The course contains: Mobile App design, blocks language, APP topics implementation.

網頁程式設計

2 選

邵敏華

課程內容涵藝前端網頁程式設計的必備知識，透過完整的語法解說，搭配簡單實用的範例，按部就班建立對 HTML 和 CSS 基本紮實的認識。其次，為了提升系統設計品質，課程融入使用者經驗與使用者界面的概念，即探討一個人使用一個特定產品或系統或服務的有關行為、態度、與情緒。

Webpage Program Design

2 E

Min-Hua Shao

The purposes of the "Web Programming" are (1) to introduce the fundamental concept and technology of front-end web programming, (2) to learn the technology of HTML and CSS, and (3) to introduce the business concerns of user interface and user experience. After studying this course, the students should have the concepts of front-end designs and the skills of web programming including HTML and CSS.

(三) 生物科技系：

植物繁殖技術與商業化模式(核心課程) 3 選

植物繁殖技術與商業化模式(深碗課程) 1 選

周映孜、張珮君

為配合跨領域微學成課程的與時俱進，將新設本課程於「智慧植栽-農業設施與災害風險管控跨域微學程」中，增修核心課程三學分、深碗課程一學分，將著重於生物技術應用於商業檢測，協助傳統的植物種苗繁殖技術的優化，說明生物技術如何成為作物繁殖時重要的商業模式。植物繁殖技術的介紹包含：種子育種與大量繁殖(孟德爾遺傳與一代雜交種)；傳統的營養繁殖技術(扦插、嫁接)；植物組織培養；病毒檢測技術；種苗的跨境貿易檢疫(各國法規簡介、薰蒸與藥劑處理)與業界專家演講。

Plant breeding technology and commercialization model 3+1 E Ying Tzy, Jou,

Pearl Pei-Chun Chang

In order to facilitate the advancement of the cross-disciplinary micro-learning programs, this course will be part of the "Wisdom Planting - Agricultural Facilities and Disaster Risk Control Cross-domain Micro-learning" program, with three credits for the Core course and one credit for the Deep Bowl course. It focuses on the application of biotechnology to commercial diagnosis, assisting optimization of traditional plant seedling propagation techniques, and how biotechnology can become part of an important business model for crop propagation. Introduction to plant breeding techniques include: seed breeding and mass reproduction (inheritance and first generation hybrids); traditional vegetative propagation techniques (cutting, grafting); plant tissue culture; virus detection technology; cross-border trade quarantine of seedlings as well as talks by industry experts.

(四) 植物醫學系：

高等害蟲生物防治學

2 選

陳文華

本課程探討各種生物防治因子如寄生性天敵、捕食性天敵及微生物天敵之病毒、真菌、細菌及線蟲作為植物蟲害防治之作用機制，生物防治因子與植物蟲害之相互作用關係。應用各種生物天敵之技術及天敵量產，天敵釋放及天敵評估技術。

Advanced Biological Control of Insect Pests 2 E

W.H. Chen

The attempt of this lecture is try to understand the biocontrol mechanism of biological agents, such as parasites, predators and microbio agent as bacteria, fungi, viruses and nematodes against plant insect pests to reduce insect pests damages or infection. Knowing the interaction between biocontrol agent and

natural enemies on the host plant or in environment is another objective of this lecture. The application of biocontrol agents and genetic mass production, release and evaluate biocontrol effectiveness.

(五) 食品科學系：

農林漁牧產業發酵應用

2 選

郭嘉信

本課程將會邀請產官學界在農、林、漁、牧領域的發酵專家擔任講員，分享其從事發酵工作的學識與經驗，本課程的目標是提供學生深入了解從事農、林、漁、牧領域從事發酵應用可能面臨的原料、微生物、技術、產品等重要議題。

Fermentation Technologies in Agriculture, Forestry, Aquaculture and Animal Husbandry Industries

2 E

J. H. Guo

Speakers specialized in fermentation from agriculture, forestry, aquaculture, or animal husbandry will be invited to share their knowledge and working experiences. The objective is to give students an in-depth understanding of important issues of raw materials, microorganisms, technologies, and products, which may be occurred, when one want to implement fermentation applications in the field of agriculture, forestry, aquaculture, or animal husbandry.

機能性食品評估技術

2 選

郭嘉信

本課程包含特殊營養食品、機能性食品、計劃性食物及藥劑營養食品之加工、生理功能介紹。由於男人、女人和小孩之特異生理構造不同，因此所需之營養要求也不大相同。而針對老年人所開發之機能性食品強調抗老化之作用及免疫系統之建立。在西方國家植物化學食品包含天然生理活性等物質較普遍化，而中國之藥用植物在未來健康食品市場扮演一重要的角色。此課程將說明這些功能特性食品之物理(身體)的及化學的功能。

Accessment Technologies for Functional Foods

2 E

J. H. Guo

The course comprise the physiological function and process of nutritional supplements、functional foods、designers foods and pharmacy foods. Men women and children are different in nutritional requirements due to their distinct physiological structure. The functional foods for aged people emphasize the effect of anti-aging and building the immune system. Physiochemical which contain natural physiological active ingredients are more popular in western countries. The Chinese herb should play an important role for the future healthy food market. This course will illustrate their physical and chemical functions.

蛋白質工程技術

2 選

郭嘉信

本課程將導引學生探討最新分子生物學及基因技術的議題，本課程的目標是教導學生最新的知識與先進技術，讓學生能自己找到問題的答案，並應用在實務上。

Protein Engineering Technolog

2 E

J. H. Guo

During the course, the students work on a current molecular biological and gene technological problem. The aim is to provide advanced knowledge and skills that enable the students to find solutions on their own, and put these solutions into practice.

食品生物技術特論與實作

2 選

郭嘉信

本課程聘請不同生物技術專長之學者專家，講授生物技術產業之最新研究與發展，其

中包括生物反應器、發酵技術、基因工程、酵素應用等，並依照授課內容，提供學生實作實習或業界參訪之活動，讓學生能將課堂所習之生物技術知識與技術，實際動手應用於產品製作或親身體驗生物技術產業的運作。

Special Topics and practical Trainings in Food Biotechnology 2 E J. H. Guo

This course will invite various scholars or specialists with different specialties of biotechnology to teach the most recent research and development of biotechnology. The topics may include, but not limit to, bioreactors, fermentation technologies, gene engineering, enzyme applications, etc. In addition to lecture in the classroom, the lecturer will also provide students with hand-on practice in the lab or field trip to visit biotechnology industry. This course will allow students to utilize the knowledges and techniques learned in classroom for actually hand-on application of biotechnology processing in lab or to visit biotechnology industry personally to observe and experience different technologies in biotechnology factories.

智慧財產權管理與技術轉移鑑價 2 選 郭嘉信

本課程規劃包含智慧財產權管理基本概念與技術移轉鑑價二大部份。在智慧財產管理單元部分，以智慧財產權法規與實務為主軸，連結法規講授與產業實務運作，提供完整的智慧財產權管理所應具備的基本概念。課程內容首先提供智慧財產權法總論（包含我國專利法、商標法與著作權法體系與重要規範），並分別提供我國有關專利與商標申請與檢索實務，以建立理解智慧財產權申請與管理所需的基礎。進而再延伸提供我國智慧財產相關訴訟案例實務單元。課程特色為結合跨校、跨領域學者以及產業實務專家，強調產學研連結與跨領域專業之培養。

Intellectual Property Managements and Technology Transfer and Valuation 2 E J. H. Guo

This course composes of two sections including fundamental concepts of intellectual property management and appraisal of technology transfer. In the section of intellectual property management, the course will mainly focus on the intellectual property laws/regulations and their practical applications in industry to provide students entire fundamental concepts required for intellectual property management. The course consists of overview of Intellectual Property Right Acts, including hierarchies and important guidelines of Taiwan patent law, trademark law and copyright law, and provides the knowledge of Taiwan patent and trademark application and retrieval practice, to establish the required basis for understanding intellectual property application and management. In addition, the course will further provide court cases of Taiwan intellectual property lawsuits for students' study. The feature of this course is to invite interdisciplinary scholars and experts from different universities or industries to teach, and to stress on the talent cultivation with interdisciplinary specialties from various industry, academia and institute.

全球食品科技與產業特論 2 選 郭嘉信

本課程邀請產、官、學、研在食品生物技術、生醫、應用微生物、食品化學、儀器分析、食品加工及技術研發的專家擔任講員，分享其學識與工作經驗，本課程的目標是提供學生深入了解國際上目前最受矚目的生物、化學、物理、加工、食物保存、食品品質評估、公共衛生、食物運用等議題。

Special Topics in Global Food Technology and Industry 2 E J. H. Guo

Speakers specialized in Food Biotechnology, Biomedicine, Applied Microbiology, Food Chemistry, Instrumental Analysis, and Food Processing and Technology Development from industry, government, university, or research institute will be invited to share their knowledge and working experiences. Objective is to give students an in-depth understanding of the most global concerns in biological, chemical, and physical sciences to the processing, preservation, quality evaluation, public health aspects, and utilization of foods.

(六) 動物科學與畜產系：

豬隻飼養管理海外實習

2 選

沈朋志、余祺

本課程旨在指導學生學習歐規豬隻飼養管理模式，實地參與海外牧場實作之學習機會。實習課程內容涵蓋豬場日常工作內容、種公母豬場、分娩舍、保育舍及肥育舍等相關飼養管理技術。

Pig Breeding Management Overseas Internship

2 E

Shen, Perng-Chih、
Yu, Chi

This course is designed to guide students to learn about the European pig breeding management model and participate in the learning opportunities of overseas practices. The internship course covers the daily work of the farm, breeding house, delivery farrowing house, the nursery house and the fattening house.

豬基因選種與繁殖科技特論暨實習

2 選

張秀鑾、楊國泰

本課程旨在結合實習課程培養研究生具備基因選育與繁殖技術素養，內容涵蓋性能記錄與系譜之表型組學於種畜遺傳預測 (BLP、BLUP 與 gBLUP) 之理論與應用、遺傳標記與全基因組關聯研究 (GWAS) 等分子遺傳技術，以及精液品管、產精效率、胚移置與選性繁殖等技術。

Special Topics in Pig Genomic Selection and Reproductive technology and Practicum 2 E

Chang, Hsiu-Luan、Yang, Kuo-Tai

The aims of this course are to train graduate students with genomic selection and reproductive technology accompanying with practicum program. Course contents will cover the theory and application of phenomics on genetic prediction (BLP, BLUP and gBLUP) for breeding stocks, genetic markers and genome-wide association studies (GWAS), semen quality control and production efficiency, and embryo transfer as well as sex-selective reproduction technology.

高效能飼料配方與生產技術特論及實習

2 選

余 祺

本課程乃教授歐規豬隻完全配合飼料製造工業之現代技術，內容包括：非抗生素添加物飼料之生產方式、天然飼料添加劑對不同階段豬隻生長速率與育成率之影響、符合重金屬含量規範之飼料添加劑製備、配合飼料之製造包括設計、收料、混合、製粒、包裝儲存油脂等液體原料添加之相關技術等。

High-Performance Feed Formula and Production Technology Specialties and Internship

2E

Yu, Chi

This course is about a modern technology associated with the European pig feed manufacturing industry. It includes the production of non-antibiotic additives, the effect of natural feed additives on the

growth rate and growth rate of pigs at different stages, and the compliance with heavy metal content regulation. The preparation of feed additives and the manufacture of compound feeds include related technologies such as design, receiving, mixing, granulating, packaging, storage and storage of liquid raw materials.

智慧-福祉化豬隻飼養管理特論及實習 2 選 翁瑞奇

本課程旨在解析歐規豬舍策劃與自動化，介紹歐規豬舍內溫溼度控制、密閉式豬舍能源循環調控及智慧化通風系統、豬舍智能系統於各生長階段豬隻之應用、懷孕母豬混養制度、福利分娩欄與電子餵飼系統等動物福利系統。

Wisdom-Welfare Pig Management Theory and Internship 2 E Weng, Ruey-Chee

This course aims to analyze the planning and automation of European-style pig houses, introduce the temperature and humidity control in the European pig house, the energy cycle control of the closed pig house and the intelligent ventilation system, the application of the pig house intelligent system in each growth stage, and the pregnancy. Animal welfare system such as sow polyculture system, welfare delivery column and electronic feeding system.

高效能廢棄物循環利用技術特論及實習 2 選 彭劭于

本課程目的在介紹台灣與丹麥畜牧場對於動物糞尿之處理與循環再利用之差異。課程內容包括台灣牧場常用之固液分離、厭氧消化處理及曝氣處理等三段式廢水處理系統、歐規動物廢棄物處理再利用策略、氮磷鉀足跡管理，並利用廢棄物所產生之沼氣轉化為電能，以及將發酵後之有機物製成堆肥以增加附加價值，使畜牧業朝向永續環保農業之目標前進。

High-Performance Waste recycling Technology and Internship 2 E Peng, Shao-Yu

The purpose of this course is to introduce the differences in the handling and recycling of animal wastes between livestock farms in Taiwan and Denmark. The course includes three-stage wastewater treatment systems such as solid-liquid separation, anaerobic digestion and aeration treatment, and European-style animal waste treatment and reuse strategies, nitrogen, phosphorus and potassium footprint management, and the use of waste. Biogas is converted into electricity, and the fermented organic matter is composted to increase added value, and the animal husbandry is moving towards the goal of sustainable environmental agriculture.

豬隻生產及飼養管理技術 2 選 沈朋志、余祺、張秀鑾、翁瑞奇、 彭劭于、吳錫勳、楊國泰、 傅子彥、李泓

本課程目的在介紹台灣高溫多濕的環境下，養豬事業之成就與豐富之經驗以及國內外養豬業之先進技術與科學知識。其內容包括豬隻生理解剖、遺傳育種、品種選拔與改良、生物技術與生殖、營養與飼料、飼養管理、環境與污染控制、經濟經營規模與市場產銷等知識，再配合實際操作，使學生參與養豬現場之訓練，以期成為務實之經營者。

Pig Production and Feeding Management Technology 2 E Shen,Perng-Chi、Yu,Chi、 Chang, Hsiu-Luan、 Weng, Ruey-Chee、

**Peng, Shao-Yu 、
Wu, Hsi-Hsun 、
Yang, Kuo-Tai 、
Fu, Tsz-Yen 、 Li, Hung**

The purpose of this course is to introduce the achievements and rich experience of the pig industry and the advanced technology and scientific knowledge of the domestic and foreign pig industry under the high temperature and humidity environment in Taiwan. Its contents include the physiological anatomy of pigs, genetic breeding, variety selection and improvement, biotechnology and reproduction, nutrition and feed, feeding management, environmental and pollution control, economic management scale and market production and sales, and then cooperate with the actual operation to enable students to participate. Training on pig farms to become a pragmatic operator.

豬場經營管理技術	2選	沈朋志、余祺、張秀鑾、翁瑞奇、彭劭于、 吳錫勳、楊國泰、傅子彥、李泓
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使學生瞭解經營牧場之一般原則、原理與如何將經濟管理導入牧場經營相關業務，使效益提高並降低經營成本。其內容包括豬場生產資源之利用、豬場經營之經濟原則、豬場生產預估、畜產品運銷、生產業務綜合運作、豬場建築與設備、環境污染控制、以及自動化生產方式的評估。

Pig Farm Management Technology	2 E	Shen, Perng-Chih 、 Yu, Chi 、 Chang, Hsiu-Luan 、 Weng, Ruey-Chee 、 Peng, Shao-Yu 、 Wu, Hsi-Hsun 、 Yang, Kuo-Tai 、 Fu, Tsz-Yen 、 Li, Hung
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To enable students to understand the general principles and principles of operating a ranch and how to introduce economic management into the business related to pasture management, so as to improve efficiency and reduce operating costs. Its contents include the utilization of production resources on the farm, the economic principles of farm operations, the estimation of farm production, the distribution of livestock products, the integrated operation of production operations, the construction and equipment of pig farms, the control of environmental pollution, and the assessment of automated production methods.

豬隻生產及飼養管理實習	2 選	沈朋志、余祺、張秀鑾、翁瑞奇、彭劭于、 吳錫勳、楊國泰、傅子彥、李泓
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實習內容在使學生經由實務訓練，可習得相關養豬技術、規劃及經營之實務訓練，以造就成為真正養豬經營之專業人才。實習內容包括品種與選種評分、豬場清洗與消毒、分娩輔助、發情觀察與配種、豬場紀錄規劃、豬舍建築設計與豬舍配置規劃、飼料需求量估計、飼養成本之概估、經濟經營規模擬定、投資報酬之分析、市場供需資料之搜集及總生產成本與收益之計算與分析。

Pig Production and Breeding Management Internship	2 E	Shen, Perng-Chih 、Yu,Chi 、 Chang, Hsiu-Luan 、 Weng, Ruey-Chee 、 Peng, Shao-Yu 、
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Wu, Hsi-Hsun 、

Yang, Kuo-Tai 、

Fu, Tsz-Yen 、 Li, Hung

The internship content enables students to acquire practical training in pig raising technology, planning and management through practical training, so as to become a professional talent for real pig management. Internship content includes variety and selection score, pig farm cleaning and disinfection, childbirth assistance, estrus observation and breeding, pig record planning, pig house design and pig house allocation planning, feed demand estimation, feeding cost estimation, economy The business rules are simulated, the analysis of investment returns, the collection of market supply and demand data, and the calculation and analysis of total production costs and benefits.

(七) 水產養殖系：

海水觀賞魚-小丑魚生產與銷售實務 2 選

本課程在使學生學習海水觀賞魚-小丑魚的「生產、管理、行銷」完整供應鏈知識，包含種魚照顧、生殖調控、餌料生物培養、育苗、養成、體色調整及銷售，並由教師提出實務性問題引導學生討論，及總結形成知識進行問題導向式學習，亦由業界專家傳授產業現況知識與經驗，並至校外參訪以增廣見聞深化知識。

Production and Marketing of Marine Ornamental Fish, Anemonefish 2 E

This course introduces the whole supply-chain knowledge in the production, management and marketing of anemonefish, including caring brood fish, controlled reproduction, production of live feeds for fish larvae, fish larvae cultivation, growing the fish, color developing on market-sized fish and marketing. The lecture is designed as a problem-based learning (PBL) course. Students discuss and try to resolve the questions related to production technique proposed by teacher, and then concluded by teacher to constitute the knowledge in the class. This course also introduces the industrial status by invited professional experts and increase students' professional experience via visiting industrial farm or organization.

海水觀賞魚-小丑魚生產與銷售實務實習 1 選

本課程在使學生學習海水觀賞魚-小丑魚的「生產、管理、行銷」完整供應鏈操作實務技能，包含種魚照顧、生殖調控、餌料生物培養、育苗、養成、體色調整及銷售。由教師指導及示範，教學助理協助修課學生進行實務性操作以熟悉各項技術。

Practice in the Production and Marketing of Marine Ornamental Fish, Anemonefish 2 E

This aim of this course is to guide the students to practice the techniques and procedures of the whole supply-chain in production, management and marketing of anemonefish. The techniques include caring brood fish, controlled reproduction, production of clean live feeds for fish larvae, fish larvae cultivation, growing the fish, and color developing on market-sized fish. The students will practice the techniques according to teacher's demonstration and by the assistance from teaching assistants in the hatchery farm..

三、 工學院

(一) 機械工程系：

機器人手臂控制系統與實習

3 選

本課程將介紹機器手臂之類型、運動學、動力方程式、控制系統設計等單元，並透過實體機器手臂的操作，讓學生更了解機器手臂控制系統理論與實務之結合。另外，學生亦可藉由本課程之學習，熟悉關於機器手臂之感測元件及控制介面之設定、控制演算法之撰寫、以及工業應用之基礎。

Control system design and practice for robotic manipulators 3 E

This subject is to introduce the fundamentals of robotic manipulator control systems, including the working types of robotic manipulators, the relevant kinematics, dynamic equations, and control system designs. It is expected, through the practical instrumental operation, the students could realize how the control systems are linked theoretically and practically. On the other hand, during the course study, the students could gain the capability of system setup for sensing device and control interface, programming of control algorithms, and simple industrial applications.

機器人手臂實務應用(深碗課程)

1 選

本課程內容在培訓學生具有工業機器手臂之實務技術，課程內容強調實作能力技術養成，包括工業手臂維修、保養、應用與實務設計。

手臂應用技術為主要重點內容，學習主題如下：

- 1.工業機械手臂結合力覺感測技術
- 2.工業機械手臂結合視覺感測技術
- 3.工業機械手臂之 3D 量測技術
- 4.工業機械手臂之組裝技術
- 5.工業機械手臂之農產品深度加工技術

The Techniques and Practices of Advanced Robot Arm 1 E

The objectives of this course will train students with the practical skills and knowledge of industrial robot arm technique . The contents of practical learning are among robot repair , maintenance , control, application and design and so on. Above all, the learning in practice is the most important in this course . The topics of practical learning are as follows:

- 1.Robot arm with force sensor technique.
- 2.Robot arm with vision sensor technique
- 3.Robot arm applied to 3D measurement technique
- 4.Robot arm applied to assembling technique
- 5.Robot arm applied to deep processes in the agricultural products.

機器人手臂智能感測實務(微型課程)

1 選

本課程主要目標為介紹各式應用於機械手臂之感測器之原理、構造、特性、對應電路及其應用等。於課程中安排實習課程，以期培養同學實際動手的能力。感測器內容包含光、電、磁、溫度、濕度、聲音、壓力及化學量(含生化)、近接感測等。

Applications of Smart Sensors for Robotic Arm 1 E

The course aim at systematically introduction of theory and applications of various sensors for robotic arms. The course presents an overview of the state of the art of sensors for robotic arms. Robotic arms sensing mainly gives robotic arm the ability to see, touch, hear and move and uses algorithms that require environmental feedback. It includes commercially available as well as experimental transducers, based on optical, acoustic, capacitive, inductive, resistive, and magnetic sensing principles.

人工智慧在機器人手臂應用 3 選

這門課程向學生介紹了人工智慧在機器人手臂的應用之基礎知識表達、解決問題和學習方法。幫助學生獲得在不同環境下是如何運用將人工智慧應用在機器人手臂。修完課程後，學生將具備以下的知識：人工智慧的理論是如何應用在機器人手臂上。

Artificial Intelligence Application in Robotic Arm 3 E

This course introduces students to the basic knowledge representation, problem solving, and learning methods of artificial intelligence application in robotic arm. It helps students gain about how artificial intelligence applies to robotic arm under a variety of circumstances. Upon completion of this course, students should be able to understand how artificial intelligence theorems will be applied into robotic arm system.

人工智慧在機器人手臂應用實習 1 選

這門課程向學生介紹了人工智慧在機器人手臂的應用之基礎知識表達、解決問題和學習方法。幫助學生獲得在不同環境下是如何運用將人工智慧應用在機器人手臂。修完課程後，學生將具備以下的知識：人工智慧的理論是如何應用在機器人手臂上。

Artificial Intelligence Application in Robotic Arm Practices 1 E

This course introduces students to the basic knowledge representation, problem solving, and learning methods of artificial intelligence application in robotic arm. It helps students gain about how artificial intelligence applies to robotic arm under a variety of circumstances. Upon completion of this course, students should be able to understand how artificial intelligence theorems will be applied into robotic arm system.

機器人手臂實務應用(特色課程) 3 選

本課程內容在培訓學生具有工業機器手臂之實務技術，課程內容強調實作能力技術養成，包括工業手臂維修、保養、應用與實務設計。

手臂應用技術為主要重點內容，學習主題如下：

1. 工業機械手臂結合力覺感測技術
2. 工業機械手臂結合視覺感測技術
3. 工業機械手臂之 3D 量測技術
4. 工業機械手臂之組裝技術

工業機械手臂之農產品深度加工技術

The Techniques of Robot Arm 3 E

The objectives of this course will train students with the practical skills and knowledge of industrial robot arm technique . The contents of practical learning are among robot repair , maintenance , control, application and design and so on. Above all, the learning in practice is the most important in this course . The topics of practical learning are as follows:

- 1.Robot arm with force sensor technique.
- 2.Robot arm with vision sensor technique
- 3.Robot arm applied to 3D measurement technique
- 4.Robot arm applied to ensembling technique
- 5.Robot arm applied to deep processes in the agricultural products.

機器人手臂實務應用實習(特色課程) 1 選

本課程內容在培訓學生具有工業機器人手臂之實務技術，課程內容強調實作能力技術養成，包括工業手臂維修、保養、應用與實務設計。

- 1.工業機械手臂結合力覺感測技術
- 2.工業機械手臂結合視覺感測技術
- 3.工業機械手臂之 3D 量測技術
- 4.工業機械手臂之組裝技術
- 5.工業機械手臂之農產品深度加工技術

The Techniques Practices of Robot Arm 1 E

The objectives of this course will train students with the practical skills and knowledge of industrial robot arm technique . The contents of practical learning are among robot repair , maintenance , control, application and design and so on. Above all, the learning in practice is the most important in this course . The topics of practical learning are as follows:

- 1.Robot arm with force sensor technique.
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- 3.Robot arm applied to 3D measurement technique
- 4.Robot arm applied to ensembling technique
- 5.Robot arm applied to deep processes in the agricultural products.

機器人手臂機構設計(特色課程) 2 選

本課程將教授各式基礎工業機器人機構運動，包括工業機器人主體部分機構運動、驅動系統部分機構運動、控制系統部分機構運動以及工業機器人四種臂部的運動形式介紹(包括直角坐標型、圓柱坐標型、球坐標型、關節型)。除此之外，也將介紹工業機器人運動中點位型和連續軌跡型的控制機能、具備智能系統的工業機器人(觸覺、力覺與視覺)所需之機構設計。最後，透過兩次專題練習來提升學員對此技術的熟悉程度。

Mechanism Design in Robot 2 E

This course will teach the basic mechanism movement of industrial robot, including the movement of the main body part, the drive system, the control system, and the movement of the four types of industrial robots (including rectangular coordinate, coordinate system, spherical coordinate type, joint type). In addition, the mechanism design of the industrial robot (tactile, force and vision) with the intelligent system of the industrial robot in the point of position and continuous trajectory control function will be introduced. In the end, two project exercises will use to help students understand more of this

technology.

機器人手臂機構設計實習(特色課程) 1 選

本課程將教授各式基礎工業機器人機構運動，包括工業機器人主體部分機構運動、驅動系統部分機構運動、控制系統部分機構運動以及工業機器人四種臂部的運動形式介紹(包括直角坐標型、圓柱坐標型、球坐標型、關節型)。除此之外，也將介紹工業機器人運動中點位型和連續軌跡型的控制機能、具備智能系統的工業機器人(觸覺、力覺與視覺)所需之機構設計。最後，透過兩次專題練習來提升學員對此技術的熟悉程度。

Mechanism Design Practice in Robot 1 E

This course will teach the basic mechanism movement of industrial robot, including the movement of the main body part, the drive system, the control system, and the movement of the four types of industrial robots (including rectangular coordinate, coordinate system, spherical coordinate type, joint type). In addition, the mechanism design of the industrial robot (tactile, force and vision) with the intelligent system of the industrial robot in the point of position and continuous trajectory control function will be introduced. In the end, two project exercises will use to help students understand more of this technology.

(一) 水土保持系：

無人載具實務專題(深碗課程) 1 選 江介倫

本深碗課程目的在使學生能實際結合平面測量及無人載具(UAV)空拍成果，產製正射影像及等高線地形圖等以利未來將地形測繪應用於水土保持處理或規劃上，內容包含：地形測量、測量誤差、無人載具操作實務、空拍機相關民航法規、相關應用分析軟體介紹、正射影像產製、等高線地形圖繪製、地形測量應用、集水區地文因子分析等之進階實務。

Application of Unmanned Aerial Vehicle Operation and Spatial Information Analysis 1E J. L. Chiang

This course could give the students familiar in the basic technical of surveying especially concentrating on slope land, which could perform the geomorphologic mapping, and apply it to the soil and water conservation treatment and planning. The main courses included application of Topographic Surveying, the structure and unmanned aerial vehicle (UAV) operation, image process, digital terrain model, revised the error and examined the precision of surveying, calculation and mapping.

無人載具實務與空間資訊分析應用(深碗課程) 1 選 江介倫/陳建璋/柯千禾

本課程目的在培養學生無人載具應用之進階實務能力，藉由熟練所學理論與實作加以應用與實現。使學生能應用無人載具，獲取相關資料，並可結合平面測量或其他相關傳統資訊發展新的應用，能解決傳統領域的問題，具進階之實際應用無人載具完成專案之能力。

Application of Unmanned Aerial Vehicle Operation and Spatial information Analysis 1E J. L. Chiang/ J.C. Chen/ C.H. Ko

This course could give the students familiar in the basic technical of UAV surveying especially concentrating on slope land, which could perform the geomorphologic mapping, and apply it to the soil

and water conservation treatment and planning. The goal of this course is to educate the advanced ability of technology through learning theory and its applied skills.

地理資訊系統(深碗課程)

1 選

江介倫

在了解地理資訊系統之基礎後，深碗課程旨在讓學生實際應用所學，以便實際消化吸收轉化成知識技能，依照選定主題實際建立地理資料庫並展示分析功能。

Geographic Information System

1E

J. L. Chiang

The design of GIS database, principle, and methodology of database processing are taught from the view point of basic concept, construction, and application of Geographic Information System. The relation between GIS and remote sensing is also covered in the course. The course also covers prominent functions of GIS, map compilation, database establishment, and data analysis. An example of land use classification using GIS will be given in the class to discuss the important factors need to consider prior to the GIS establishment.

基礎工程學

2 選

陳天健

應用土壤力學理論，針對土壤及坡地開發所需之工程設計，講授基礎工程學原理，基地工程地質調查、土壤降伏理論、淺基礎、深基礎、擋土牆、加勁擋土結構和基礎開挖支撐之力學分析與設計之學識基本能力。

Foundation Engineering

2E

T. C. Chen

Foundation Engineering is an advance course of soil mechanism; the course objective is to teach the basic soil structure design methodology on the ground or hillslope to student. The content includes: principal theorem of foundation engineering, site investigation, soil failure criterion, lateral earth pressure model, and the design methodology on shallow foundation, pill foundation, retaining wall, mechanism stable structure, ground excavation, and supporting system.

(二) 車輛工程系：

機器人手臂控制系統與實習

3 選

本課程將介紹機器手臂之類型、運動學、動力方程式、控制系統設計等單元，並透過實體機器手臂的操作，讓學生更了解機器手臂控制系統理論與實務之結合。另外，學生亦可藉由本課程之學習，熟悉關於機器手臂之感測元件及控制介面之設定、控制演算法之撰寫、以及工業應用之基礎。

Control system design and practice for robotic manipulators 3 E

This subject is to introduce the fundamentals of robotic manipulator control systems, including the working types of robotic manipulators, the relevant kinematics, dynamic equations, and control system designs. It is expected, through the practical instrumental operation, the students could realize how the control systems are linked theoretically and practically. On the other hand, during the course study, the students could gain the capability of system setup for sensing device and control interface, programming of control algorithms, and simple industrial applications.

整車試作實務(1)**3 選****合授**

本課程用於培養學生對於電動車輛之設計與製造之實作能力，以利畢業後能順利與相關產業進行接軌。課程內容涵蓋電動車輛原理概念、車輛結構設計與製造、車輛底盤之設計與製造有效建構完善的電動車輛產業服務價值鏈，培訓電動車輛產業所需的相關人才。

Vehicle Prototyping Practice (1)**3 E****Joint teaching**

This course is aimed to cultivate students to have practical abilities on design and manufacturing technology for related industry. The contents of this course include the introduction of motor-driven vehicle, body design and manufacturing technology, chassis design and manufacturing concepts. With a complete training of design-manufacturing-service chain for the motor-driven vehicle industry, the student will have all the skills they need for immediate employment after graduation

整車試作實務(2)**3 選****合授**

本課程希望透過教師講解以及同學實作，讓學生能夠對微分及積分有充分的瞭解，以強化同學未來學習工程數學及相關專業課程之數學基礎。本課程配合微積分教學進度，講授課本之習題。進行方式以「回答數學基本觀念」、「概念的澄清」為主。課程內容包括：極限與連續、導數及其應用、積分(定積分與不定積分)、超越函數及其反函數、積分法則、不定型與瑕積分、定積分的應用、偏導數、重積分。

Vehicle Prototyping Practice (2)**3 E****Joint teaching**

This course is aimed to cultivate students to have practical abilities on design and manufacturing technology for related industry. The contents of this course include the introduction of motor-driven vehicle, body design and manufacturing technology, chassis design and manufacturing concepts. With a complete training of design-manufacturing-service chain for the motor-driven vehicle industry, the student will have all the skills they need for immediate employment after graduation

基礎微積分(1)**1 選****陳彩蓉**

本課程希望透過教師講解以及同學實作，讓學生能夠對微分及積分有充分的瞭解，以強化同學未來學習工程數學及相關專業課程之數學基礎。本課程配合微積分教學進度，講授課本之習題。進行方式以「回答數學基本觀念」、「概念的澄清」為主。課程內容包括：極限與連續、導數及其應用、積分(定積分與不定積分)、超越函數及其反函數、積分法則、不定型與瑕積分、定積分的應用、偏導數、重積分。

Fundamental Calculus (1)**1 E****T. J. Chen**

The purpose of this course is to strengthen the ability of students on mastering calculus through personal practice under the supervision of instructor so that the students could have a better background for studying Engineering Mathematics and other professional courses. This course will be progressed in accordance with the Calculus course. Fundamental concepts of Calculus will be emphasized. The major topics of this course are: Limit and Continuity, Differentiation and its Applications, Integration (Definite and Indefinite Integrals), Transcendental Functions and their Inverse Functions, Rules for Integration, Intermediate Forms and Improper Integrals, Applications of Definite Integrals, Partial Derivatives, Iterated Integrals.

基礎微積分(2)**1 選****陳彩蓉**

本課程希望透過教師講解以及同學實作，讓學生能夠對微分及積分有充分的瞭解，以強化同學未來學習工程數學及相關專業課程之數學基礎。本課程配合微積分教學進度，講授課本之習題。進行方式以「回答數學基本觀念」、「概念的澄清」為主。課程內容包括：極限與連續、導數及其應用、積分(定積分與不定積分)、超越函數及其反函數、積分法則、不定型與瑕積分、定積分的應用、偏導數、重積分。

Fundamental Calculus (1)**1 E****T. J. Chen**

The purpose of this course is to strengthen the ability of students on mastering calculus through personal practice under the supervision of instructor so that the students could have a better background for studying Engineering Mathematics and other professional courses. This course will be progressed in accordance with the Calculus course. Fundamental concepts of Calculus will be emphasized. The major topics of this course are: Limit and Continuity, Differentiation and its Applications, Integration (Definite and Indefinite Integrals), Transcendental Functions and their Inverse Functions, Rules for Integration, Intermediate Forms and Improper Integrals, Applications of Definite Integrals, Partial Derivatives, Iterated Integrals.

電動車概論**2 選****楊榮華**

本課程將介紹電動車之種類、結構、儲能系統、動力系統、以及能量管理系統等。另外，將結合運動學、動力方程式、控制系統設計等理論之介紹單元，並透過實體小型電動車的操作，讓學生更了解電動車系統理論與實務之結合。另外，學生亦可藉由本課程之學習，瞭解關於電動車之感測元件及控制介面之設定、控制演算法之撰寫介紹、以及工業應用之基礎。

Introduction to Electric Vehicle**2 E****J.H.Yang**

This subject is to introduce the fundamentals of electric vehicle systems, including the working types, structures, energy storage systems, dynamics as well as energy management systems of electric vehicles. In addition, by combining the relevant topics concerning the kinematics, dynamic equations, and control system designs, it is expected the students could realize how the EV systems are linked theoretically and practically. On the other hand, during the course study, the students could gain the capability of EV system setup for sensing device and control interface, programming of control algorithms, and applications.

微感測器**3 選****李佳言**

本課程為教導學生對微感測器設計與製程的基本原理認識，以及深入瞭解感測器材料與相關製程設備、感測器製作與感測器產業之運作，運用業界所普遍使用的感測器材料與設備介紹，使學生瞭解設備工程師在感測器研發與製作可扮演的角色與任務。授課內容包括微機電系統簡介、微感測器簡介、環境感測器、車輛感測器。

Micro Sensors**3 E****C. Y. Lee**

The aim of this course is to acquaint the students with the basic principles of vehicle micro-sensor design and manufacturing. The course also introduces the students to the sensor materials and manufacturing equipment, the sensor fabrication and the sensor business. Utilizing the knowledge of commercial sensor materials and equipments, the students can understand their roles in the sensor fields.

The contents include: Introduction to MEMS, Introduction to Micro-sensors, Environmental Sensors and Vehicle Sensors.

(三) 材料工程研究所：

書報討論(1)

1 選

輪授

本課程主要以金屬材料、電子材料、陶瓷材料、生醫材料與高分子材料五大主題為架構，期望藉由期刊論文選讀以及分組討論的方式訓練學生接受新知以及邏輯判斷能力。

Reading Seminar (1)

1 E

All Teachers

This course includes metal, electronics, ceramic, biomedical and polymeric materials. Students are trained by reading selected journal papers and group discussion to promote their knowledge level and ability of logic judgement..

書報討論(2)

1 選

輪授

本課程主要以金屬材料、電子材料、陶瓷材料、生醫材料與高分子材料五大主題為架構，期望藉由期刊論文選讀以及分組討論的方式訓練學生接受新知以及邏輯判斷能力。

Reading Seminar (2)

1 E

All Teachers

This course includes metal, electronics, ceramic, biomedical and polymeric materials. Students are trained by reading selected journal papers and group discussion to promote their knowledge level and ability of logic judgement.

四、 管理學院

(一)管理學院：

社區規劃與城鄉風貌

3 選

周宛俞

本課程是以城鄉發展和社區營造的角度，探討社區議題。強調空間與人之間的關係，進行社區問題分析、發展解決問題方案的流程與操作模式、與利益相關者反覆討論、評估、修正解決方案，提出可執行且具有創新意涵的具體作法。

社區規劃是為社區問題找到解決方案，課程主要是介紹社區空間營造的切入模式，並且透過實作和分組討論來演練操作流程，累積學生的「資訊整理能力」和「議題洞察力」。從「傾聽與尊重」、「觀察」及「創意思考」三個角度，培育培養學生對環境的人文關懷，了解社區風貌的中心價值在於「生活在城鄉空間裡的人們」，從中得到新的領會而往後能更全面性的思考城鄉發展議題。

Community Planning and Urban/Rural Landscape

3 E

W.Y. Chou

This course explores community issues from the perspective of urban-rural development and community planning. Focus on the relationships between the living spaces and residents, students are lead to analyze community problems, develop problem-solving ideas, discuss with stakeholders, evaluate and correct their programs, and finally propose innovative and practical solutions.

地方特色遊程(微型課程)

0.8 選

周宛俞

本課程為「永續設計與地域創新」跨領域學分學程之微型課程，與業師共同帶領修課學生參與地方特色遊程，帶領學生實際體驗並開拓視野。

In-depth Tour

0.8 E

W.Y. Chou

This course is one of small course of “Sustainable Design and Regional Innovation Program”. Professional specialist faculty will collaboratively lead students participant local special tour, and make student have more experience and vision about the regional redevelopment industry..

(二)財務金融國際學士學位學程：

新聞英語閱讀與討論

2 選

本課程旨在透過閱讀英語新聞與時事討論，訓練學生英語閱讀與口語表達能力，並培養獨立思考與提升國際觀。課程前半段主要藉由講解報章雜誌之新聞或專題報導，介紹新聞英語之特點，包括標題、結構、文字表達等，以提昇學生自行閱讀英文新聞書報之能力。課程後半則有系統的引導學生閱讀不同主題的英語新聞，包括政治、社會、財經、生活科技與環保等主題。除加強學生對國內及國際新聞事件的興趣及對英語新聞閱讀和瞭解的程度，也同時培養學生敏銳的觀察力及組織力，並訓練學生以英語陳述時事並完整表達個人的看法。

Journalistic English: Read and Discuss the World News

2 E

The course is designed to guide students in reading English-language news and to train them to clearly express their points of views on related issues through discussion. One of the main focuses of this course will highlight on basic elements of news articles, vocabularies and expressions normally used in news writing from different topics ranging from politics, business, society, science, etc. Students will be

also guided to explore the content of English news media by decoding the peculiar language of headlines and news leads and by reading the feature article, the opinion and editorial page. They will also spend class time doing outlining, summarizing and analyzing news articles. The other focus of this course will emphasize on English oral speaking skills and critical thinking. Students learn to articulate their feedback, opinions, comments, or even criticism in response to the news discussed in class.

進階英語檢定

2 選

本課程旨在協助同學提升國際商務英語溝通能力，並取得理想英語檢定證照，增加日後就業競爭力。課程內容將針對聽力 文法 閱讀三部份，進行題型分析，協助同學掌握常見商業字彙及答題技巧。每週針對不同單元、題型 演練與講解，以提升同學答題自信和速度。

Advanced English Test Training

2 E

This course is aimed at assisting students passing English proficiency tests. Tactics in answering the questions will be introduced in the course. Students are expected to develop their international business communication skills as well as competitiveness in the job market.

金融資料採礦-R 軟體應用(核心課程)

2 選

本課程採用現今最熱門的 R 語言實作財金資料處理與分析，課程內容著重運

用 R 軟體的統計分析技術在財金數據建模，應用領域包括金融財金資料如股市資料、選擇權交易與債券投資等金融資料等。使學生可實際應用操作 R 軟體，有效完成金融資料分析工作與商業智慧之流程，提昇學生未來就業競爭優勢。

Financial Mining in R

2 E

This Class is a comprehensive introduction to financial modeling that teaches advanced undergraduate and graduate students in finance and economics how to use R to analyze financial data and implement financial models. The objective of this course is to explore financial data mining. Data Mining in Finance presents a comprehensive overview of major algorithmic approaches to predictive data mining, including statistical, neural networks, decision-tree, and time-series methods, and then examines the suitability of these approaches to financial data mining. This course focuses specifically on the time-series data model, which is thus better suited for financial mining because it is able to make greater use of underlying domain knowledge.

區塊鏈實務(微型課程)

1 選

本課程介紹區塊鏈歷史、特性與原理，包括 P2P 網路、分散式帳本技術、共識原理、智能合約以及密碼學應用等。另外，經由各種區塊鏈應用案例以及實作練習，讓學生更瞭解如何透過區塊鏈進行應用服務的設計和開發。

The Blockchain in Practice

1 E

The purpose of the course is to introduce the history, background and properties of Blockchain. The topics of P2P networks, distributed ledgers, consensus algorithms, smart contracts and applied

cryptography are included. Therefore, students may learn about service analysis and design of Blockchain applications from business cases and implementations of Blockchain.

(三)餐旅管理系：

傳統糕點製作及實習(核心課程)

3 選

林建廷

本課程教授酥油皮類、糕皮類、漿皮類及餅皮類等傳統糕點產品的製作。教學內容為酥油皮類、糕皮類、漿皮類、餅皮類產品、豆餡和月餅餡的製作原理及運用，包括材料認識、配方制定及製作方法等。除了產品的專業知識及技能外，本課程特別注重學生正確工作態度與職業道德的培養。本課程以紙筆測驗進行知識面的評量，以實作進行技能面的評量，以出席情況、準時與否及學習態度進行情意面的評量。本課程教授的酥油皮類產品有老婆餅、太陽餅、泡(椗)餅、蒜蓉酥、椰蓉酥、蘇式椒鹽月餅、白豆沙月餅、咖哩餃、油皮蛋塔、芝麻喜餅。糕漿皮類產品有椰蓉月餅、金(甘)露酥、酥皮椰塔、酥皮蛋塔、龍鳳喜餅。餅皮類產品有廣式、台式、蘇式及日式月餅。

Traditional Baked Desserts Practice

3 E

J. T. Lin, F

This course introduces traditional baked desserts. Students can learn the basic principles and production including the ingredients, recipes, and methods. Knowledge and principles will be evaluated by writing examination. Skills will be examined by the procedures and the quality of the products. A total of 30 products from three varieties will be introduced.

歐式點心製作及實習(核心課程)

3 選

張慧珍

本課程教授餅乾類及歐式甜點蛋糕類烘焙食品的製作。教學內容為餅乾及歐式甜點蛋糕產品的製作原理及運用，包括材料認識、配方制定及製作方法。除了產品的專業知識及技能外，本課程特別注重學生正確工作態度與職業道德的培養。本課程以紙筆測驗進行知識面的評量，以實作進行技能面的評量，以出席情況、準時與否及學習態度進行情意面的評量。本課程教授的產品有菊花餅乾、蜂蜜馬德蕾、咖啡杏仁餅乾、榛果皇冠核桃蛋黃餅乾、荷蘭水果蛋糕、蜂蜜扶輪庭、修格拉巧克力蛋糕、米蘭杏仁、布朗尼慕斯胚芽奶酥、洋梨塔等共 15 題組 30 種產品。

Cookies and European Pastries Practice

3 E

H. C. Chang

This course introduces the cookies and European pastries. Students can learn the basic principles and production including the ingredients, recipes, and methods. Knowledge and principles will be evaluated by writing examination. Skills will be examined by the procedures and the quality of the products. A total of 30 products from three varieties will be introduced.

創意與創新實務(微型課程)

1 選

廖世義

本課程將從四個部分:定義問題、獲得靈感、創造形式、設計思維來探討創意與創新過程。本課程教導學生從過去單向思考的學習模式，轉變為「實務操作」的學習課程，並運用設計思維模式將創新點子具體實踐化。

Creative and Innovation Practice

1 E

S. Y. Liao

This course will explore design considerations from four perspectives: defining issues, getting

inspiration, creating forms, and understanding the innovator's thinking.

This course teaches students to change from a one-way "thinking" learning mode to a "practical operation" learning course, and to use the design thinking mode to concretely implement innovative ideas.

創業實習(微型課程)

1 選

李一靜

本課程將藉個案研究使學生了解創業所遭遇之各種問題及應變，透過實際營運模擬，降低新事業創業過程失敗之風險。

Entrepreneurship Practice

1 E

Y. C. Li

This course will help students to understand the process of getting up start a business by means of cases study and problem-solving strategy. The purpose is to help them to Create their new venture.

傳閱附件 1-5--本校各學院所屬各系(所)課程中英文摘要-人文暨社會科學院

五、 人文暨社會科學院

(一)客家文化產業研究所:

民俗及其文物研究

3 選**曾純純**

本課程從民俗學角度出發，學習掌握臺灣文化資產保存法與古物分級指定及廢止審查辦法的建立和發展變革過程的同時，通過一些案例了解六堆客庄民俗及其文物的保護和傳承現狀，分析臺灣文資保存制度在實際應用中的作用以及存在問題。其次為使本所基礎課程「文化資產與保存」與二年級「民俗藝術專題」與「文化資產與數位科技」課程有良好的銜接。

Study folklore and artifacts

3 E**Cheng Chun-Chun**

1. Have the ability to innovate and promote Hakka culture.
2. Have the ability to create a Hakka cultural living environment.
3. Ability to conduct independent research, problem solving and essay writing

文化書寫:理論與實務

3 選

本課程主要在教導學生認識文化書寫的定義與面向、價值，透過研讀文獻史料中的文化書寫與文化評論，了解客家民俗、社會、信仰、性別及族群的書寫技巧與方法，進而培養學生發掘文化資產並以文化創意方式呈現，及以故事或文化書寫行銷地方之技能。

Cultural Writing :Theory & Practice

3 E

The primary goal in this class is to help students understanding the theory of knowledge of cultural writing. Through reading relevant culture writing and cultural criticism in historical documents, students should be able to gain an initial understanding of the techniques and methods of cultural writing, including folklore, society, belief, gender, literature, ethnic group etc. This course is also expected that they can apply them to the current Hakka culture creative industry and local marketing.

(二)休閒運動健康系：

運動心理與領導學

1 選

本課程主要目的是讓學生了解運動者的心理歷程與行為的科學，了解個體的心理在面對運動時身體壓力的反應以及情緒如何影響個體的心理；而領導學是研究現代領導活動的一門科學課程，除了研究領導活動各個因素之間的相互關聯外，也將運動者的大腦行為列入領導學中。此外，本課程亦提供學生瞭解如何將心理學的知識應用於促進個體運動情境中的表現以及領導、創造、組織團隊，對於未來創造自己的健身產業上將有實質的效益。

Sports Psychology And leadership

1 E

This main purpose of this course is providing the domain knowledge of exercise psychology which based on behavioral science. Meanwhile, we also encourage students to realize how physical performances are influenced by individual mentality, and how exercise impacts on mentality during the course. Additionally, leadership is a science that analyzes modern leadership and related development. This course is a comprehensive science that focuses on the objective relationship and interaction between every effective element within leadership. Through the lectures, students are able to apply their exercise psychology-related knowledge to facilitate individual performances, leadership, creativity and organization in the future.

教練教學技術與口語指令**1 選**

本課程主要目的除了學習動作的教學技術外，也讓學生了解身為運動教練進行運動指導時，如何透過教學技巧及口語指令充分發揮所具備的專業能力、知識、技能以及態度，讓被指導者能夠淺顯易懂的執行動作，並透過本課程指導學生說話時保持連貫的思維，突破重點，語音要清晰圓潤、吐字清楚，做到準確、流暢、的說話能力。

Coach Teaching Techniques and Oral instruction 1 E

In addition to learn the teaching techniques of movements, the main purpose of this course is to enable students to understand how to develop their professional skills, knowledge, skills and attitudes through instructional skills and oral instruction when being a sports instructor, and how to use these ability to make those whom you are taught easy to understand perform actions. This course also teach students maintain a coherent thinking, break through the key points, and make the voice be clear, round, accurate, smooth, and swearing when teaching.

健身俱樂部顧客關係管理實務(微型課程)**0.5 選**

「顧客關係管理」(CRM)，可視為「顧客」與「關係管理」二者的組合體。深入探討「企業的顧客戰略」，亦即將「顧客」視為企業最核心的戰略問題看待。CRM 中的 IT 資訊科技應用，其實只是戰術問題，而真正的戰略問題是在「顧客」與「行銷」身上。本課程新增許多最新相關國內外案例，並介紹大數據的應用。

Fitness clubCustomer Relationship Management 0.5 E

"Customer Relationship Management" (CRM) can be regarded as a combination of "customer" and "relationship management". In-depth discussion of "corporate customer strategy" also regards "customer" as the core strategic issue of the company. The IT application in CRM is actually a tactical issue, and the real strategic issue is in "customer" and "marketing". This course adds many new and relevant domestic and international cases and introduces the application of big data.

(四)幼兒保育系：**人工智慧深度學習之概論與應用(特色課程)****2 選****陳永祥**

這門課程向學生介紹了人工智慧的基礎知識表達、解決問題和學習方法。幫助學生獲得敏銳的洞察能力，知悉在不同環境下是如何運用人工智慧。修完課程後，學生將具備以下能力：組織具體計算機問題的答案，並應用於智慧系統中；理解知識表示、問題求解和學習方法在智慧系統中的作用；在由計算機的角度了解人類智慧當中，正確地評價問題解決方式、洞察力和語言。

Introduction of Artificial Intelligence and Deep Learning**2 E****Y.-H. Chen**

This course introduces students to the basic knowledge representation, problem solving, and learning methods of artificial intelligence. The features are to help students gain intuition about how artificial intelligence methods work under a variety of circumstances. Upon completion of this course, students should be able to use intelligent systems by assembling solutions to concrete computational problems, understand the role of knowledge representation, problem solving, and learning in intelligent system, and appreciate the role of problem solving, vision, and language in understanding human intelligence from a

computational perspective.

數位教材擴增及虛擬實境設計

2 選

鄭博元

這門課程向學生介紹 AR/VR 的基礎知識和數位教材製作的方法，幫助學生認識如何使用相關軟硬體工具來建置一個 AR/VR 的數位學習內容。修完課程後，學生將具備以下能力：建置簡單虛擬實境與擴增實境應用的能力，VR360 攝影機操作能力及 3D 的互動式導覽系統實作能。

Design of Augmented Reality and Virtual Reality

2 E

B.-Y. Cheng

The purpose of this course is to help students acquire fundamental knowledge regarding augmented reality and virtual reality, and then skills in design AR/ VR digital content. This is a problem-based learning course design. Student may not only learn how to use the software (e.g., Unity), develop capability of design AR/ VR content, and utilize VR360 camera to develop interactive virtual navigation system.

數位教材擴增及虛擬實境設計(深碗課程)

1 選

鄭博元

這門課程向學生介紹 AR/VR 的基礎知識和數位教材製作的方法，幫助學生認識如何使用相關軟硬體工具來建置一個 AR/VR 的數位學習內容。修完課程後，學生將具備以下能力：建置簡單虛擬實境與擴增實境應用的能力，VR360 攝影機操作能力及 3D 的互動式導覽系統實作能。

Design of Augmented Reality and Virtual Reality

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教材教具開發專利分析(微型課程)

0.5 選

薛招治

本課程教授學生具備創新教材教具的專利保護及專利分析相關知識。課程內容主要介紹專利法之基本概念，以案例解析的方式來呈現如何利用不同類型專利保護教材教具相關創新，並希望學生能透過專利分析檢索及演練，訓練學生具備教材教具創新研發前的創意蒐集能力，接觸國內外最新的技術、產品及競爭者資訊，提昇教材教具創新的能力。

Teaching Aids Development and Patent Analysis

0.5 E

C.C. Hsueh

The purposes of this course aims at providing knowledge about how to use patent in protecting innovative teaching aids and patent analysis. The course content will include the concept of intellectual property law, how to use patent laws to protect innovative teaching aids by using case study. Besides, it also hopes that students can use patent search and patent analysis to collect technology reference prior to research and development of teaching aids and have the latest foreign information about technology, product and competitive companies in teaching aids mar.

傳閱附件 1-6--本校各學院所屬各系(所)課程中英文摘要-國際學院

六、國際學院

(一)土壤與水工程國際碩士學位學程：

智慧農業控制系統與應用

3 選

李柏旻

本課程主要在於學習並利用生產力 4.0 科技發展，帶動農業轉型與升級。面對全球性的農業升級挑戰，相對於國外標竿國家已積極科技發展提升農業競爭力。展望智慧農業的發展趨勢將是講求效率、效能、安全與風險控管的時代，也是追求高質、便捷與人性化的時代。農業生產力推動策略藉由感測技術、智能機器裝置(IR)、物聯網(IoT)、巨量資料(Big Data) 分析等前瞻技術，建構智慧農業產銷與數位服務體系，並透過智慧化以強化農業生產與產品銷售，進而結合生產面與銷售面，降低產銷落差，建立安全、安心、永續的農業。

The application and system control of Intelligent Agriculture 3 E P. M. Li

This course is mainly for students to learn and use the development of productivity 4.0 technology to drive agricultural transformation and upgrading. Faced with the challenges of global agricultural upgrading, we have actively promoted agricultural competitiveness in comparison with foreign countries. Looking forward to the development trend of smart agriculture will be an era of efficiency, efficiency, safety and risk control, and an era of high quality, convenience and humanity. The agricultural productivity promotion strategy aims to build a smart agricultural production and marketing and digital service system through forward-looking technologies such as sensing technology, intelligent machine device (IR), Internet of Things (IoT), and Big Data analysis. Strengthen agricultural production and product sales, and then combine production and sales, reduce the gap between production and sales, and establish safe, secure and sustainable agriculture

(二)動物用疫苗國際學位專班：

進階禽類疫苗開發

2 選

鄭力廷、外籍教師

教導學生有關禽類疫苗的相關免疫學理及動物疫苗之應用。其課程內容包括禽類疫苗之生物研究過程及近代免疫學理論對禽類疫苗研究與發展之新領域等，並介紹不同動物之疫苗研發與應用。另外本課程並指導學生由最新動物疫苗相關期刊中，挑選禽類最新而重要的論文提出報告，並由全體教師、學生共同研討禽類疫苗研發。最後在經由禽類細菌及病毒疫苗研發個論探討最新疫苗研發趨勢及方法。

Advanced Avian Vaccine Development 2 E L.T. Cheng,

This course covers the basic vaccine principles as applicable to avian vaccine development. Contents include vaccine development processes and newest trends as report in contemporary journals. Through the discussion of vaccine development for viral and bacterial pathogens, the students are kept abreast of the newest technology and trends.

進階寵物疫苗開發

2 選

鄭力廷、外籍教師

本課程主要教導學生有關寵物用疫苗在開發過程中的相關應用知識。其課程內容包括主要的寵物如犬、貓等的相關傳染性疾病及目前相對應的疫苗，並藉由近代免疫學理論及疫苗研究與發展之新領域的相關研究，引導學生對於新型寵物疫苗的研發與應用進行深入討論，使學生能夠對此領域有更深入的了解。

Advanced Companion Animal Vaccine Development

2 E L.T. Cheng,

The purpose of this course is to teach students the theory and knowledge in developing the companion animal vaccine. The contents include the contagious diseases of pets, like *Canis lupus familiaris* and *Felis catus*, etc., and the related vaccines. With the past research on vaccination and the impact of updated knowledge about immunity, students in the course will be guided to discuss about the research and development of new generations pet vaccine. This course also leads students to learn how to develop new pet vaccines.

傳閱附件 1-7--本校各學院所屬各系(所)課程中英文摘要-獸醫學院

七、獸醫學院

(一) 動物疫苗科技研究所：

生物檢測試劑套組設計開發(微型課程) 1 選 鍾曜吉等合授

本課程旨在教導學生各種生物檢測試劑的種類、設計原理與應用，包括 ELISA、試紙條等。同時課程內容尤其注重於教導學生對於試驗套組設計開發時之相關設計規劃與相關法律規範。

Design and Development of Bioassay Kits 1 E Yao-chi, chung

The purpose of this course is designed to teach students the types, design principles and applications of various bioassay reagent kits, including ELISA, test strips, etc. At the same time, the course content is especially focused on relevant design plans and related legal standards in the design and development of test kits.

(二) 獸醫學系：

臨床診療實習 2 必 全系教師

該課程乃著重於廣泛討論各種病例，包括免疫性、致病機序、診斷方法治療法、及疾病的控制。以最新有關文獻發表之新技術或知識輔助，以印證研討重點。研討內容以台灣最常發生之疾病為優先，包括病毒性細菌性、寄生蟲性及一般性疾病等。使學生對疾病的鑑定及控制更具信心。

Clinical Practic 2 R All Faculties

This course lays special emphasis on the pan discussion about different case reports of animal disease. The discussion will be in regard to its epidemiological, pathogen city, diagnosis, effective treatment, immunity and control program. The new publications of veterinary medicine are required for this seminar to help student to confirm their viewpoint. The topics being put in priority are those diseases which are now prevalent in Taiwan such as Hog Cholera, Pseudorabies, TGE, Colibacillosis, Brucellosis, Tuberculosis, Toxoplasmosis, and so on. It will give the student more confidence in their ability for the disease control.

傳閱附件 2---木材科學與設計系 108 學年「產學攜手合作計畫—家具與遊艇裝修實務專班」課程規劃案

· 四年制 木材科學與設計系(產學攜手專班)

(一)教育目標

秉持木質資源材料及其纖維物應用科學知識與理念之發展特色，配合社會環境變遷及產業發展脈動，強化融入在生活環境的家具、木器生活用品、木竹工藝、紙品工藝等綠色產品之創作，以及木建築結構與空間環境規劃等的綠色設計，拓展文化創意產業，落實工廠實習訓練及實務技能，培育科學理論與文化內涵於設計之整合能力，以達技術職業教育之目標。

(二)校定共同必修科目

中 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
通識選項課程 General Education	12	2	2	2	2	2	2			人文學科：2 門 社會科學：3 門 數理與應用科學：1 門
國文 Chinese	4	2	2							國文(閱讀與寫作)(1) 國文(閱讀與寫作)(2)
大一英文 Freshman English	4	2	2							大一英文(1) 大一英文(2)
英語聽講練習 101~102 English Listening & Speaking Practice	2	1	1							英語聽講練習 101 英語聽講練習 102
憲法 Constitution	2						2			
體育選項 Physical Education	4	1	1	1	1					一下修游泳
通識教育講座 Lectures on General Education	1			1						各系依序開課，開課學期不定
外語實務 Foreign Language Proficiency Test	0	0	0	0	0	0	0	0	0	畢業前修畢 通過標準依「外語實務課程實施要點」規定
合 計	29	8	8	4	3	2	4	0	0	

(三) 學院共同必修科目

中 文 科 目 名 稱 英	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
普通物理學 General Physics	3		3							
普通物理學實驗 General Physics Lab.	1		1							
生物統計 Biometry	2				2					
生物統計實習 Practice of Biometry	1				1					
實務專題 Special Projects	2					1	1			
合 計	9	0	4	0	3	1	1	0	0	

(四)專業必修科目

中 文 科 目 名 稱 英	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
木工實習(1) Woodworking Practice (1)	2	2								
基本設計 Basic Design	2	2								
基本設計實習 Basic Design Practice	1	1								
木材物理性質與利用 Wood Physical Properties and Utilization	2	2								
木材物理性質與利用實習 Wood Physical Properties and Utilization Lab.	1	1								
設計圖法 Design Drawing	4	4								
木工實習(2) Woodworking Practice (2)	2		2							
木材鑑別與商用木材 Wood Identification and Commercial Timber	2		2							
木材鑑別與商用木材實習 Wood Identification and Commercial Timber Lab.	1		1							
人因設計 Human factors design	2		2							
電腦輔助製圖 Computer Aided Design Drawing	3		3							
家具製圖 Furniture Drawing	3		3							
應用材料學 Applied Material Science	2			2						
木材化學性質與利用 The Chemical Properties and Application of Wood	2			2						
木材化學性質與利用實習 The Chemical Properties and Application of Wood Lab.	1			1						
設計表現技法 Design Presentation	2			2						

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
設計表現技法實習 Design Presentation Practice	1			1						
成本估算與報價 Cost Estimate and Quotation Price	2			2						
電腦輔助設計(1) Computer Aided Design(1)	3			3						
室內裝修設計(1) Interior Decoration Design (1)	3			3						
木材乾燥與保存實務 Wood Drying and Preservation Practice	2				2					
木材膠合與表面裝飾實務 Wood Adhesion and Surface Decoration Practice	2				2					
家具設計 Furniture Design	2				2					
家具設計實習 Furniture Design Practice	1				1					
木質材料自動化加工 Automated Processing for Wood-based Materials	2				2					
木質材料自動化加工實習 Automated Processing for Wood-based Materials Practice	1				1					
產業實務實習(1) Professional practice(1)	2					2				
木質環境學 Wooden Environment	2					2				
木質板應用實務 Wood-Based Processing and Application Practice	2					2				
產業實務實習(2) Professional practice(2)	2						2			
產業實務實習(3) Professional practice(3)	9							9		
產業實務實習(4) Professional practice(4)	9								9	
合 計	77	12	13	16	10	6	2	9	9	

(五)專業選修科目

中 文 科 目 名 稱 英	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
設計方法 Methodology of Design	2	2								
設計史 Design History	2	2								
設計概論 Introduction to Design	2	2								
色彩計畫 Color Scheme	2		2							
家具製作 Furniture Manufacturing	4			4						
木材設計力學 Mechanics for Wood Design	2			2						
電腦輔助設計(2) Computer Aided Design (2)	3				3					
室內裝修設計(2) Interior Decoration Design (2)	3				3					
家具設計開發實務 Furniture Design and Development Practice	4					4				
電腦輔助製圖實務 Computer Aided Design Drawing Practice	2					2				
室內裝修設計(3) Interior Decoration Design (3)	4					4				
家具製造程序實務 Furniture Manufacturing Processes Practice	2					2				
機能性木材應用實務 Functional Wood Application Practice	4						4			
設計行銷與管理 Marketing and Management for Design	2						2			
室內裝修施工實務 Interior Decorating Practice	4						4			
展示設計 Display and Exhibit Design	2						2			

傳閱附件 2--木材科學與設計系 108 學年「產學攜手合作計畫—家具與遊艇裝修實務專班」課程規劃案

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
職業安全與衛生 Occupational safety and health	2						2			
合 計	46	6	2	6	6	12	14	0	0	

木材科學與設計系(產專班)

Department of Wood Science and Design

一、必修科目

01 木工實習(1)

2 必

本課程旨在提供家具工廠一貫作業所使用的機械之基本原理、操作技術與安全衛生之必須知識，以訓練學生熟知並練習各種機械之正確操作與應用為目的。本課程分為：機械原理及木工機械總論，鋸切機械、鉋切機械、銑削機械、鑽孔機械、成型機械、研削機械、加壓機械(油壓或壓縮空氣機)及加熱設備(含電熱、蒸汽熱源、大電流發熱、微波及高週波發振機等)等之選用、調整、操作及基本維護。

01Woodworking Practice (1)

2R

The topics of this course are to introducing the machinery of furniture manufacture. It includes: the principles of machinery, woodworking machine, safety and healthy of processing. Introducing contents the selection, operating, adjustment and maintain of sawing, jointing, planning, routing, shaping, drilling, moulding, tenoning, sanding (grinding), pressing (by hydraulic or air compressor) and heating (by electronic heater, steam boiler, high current, microwave or high frequency generator) equipments, in this course.

02 木工實習(2)

2 必

本課程以單元訓練為主，教導學生熟悉各種手工具及木工機械之作業法，使同學具備簡易的木材加工技能，以從事簡易木材加工工作，並達家具木工丙級技術士的技能，俾應用於木質工藝製造工程上。

02Woodworking Practice (2)

2R

The objectives of this course are to acquaint the students with basic woodworking techniques and to enhance their ability to pass the C grade qualified exam held by the Committee of Labors.

03 基本設計

2 必

基本設計是學習設計的基礎學科，課程目標在建立美學概念並將設計原理與方法應用於設計，包括平面、立體與空間構成的設計實作。課程內容包含設計概論、設計史、美學原理，並探討設計的造形、色彩、質感、空間、機能等主題。本課程的訓練有助於建立學生正確的美學概念，激發創意思考能力並熟練表現技巧，本課程是學生未來從事空間設計、室內設計、產品設計、工業設計等工作的基礎。

03Basic Design

2R

Basic Design is the introductory course of design studies. The objective of the course is to establish concept of Esthetics and to apply design theory and method to the actual design including the operation in constructing two-dimensional, three-dimensional and space designs. This course content

includes introduction to design, the history of design and theory of Esthetics, as well as discussions on themes such as the style, color, material, space and functions of design. Through the training in this course, students will acquire and develop in the concept of Esthetics, creativity and presentation skills. This course is the foundation to all students pursuing a career in space planning, interior design, merchandise design, and industrial design.

04 基本設計實習

1 必

基本設計實習是配合基本設計課程，讓學生從事基本設計之操作實習，從設計的操作、觀摩與討論過程增加對設計的認識與經驗。主要課程內容包含平面造形設計之構成方法與形式，以及立體造形設計之構成方法與形式。本課程之進行以實作與講評討論為主要教學方式，訓練學生將所學到的基本設計原理，藉由各種材料的質感與色彩的操作，具備多元化造形設計表現的能力。

04Basic Design Practice

1R

Basic Design Practicum is combined with the Basic Design course. The practicum allows the students to apply Basic Design in practice. Students will acquire further knowledge and design skills through the practice, demonstration and discussions offered in the practicum. The content of this course includes the method and style in constructing two-dimensional and three-dimensional designs. Lectures will be conducted in the form of a practicum, which will require the students to practice basic design theories with various materials and color schemes, to equip the students with the capability of creative design in various styles.

05 設計圖法

4 必

本課程乃相關設計之圖說語言，著重於培訓學生表達及記錄設計與製造所需的觀念與知識，供學生未來從事空間設計、室內設計、產品設計的基礎。其內容包括：繪圖基本技巧、平面幾何圖法、正投影視圖、剖面視圖、輔助視圖、尺度標註與註解、公差與配合、立體圖與透視圖的繪製等，並配合設計圖面練習模型製作。

05Design Drawing

4R

The universal graphical language used in the related design work is offered in the course. It is training for students used to express and record the ideas and information necessary for designing and manufacturing. For students to engage the foundations of space design, interior decoration design, products design in the future. Focus on the basic skill of drawings, descriptive geometry, orthographic projection, sectional views, auxiliary views, dimensioning and marks, tolerance and fits, axonometric drawings and perspective views, etc.. Cooperate with the design drawing to be practicing the making of the model at the same time.

06 木材物理性質與利用

2 必

本課程主旨在使學生體認木材的物理性質的特徵，諸如：木材之比重、水分特性(吸脫濕遲滯、收縮膨脹及吸水性)、熱性質(比熱、熱傳導及熱擴散)、音響性質(吸音率、吸音特性及遮音特性)、電氣特性(導電性及誘電性)等，俾有助於其加工製作與設計材料運用之理解。

06Wood Physical Properties and Utilization

2R

The purpose of the course is introducing the physical properties of wood in the process and design.

The contents include: wood specific gravity, wood-moisture relations of wood, thermal properties of wood, acoustic properties of wood, electrical properties of wood.

07 木材物理性質與利用實習

1 必

本課程使學生熟悉木質物理學性質之測定方法，其內容包括木材之比重、含水率測定、木材之吸、脫濕的含水率遲滯現象、吸濕膨脹率及吸水膨脹率之測定、木材之熱傳導率測定及計算、木材之吸音率測定及計算、木材之誘電率及導電性測定及計算。

07Wood Physical Properties and Utilization Lab. 1R

The objective of laboratory work is to teach the students who become familiar with the methods of measuring the physical properties of wood. The contents include determination of specific gravity and moisture content, observation of moisture absorption and desorption hysteresis measuring the and measurement of shrinkage and swelling, determination of thermal conductivity calculation, determination of sound adsorption coefficient, dielectric properties and electrical conductivity.

08 木材鑑別與商用木材

2 必

本課程之目的在使學生了解木材解剖與鑑定之意義、木材之種類及鑑別方法、木材之巨視構造與微視構造及重要商用木材之特徵。針對各地區具有經濟用途及開發潛力的木材特徵與用途。

08Wood Identification and Commercial Timber 2R

Introducing the definition of wood anatomy and identification, the methods of identification, the macrostructure and microstructure of wood, the characteristics of important commercial timber.

09 木材鑑別與商用木材實習

1 必

木材之解剖及鑑定乃在研究木材內部及外部形態之一門科學，對於木材之各種工藝利用，首先必須考慮木材之構造，因此不僅在樹種之鑑定乃必要，同時與其物理及機械性質具密切之關係。本實習課程包括下列項目：木材外觀特徵之觀察、木材鑑定別之方法及標本觀察之準備、商用木材巨視與顯微構造之觀察。

10 人因設計

2 必

課程規劃以培養學生具有以人類行為與心理之角度去探討產品、介面與互動等相關研究之能力。人因設計為探討人類生理與心理因素，感知、動作與行為之訊息、特性及能力，將之應用在設計上。使產品不但能達成使用者目標，且易於使用，並讓使用者對使用過程滿意，進而產生品牌忠誠度。本課程將介紹針對以產品之人機介面設計與使用者介面為重點，包含人機互動概念、原理與手法，並探討如何融入於產品與系統的設計過程中，設計出更符合人性的產品，進一步提升產品使用性與魅力。

10Human factors design

2R

Curriculum planning to develop students with the human behavior and psychological perspective to explore the product, interface and interaction related research capabilities. Human factors designed to explore human physiological and psychological factors, perception, action and behavior of the message, features and capabilities, will be applied to the design. So that the product not only achieve user goals, and easy to use, and allow users to satisfaction in the user's process, resulting in brand

loyalty. This course introduces how to design a more human-friendly product that focuses on the design and user interface of human-machine interface, including concepts, principles and practices of human-computer interaction and how to integrate it into the design process of products and systems. Further enhance product usability and charm.

11 電腦輔助製圖

3 必

本課程以電腦輔助繪圖之基本概念，訓練學生實際操作 AutoCAD 電腦軟體之各種指令，使其熟悉電腦繪圖之基本程序，加深學生對設計製圖之能力。其內容包括：AutoCAD 基本操作、設定繪圖環境、繪圖規範之準備、基本繪圖指令、編修指令、應用幾何技巧、正視圖與透視圖繪製、尺寸標註方法、立體圖、3D 立體圖表現、設定繪圖機與出圖等。

11Computer Aided Design Drawing

3R

This course is to introduce the basic concept of computer aided drawing and to help the student practice using the AutoCAD software package. Learning is reinforced through class exercises, homework assignments that can be used to measure student understanding in woodworking drawings. Its content includes: AutoCAD basic operating, setup the drawing environment, normal preparation of drawing, basic drawing command, edited command, applying skills of geometry, projection drawing to draw, method of dimensions and marks, axonometric drawings, present to 3D axonometric drawings, plotting drawings etc..

12 家具製圖

3 必

本課程主要內容在訓練學生針對家具產業繪圖技術人員的職能強化，課程中由桌、椅、櫃、廚、床與生活用品的設計圖繪製到結構設計探討分析後的工作圖繪製，再由工作圖解構後的生產零件圖繪製與裝配組合圖繪製技巧訓練。

12Furniture Drawing

3R

The main content of this course is to train students who reinforce the functions of drawing technicians in the furniture industry. The courses training the design from the sketch of tables, chairs, cabinets, kitchens, beds and household products which could be converted to the working drawings for the analyzing and analyzing structural designs. Furthermore, the graphical production after the production of parts drawing and assembly combination drawing skills training.

13 應用材料學

2 必

介紹工程及商用材料有關物理及化學性質。內容包括石材，鋼鐵材料、非鐵金屬材料、陶瓷材料、複合材料、玻璃材、瀝青材、纖維材、皮革材、塑膠材、奈米材等。並說明各種材料之應用場合，包括家具製造，室內裝潢、房屋建築、工業產品或日用品等，介紹各材料之成分、規格、種類、耐久性或缺點特性，使能夠了解正確利用材料的方法，並導引生態及綠色概念，同時啟發木材與各種材料複合之產品設計概念。

13Applied Material Science

2R

An introduction to physical and chemical properties and applications of engineering or commercialized materials are covered. The courses cover stone, steel, glass, fiber, leather, nonmetal materials, plastic, composites, and bituminous materials. The usage of materials is demonstrated in furniture making, interior decoration, housing construction, and industrial products. In order to better

understanding the proper use of materials and related products, the information of the component analysis, durability, specification, shortage, and characteristics of materials is provided. The concept of biology and green materials is introduced, and the concept of products design in combining wood and other materials is initiated.

14 木材化學性質與利用

2 必

本課程旨在講授木材內主要及次要化學組成分之基本知識，詳述纖維素、半纖維素、木質素及萃取成分等之結構性質及利用方法，期使學生充分瞭解影響木材化學性質之機制，進而達成合理化之化學工業應用。

14The Chemical Properties and Application of

2R

Wood

The course is designed to fulfill the needs of the forest products students to be better acquainted with the fundamental knowledge of various major and minor chemical components in wood. The molecular structure, properties as well as utilization methods of cellulose, hemicellulose, lignin and extractives will be fully described to enable students to understand the mechanisms that control the properties and to manipulate those properties to suit industrial needs.

15 木材化學性質與利用實習

1 必

配合木材化學性質與利用有關理論之介紹，設計八項實習使學生從動手操作中體會各種木材化學成分之不同性質。實習內容包括試材之製備木粉、含水率、水萃取物、1%NaOH 萃取物、灰分、乙醇甲苯萃取物、全纖維素與木質素等之定量分析。

15The Chemical Properties and Application of Wood 1R

Lab.

Eight labs are established to enable the students fully understand the different properties of various wood chemical constituents lectured in the classroom. The contents include : preparation of testing materials, moisture content determination of wood meal, analysis and determination of water, 1% NaOH and ethanol-toluene extractives, measurement of ash, determination of holocellulose and lignin.

16 設計表現技法

2 必

設計表現技法課程的主要目的是訓練學生熟練各種圖形的繪製技巧。課程內容包含設計概念與設計圖的表達方法。課程最主要的部分是各種圖形的繪製方法與技巧的熟習。設計表現技法主要是作為設計表達的進階訓練，包括平面圖、立面圖、剖面圖及透視圖的繪製。此外本課程也訓練學生配合設計圖面練習模型製作。本課程是學生未來從事空間設計、室內設計、產品設計的基礎。

16Design Presentation

2R

The objective of this course is to familiarize the students with the presentation method of design. Course content includes design concept and the presentation of design in drawing. The core of the course is familiarization of the method and skills of diagrams drawing. Design Drawings Presentation

Practicum provides the advance training of presenting design ideas in two-dimensional, three-dimensional, section and perspective drawings, as well as producing. This course is a pre-requisite for students pursuing a career in space planning, interior design, merchandise design, and industrial design.

17 設計表現技法實習

1 必

設計表現技法實習是配合設計表現技法課程，主要目的是訓練學生熟練各種圖面的繪製技巧。課程內容包含設計概念與設計圖的表達方法。課程最主要的部分是各種圖面的繪製方法與技巧的熟習。設計表現技法主要是作為設計表達的進階訓練，包括平面圖、立面圖、剖面圖及透視圖的繪製。此外本課程也訓練學生配合設計圖面練習模型製作。本課程是學生未來從事空間設計、室內設計、產品設計的基礎。

17Design Presentation Practice

1R

Design Presentation Practicum is combined with the Design Presentation course. The objective of this course is to familiarize the students with the presentation method of design. Course content includes design concept and the presentation of design in drawing. The core of the course is familiarization of the method and skills of diagrams drawing. Design Drawings Presentation Practicum provides the advance training of presenting design ideas in two-dimensional, three-dimensional, section and perspective drawings, as well as producing. This course is a pre-requisite for students pursuing a career in space planning, interior design, merchandise design, and industrial design.

18 成本估算與報價

2 必

本課程係提供學生有關利潤與成本觀念，並進而估算、分析和控制製品之成本，以增加對經營者之信心。其講授內容包括有：成本結構的要素與分類、成本估算的步驟、如何估算材料成本、如何估算人工成本、如何估算製造費用、如何估算銷售費用、如何決定產品的總成本與單位成本、緊急訂單的產品如何估算成本、成本估算與事前降價成本規劃、成本估算與產品報價策略等等。

18Cost Estimates and Quotes Price

2R

The aim of this course is training the students about the concept of profit and costs, and thus estimating the cost, analysis and control products, in order to increase the confidence of the operators. It's offered to cover: Factor and classification on cost structure, Cost estimating steps, How to estimate materials cost, How to estimate labor cost, How to estimate manufacturing expenses, How to estimate selling expense, How to determine total cost and unit cost on the product, How to estimate the product cost under emergency orders, Cost estimates and cost price reduction plan in advance, Cost estimates and product quotes strategy, and so on.

19 電腦輔助設計(1)

3 必

本課程以教導學生學習與使用電腦 3D 繪圖軟體，使同學具備製作出各式各樣的電腦 3D 模型，並應用於設計課程中。且藉由對不同案例的繪製練習，讓學生們更能充分運用電腦 3D 繪圖軟體的優點，加以整合設計出出色的作品來。

19Computer Aided Design (1)

3R

Guiding the students familiar with skills using computer 3D drawing software. Training the attendants to handle or create various types of 3D models and applied to design courses. The attendants can fully employ the advantages of computer 3D sketch software through the practice on several different case studies and produce an integrated design project.

20 室內裝修設計(1)

3 必

主要課題為室內各空間基本設計規劃，包括客廳、餐廳、衛浴、臥室等，課程內容包含空間設計圖學表現、配置原則、不同類型案例解析，本課程是學生未來從事空間規劃、室內設計與室內裝修等工作的基礎。本課程是室內設計基礎課程，教學目標為瞭解室內設計基本原理，建立空間設計概念與方法並實際應用於室內設計，包含室內設計製圖及表現技法訓練，並進行室內設計實作。

20Interior Decoration Design (1)

3R

The objective is to teach the conception of space design that about living room, kitchen, bathroom and bedroom. The course introduces space planning and design, design method, the different cases study, as well as discussions on themes such as the style, color, texture, functions, material and working procedures of space design. Through the training in this course, students will acquire and develop in the concept of space design, creativity and presentation skills. This course is the foundation to all students pursuing a career in space planning, interior design and interior decoration.

21 木材乾燥與保存實務

2 必

本課程介紹有關木材之乾燥以及保存處理之性質、原理、實際作業方法，使學生具有實際操作之技術並期獲得最低之處理成本與最佳之成品品質。常用之乾燥方法有氣乾及窯乾兩種方法。而木材保存常用之方法有空胞法(有魯賓法及勞力法)及滿胞法。

21Wood Drying and Preservation Practice

2R

This course presents information on wood drying . Related treating properties, principles and practical techniques that can be applied to the drying and preservation of lumber, dimension stock and many special items will be emphasized in order to reduce cost of treatments and maintain high quality of wood products. There are two major wood drying processes(1)Air dry(2)Kiln dry. Also there are two General classes of wood preservatives: such as full-cell (Bethel) and empty-cell (Ruepping) processes.

22 木材膠合與表面裝飾實務

2 必

本課程之內容設計主要在訓練學生瞭解木材工業常用的膠合劑之種類、反應化學、使用方法、硬化後膠膜性質，以及包括木工塗裝材料、塗裝系統、塗裝機具、特殊塗裝方法、塗裝缺點及其對策等。同時也教導學生木材薄片貼面與實木鑲嵌之實務技能。

22Wood Adhesion and Surface Decoration Practice 2R

This course is designed to acquaint students with types of adhesive commonly used in the wood industry, their reaction chemistry, application methods and properties of glued members, and with finishing materials, finishing systems, operating systems, special finishing methods, finishing problems and remedies, etc.. And also to guide student making the practical skills of wood veneer overlay and wood inlay.

23 家具設計

2 必

本課程主要著重於引導學生從設計、專門方案到家具成品之完整設計過程的觀念。講授內容包括：(一) 設計觀念的發展。(二) 定義設計產品的範疇。(三) 產品使用的功能標準。(四) 研擬計畫書。(五) 組件材料的選擇。

23Furniture Design

2R

This course is intended to be a practical guide to planning processes, of concept through design, shop plans and finishes. A sequence of the custom furniture design process is presented in the following chapters: (1) Developing the concept — A menu of ideas from what has been done before, or created in your own style — get the creative juices flowing. (2) Defining the scope — Temper the concepts with the realities of your resource — time, interest, capabilities and shop space—for the level of complexity. (3) Applying standards — Follow or depart from convention. Look at size and stature of the user-pleasing proportions, style relationships. (4) Committing to paper — Lock in your design, adapting plans and photos, preplanning construction steps. (5) Converting to parts — Select best woods, mill cuts, joinery techniques.

24 家具設計實習

1 必

本課程主要訓練學生從設計、專門方案到家具成品之實際操作為基礎，使其熟悉完整設計過程並透過實習作業的練習，加深學生對家具設計與開發之能力。實習內容包括：(一) 設計觀念的發展。(二) 定義設計產品的範疇。(三) 產品使用的功能標準。(四) 研擬計畫書。(五) 組件材料的選擇。

24Furniture Design Practice

1R

This course mainly focuses on the student practical operation of design and specialized programs to finished furniture. It is familiar with the complete design process and enhances that the students learn to design and develop furniture through practical exercises. The practice covers: (1) Developing the design concepts; (2) Defining the scope to design products; (3) Applying functional standards to design products; (4) Committing to planning paper; (5) Converting to part materials.

25 木質材料自動化加工

2 必

傳授木材工業自動化加工之基礎知識，簡介機械視覺、自動演算及數值控制等概念。主要內容為教導木工用電腦數值控制加工機，含數值控制基本觀念、電腦數值控制花鈹機之指令、程式設計、定位模之製作、立體圖文繪製及加工，雷射加工機之應用軟體、向量圖、點陣圖、外框、封閉區塊、開口區塊、交叉區塊、雷射切割及雷射雕刻，立體圖文自動轉換及逆向工程設備之應用等。培養學生成為自動化加工知行能力兼備的專業人才

25Automated Processing for Wood-based Materials 2R

Introducing the state of art for woodworking processing automation, machine vision, automatic computing, numerical control and related background. The topics covers programming practice for (computer) numerical controlled machine, components of woodworking CNC router, and fundamental procedures on programming numerically, operations of Laser engraver, CNC router and relate application.

26 木質材料自動化加工實習

1 必

訓練學生具備自動化加工之基本知識及實務應用電腦數值控制加工機械、電腦輔助軟體及立體物件逆向工程等能力。設計為校內實習，練習自動化加工用電腦軟體、機械視覺逆向工程設備、電腦數值控制花鈹機及雷射加工機；校外實際參與生產線，見習木料自動鋸切與分配系統、自動演算裁板系統、數控花鈹機、全自動木質板加工系統及化妝單板生產線等。

26 Automated Processing for Wood-based Materials

1R

Practice

Training students to know the automation related background. The topics covers compus courses and furniture factor courses. Compus coures: leraning the computer programs, operations of machine vision equipment, CNC router and Laser engraver. Furniture factor courses: automatic sawing and admeasuring system, automatic computing system of panel sawing, NC router, panel processing automation system and the production line for fancy veneer.

27 產業實務實習(1)~(2)

4 必

落實學生學以致用，並加強縮短四技學程的學生學用落差，而進行培育相關實務工作經驗之一系列實習課程。

27 Professional practice (1)

4R

Through this course, students can apply their knowledge to implement and cultivate a series of relevant practical work experience in this internship programs.

28 木質環境學

2 必

本課程之目的係使學生了解室內空間應用木質材料裝修時，具有諸多優良之居住特性，是其它無機質材料所無以比擬的，究竟木材具有那些優良之居住特性及其缺點之如何改善是本課程之方向。內容包括國內木材之蓄積與生產概況、木材與建築、木質材料之特性與用途、木質地板之特性、感覺的評價、木材對居住環境之調節特性、木質材料之吸音特性、木質材料之遮音、木質材料之耐燃處理、木材之防蟲、蟻、蟎類處理。

28 Wooden Environment

2R

The objective of the course is to let students appreciate the many advantages of that the wooden materials applied to indoor wood use and reduction of human health problems. The prominent qualities demonstrated by wood materials in residential use will be explained and compared with those of inorganic construction materials. Content, Growing stocks and production of wood in Taiwan, Characteristics and uses of wood panel materials, Wood and architecture, Characteristics of wooden floors, Evaluation of feelings, Conditioning characteristics of living environment for wood, Characteristics of sound absorption for wood panel materials, Sound transmission of wood panel materials, Fire-resistance of wood panel materials, Living environment and health, Decay-proofing, ant-proofing and mite-proofing treatments of wood.

29 木質板應用實務

2 必

本課程旨在傳授學生合板、木芯板、層積材、單板層積材、粒片板及纖維板等以木質材料為原料的初級加工產品(木質複合材料)之性質，使學生瞭解市售木質複合材料之特殊使用性能，充分應用於設計實務，增進材料應用範疇等有關知識。

29 Wood-Based Processing and Application

2R

Practice

The course is designed to acquaint students with the utilization and performance of plywood, lumber core plywood, laminated wood, laminated veneer lumber, particleboard and fiberboard ...etc., which are the primary processed products of wood based materials.

30 產業實務實習(3)~(4)

18 必

本課程主旨在讓學生提早體驗職場，建立正確工作態度，藉由至本系相關企業見習與觀摩學習，使學校理論教學與實務結合，激發學生學習及進行未來生涯發展規劃，養成專業興趣及就業能力，縮短學用落差。本課程採學期制施行，需在同一機構連續實習至少為期 4.5 個月，實習期間除依各校訂定定期返校之座談會或研習活動等外，學生應全職於實習機構實習。

31 Professional practice (3)

18R

The main purpose of this course is to establish the working attitude of the students in the employment career. The course is combining both the theory and practice in wood science and design. The students could learn and practice their career planning for the future. Furthermore, to develop professional interests and employment ability to shorten the gap between academic and real employment. The course is available in the semester term. It requires the students in the institution consecutive internships no less than 4.5 months as a principle.

二、選修科目

01 設計方法

2 選

本課程是學習設計的基礎學科，課程目標在建立設計原理概念並將設計美學原理應用於實際的設計，課程內容包含設計原理與方法概論、美學原理、設計流程，並探討設計的造形、色彩、質感、空間、機能等主題。本課程的訓練有助於建立學生正確的設計概念，激發創意思考能力並熟練表現技巧，本課程是學生未來從事空間設計、室內設計、產品設計、工業設計等工作的基礎。

01 Methodology of Design

2E

The course is the introduction of design studies. The objective of the course is to establish concept of design theory and to apply design esthetic theory to the actual design. The course content includes introduction to design theory and method, the theory of Esthetics, process of design, as well as discussions on themes such as the style, color, material, space and functions of design. Through the training in this course, students will acquire and develop in the concept of design, creativity and presentation skills. This course is the foundation to all students pursuing a career in space planning, interior design, merchandise design, and industrial design.

02 設計史

2 選

本課程教學主要目的在引出一些設計史的重要設計年代、代表性的設計師思考理念、設計作品和重大設計事件的原由等。藉由歷史觀點，認識「設計」的脈絡演變，進而探討設計的本質。思考歷史的變化過程，設計與社會、政治經濟等社會文化背景之間的因果關係。透過對設計師的了解建構設計與鑑賞設計作品的能力，使學生建立自我批判的能力。

02Design History

2E

The main purpose of this course teaching leads to some important design age of the design history, representative designers to think about ideas, design work and major design events and so on. From a historical point of view, we understand the evolution of "design" to explore the nature of design. Thinking about the process of change in history, design and social, political and economic and other social and cultural causal relationship between. Through the understanding of designers to construct design and appreciation of the ability to design work, so that students build self-critical ability.

03 設計概論

2 選

設計概論為設計領域的基礎必修學科，旨在引導設計系大一學生，在習得設計實踐必備之理論知識與技法之前，先建立有關設計專業領域的基本概念。探討主題將從設計的定義與範圍進行設計探討包括生活設計中的理解與審美、設計教育，透過國內外設計產品賞析培養自身對工業設計的詮釋與美學建立，鼓勵學生從課題中自主思考與學習。

03Introduction to Design

2E

Design Introduction is the basic compulsory subject in the field of design. It aims to guide a university student in design department to establish the basic concepts of design profession before acquiring the theoretical knowledge and skills necessary for design practice. The theme of the discussion will be from the definition and scope of design to explore including understanding of life design and aesthetic education, design education through the appreciation of design products at home and abroad to

cultivate their own interpretation of industrial design and aesthetics, to encourage students to think and study independently from the subject.

04 色彩計畫

2 選

本課程主要講授之重點在於培養學生對色彩的基本認識與激發學生自我的色彩應用技巧。基本上授課內包含：認識色彩、色彩體系、色彩混合與對比、色彩感覺與應用、配色原理與色調分析、色彩計畫的專題製作運用。其次分組報告：同學以自由分組方式對於色彩的使用實例進行研究，並於課堂上發表各組之研究成果，並繳交書面報告及作品呈現。

04Color Scheme

2E

The main focus of this course is to give students a basic understanding of color and stimulate student self-color application skills. Basically, the lectures include: production of knowledge, color system, color mixing and contrast, color perception and application, color matching principle and color analysis, and color planning. The second, group report: students to use free grouping of examples of the use of color research, and in the classroom published research results, and provide a written report and presentation.

05 家具製作

4 選

本課程以單元訓練為主，教導學生熟悉各種手工具及木工機械之作業法，使同學具備簡易的木材加工技能，以從事簡易木材加工工作，並達家具木工丙級技術士的技能，俾應用於木質工藝製造工程上。

05Furniture Manufacturing

4E

The objectives of this course are to acquaint the students with basic woodworking techniques and to enhance their ability to pass the C grade qualified exam held by the Committee of Labors.

06 木材設計力學

2 選

首先教導材料之基本應力及應變觀念以及求解方法，包括平面至三維之應用。導入向量觀念求解及物件受力之靜力問題求解，同時探討基本結構受力靜定求解方法。其次教導木材基本之抗拉、抗彎、抗壓、抗剪特性，以及相關之影響因子。同時，瞭解木材在工程應用容許強度之推導以及安全係數之觀念。

06Mechanics for Wood Design

2E

Introduces the concepts of stress and strain of materials and the related solving approaches. The application on plane and three dimension cases are covered. The vector concept is introduced to solve static problems for objects subjected to external forces. Basic determinant problems for simple structure are covered. The fundamental characteristics of tensile strength, bending strength, compressive strength, and shearing strength of wood materials with related influential factors are demonstrated. The derivation of allowable stress and the concept of safety factor in the engineering application for wood are guided.

07 電腦輔助設計(2)

3 選

本課程以教導學生學習與使用電腦 3D 繪圖軟體，使同學具備製作出各式各樣的電腦 3D 模型，

並應用於設計課程中。且藉由對不同案例的繪製練習，讓學生們更能充分運用電腦 3D 繪圖軟體的優點，加以整合設計出出色的作品來。

07Computer Aided Design (2) 3E

Guiding the students familiar with skills using computer 3D drawing software. Training the attendants to handle or create various types of 3D models and applied to design courses. The attendants can fully employ the advantages of computer 3D sketch software through the practice on several different case studies and produce an integrated design project.

08 室內裝修設計(2) 3 選

主要課題為”住宅空間”設計，本課程延續室內裝修設計(一) 課題內容，加強學生在室內空間設計規畫之手法及概念，並搭配室內設計風格、色彩、質感、機能、裝修材料、施工方法等。本課程的訓練有助於建立學生正確的空間設計概念，激發創意思考能力並熟練表現技巧。

08 Interior Decoration Design (2) 3E

The major subject of this course is “space design of residence”. In this course we discuss the difference design style, color, material, functions and interior decoration. Through the training in this course, students will acquire and develop in the concept of space design, creativity and presentation skills.

09 家具設計開發實務 4 選

本課程係結合當前家具行業發展的新形勢與新特點，針對家具企業對家具設計專業人才素養的需求，按照企業設計實際環境必備的基本知識結構，以實質的功能與形態、藝術與技術、生產與營銷等諸多要素經辯證而獲得一整套關於生活方式的解決方案。講授內容則有系統的導引家具材料、家具接合方法、家具結構設計、家具藝術風格的演變、家具造型設計、家具透視圖表現技法、家具開發實務等。

09 Furniture Design and Development Practice 4E

This course is a combination of the new situation and new features on the current furniture industry development. To accompany the furniture industry raised the demand for professionals in furniture design. The basic structure of knowledge in accordance with the corporate design of the actual environment necessary. To the actual function and form, art and technology, production and marketing, and many other elements of dialectical obtained through a set of solutions with regard to lifestyle. The teachings of a guide system furniture materials, furniture joining method, furniture construction design, the evolution of furniture artistic style, furniture modeling design, furniture perspective performed techniques, furniture development practice, etc..

10 電腦輔助製圖實務 2 選

本課程以電腦輔助繪圖之基本概念，訓練學生實際操作 AutoCAD 電腦軟體之各種指令，使其熟悉電腦繪圖之基本程序，加深學生對設計製圖之能力。其內容包括：AutoCAD 基本操作、設定繪圖環境、繪圖規範之準備、基本繪圖指令、編修指令、應用幾何技巧、正視圖與透視圖繪製、尺寸標註方法、立體圖、3D 立體圖表現、設定繪圖機與出圖等。

10Computer Aided Design Drawing Practice 2E

This course is to introduce the basic concept of computer aided drawing and to help the student practice using the AutoCAD software package. Learning is reinforced through class exercises, homework assignments that can be used to measure student understanding in woodworking drawings. Its content includes: AutoCAD basic operating, setup the drawing environment, normal preparation of drawing, basic drawing command, edited command, applying skills of geometry, projection drawing to draw, method of dimensions and marks, axonometric drawings, present to 3D axonometric drawings, plotting drawings etc..

11 室內裝修設計(3)

4 選

為介紹室內設計結合設備、施工及估價之實務課程，課程內容介紹空間規畫須考量之水電、空調、照明設備等系統整合，並以實際案例講解操作。本課程有助學生通過室內裝修設計人員乙級技術士之考試。

11 Interior Decoration Design (3)

4E

The course includes the interior decoration project, material of interior decoration project, fitting up construction drawing, constructed checking and calculating of material, fit up interior decoration technology, constructed surfacing of interior decoration, constructed the views of interior decoration etc. The exercise includes: constructed the ceiling structure, constructed the wall structure, constructed cylinder body structure, constructed the wooden floor structure, receiving vocal imitation skill, constructing glass decorate, constructing doors and windows, curtain install, indoor electric apparatus install and constructed the material of interior decoration on surfaces etc..

12 家具製造程序實務

2 選

本課程之主旨除了探討一般有關家具的製造技術外，更積極培養訓練學生對家具製造之程序、生產速度及各種工廠設備與製造系統之整合觀念，使學生能靈活運用在實際家具的生產作業。其講授內容包括：家具工業概況、家具工廠組織、木料之進廠、儲存及乾燥、配料間的加工、配料間的木料利用、配料間的生產、薄片間及其加工、細作間及其生產管制、組合間作業、塗裝間作業、打蜡及包裝間作業、倉儲運輸管理、製作家具之成本分析等。

12 Furniture Manufacturing Processes Practice

2E

The intent of the course is to enable students to develop techniques and integrated manufacturing concepts in the furniture industry. It covers: introduction of the furniture industry, organization of a furniture factory, lumber receiving, storage and drying, process, lumber utilization, production of parts at the rough end, veneering components, machining parts, production control, assembly, finishing methods, the finishing conveyor, rubbing and packing, warehousing and shipping, the cost of manufacturing furniture, and so on.

13 機能性木材應用實務

4 選

本課程乃針對在使用木材過程中產生主要缺陷之認識，導引學生利用物理和化學處理進行機能性改良的機制，瞭解其製備原理、過程、性質和用途，以增進木質材料的合理、高品質和設計材料運用之途徑。講授內容包括有木材強化、木材/金屬複合材料製造、木材阻燃、木材的尺寸安定性、木材軟化和彎曲、木質陶瓷、木材變色防止、染色技術以及木塑複合材料等。

13 Functional Wood Application Practice

4E

This course is introducing the wood defects in the manufacture processes which would affect the

mechanism of physical and chemical processing for the functional improvements. To understand the preparation principle, processes, properties and uses, to promote a reasonable application, high-quality and design materials for the use of wood products pathway. The contents including wood-densitized, wood / metal composite materials, wood fire-resistance, wood dimensional stability enhancement, plastics and bending wood, wood ceramics, wood discoloration and staining techniques, as well as the wood-plastic composite materials.

14 設計行銷與管理

2 選

本課程以經營戰略的角度於設計過程中導引學生技術創新與新產品開發活動，並密切關注建立開放的組織架構以吸納全方位的創新資源，強調設計企業的知識管理和知識產權管理。同時還吸納了當今創新非常重要和關鍵的開放式創新的思考和企業間動態聯盟的思想，並準備了足夠的案例幫助學習與實踐創新管理的模式。課程內容涵蓋 3 個主題：創新管理的概念、技術與知識管理與新產品開發和行銷。

14Marketing and Management for Design

2E

The aim of this course is training the students how to operate a strategic of the design processes. To guide the students the technological innovation and the new product development. To establish an open organizational structure which could absorb the full range of innovative resources, emphasizing the design of enterprise knowledge management and intellectual property management. Furthermore, a dynamic critical thinking and open innovation ideas become very important capability today. And through the cases study help the students learning and practicing the innovation management model. The course will covers three topics: the concept of innovation management, technology & knowledge management and new product development & marketing.

15 室內裝修施工實務

4 選

本課程目的在教導學生認識室內裝修工程常用材料與加工性質，並能依照裝修施工圖運用木工機器與手工具，完成施作及組裝簡易木製成品，諸如櫥櫃、地板、天花板、隔間…等相關工程。講授的內容包括室內裝修工程之基本知識、室內裝修工程常用材料、裝修施工圖的讀圖、施工材料的核算、室內裝修結構施工技術、室內裝修飾面施工以及室內裝修的景觀布置等。習作內容則包括天花板結構施工、牆面裝飾結構施工、柱體裝飾結構施工、木質地板結構施工、連接收口技術、玻璃裝飾施工、門窗施工、窗簾安裝、室內電器安裝以及各種材料之室內裝飾面施工等。

15Interior Decorating Practice

4E

This course purpose is training the students who could realize the material of interior decoration project and working property, and to use the woodwork machine and hand tool according to fitting up the construction drawing, Finish the operation and assemble on the simple wooden products. Such as the cabinet, floor, ceiling, and compartment etc.. The course includes the interior decoration project, material of interior decoration project, fitting up construction drawing, constructed checking and calculating of material, fit up interior decoration technology, constructed surfacing of interior decoration, constructed the views of interior decoration etc..The exercise includes: constructed the ceiling structure, constructed the wall structure, constructed cylinder body structure, constructed the wooden floor structure, receiving vocal imitation skill, constructing glass decorate, constructing doors and windows, curtain install, indoor electric apparatus install and constructed the material of interior

decoration on surfaces etc..

16 展示設計

2 選

本課程的目在於介紹一個裝飾藝術的領域，包括臨時的節日裝飾的街道，公共廣場，門面修飾，公眾假期，遊行，實物解說的裝飾和展示的設計，以及各類展覽型態等。

16 Display and Exhibit Design

2E

The purpose of this course is to introduce a field of the decorative arts that includes the temporary festive decoration of streets, public squares, window dressing, public holidays, parades, the design of decorations and displays for demonstrations, and various types of exhibitions.

17 職業安全與衛生

2 選

介紹有關職業安全與衛生的法規概要，通盤探討一般的職業安全與衛生，再聚焦於木材設計與製造專業上的安全與衛生問題。通論內容旨在培養職場上發揮合作並有執行力的多元職能，聚焦內容在培育本系專業人才面臨新科技的時空及人員等的變革之際，應用專業知識跨領域解決新產生的安全與衛生困擾的基本能力。講授內容有職業安全與衛生法規概要，工地、工廠及危害物等屬於地點性質的安全管理，個人安全護具，機具之安全管理及維護。衛生內容除了職業衛生概要之外，另以影響木材產業從業人員的健康管理為主點。

17 Occupational safety and health

2E

To introduce occupational safety and health, discuss the topics in general, and focus on the safety and health issues in wood design and manufacturing. The purpose of the general seminar is to cultivate a multi-functional role of cooperation and execution in the workplace. Focusing on train students develop the abilities of interdisciplinary to solve the problems of safety and health issues, base on the expertise when the technologies and personnel were changed. Lectures include outline of Occupational Safety and Health Act, safety management of workplace, factories and hazardous materials, personal protective equipment, safety management and maintenance of machines. The management of Health contents in addition to profiles, and other point is the effects wood and processing of wood on the health.

108 學年度企業管理系產學攜手專班「行銷流通服務專班」

(一)教育目標

本系旨在配合國家教育目標、經濟情勢變遷、工商企業發展及本校中長期發展計畫，以連貫的課程規劃對學生施以密集的专业訓練，並陶冶其職業道德及服務精神，培育企業管理技術人才，使學生能擔任與企業人力資源、行銷、財務、生產、資訊有關之計畫、執行、控制等管理工作。

(二)校定共同必修科目

中 文 科 目 名 稱 英	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
通識選項課程 General Education	12	2	2	2	2	2	2			人文學科：2 門 社會科學：2 門 自然與生命科學：1 門 數理與應用科學：1 門
國文 Chinese	4	2	2							國文(閱讀與寫作)(1) 國文(閱讀與寫作)(2)
大一英文 Freshman English	4	2	2							大一英文(1) 大一英文(2)
英語聽講練習 101~102 English Listening & Speaking Practice	2	1	1							英語聽講練習 101 英語聽講練習 102
憲法 Constitution	2			2						
體育選項 Physical Education	2	1	1							
外語實務 Foreign Language Proficiency Test	0	0								畢業前修畢 通過標準依「外語實務 課程實施要點」規定
合 計	26	8	8	4	2	2	2	0	0	

(三) 學院共同必修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
經濟學 (1) Economics (1)	3	3								
會計學 (1) Accounting (1)	3	3								
管理學 Management	3		3							
統計學 (1) Statistics (1)	2			2						
電子計算機概論 Introduction to Computers	0			0						
統計學 (2) Statistics (2)	2				2					
合 計	13	6	3	2	2	0	0	0	0	

(四)專業必修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
微積分 Calculus	3	3								
會計學 (2) Accounting (2)	3		3							
經濟學 (2) Economics (2)	3		3							
統計學實習 (1) Practice of Business Statistics (1)	1			1						
行銷管理 Marketing Management	3			3						
統計學實習 (2) Practice of Business Statistics (2)	1				1					
生產與作業管理 Production and Operation Management	3				3					
財務管理 Financial Management	3				3					
資訊管理 Information Management	3					3				
人力資源管理 Human Resource Management	3					3				
策略管理 Strategic Management	3						3			
校外實習 1 Practice of Industrial Training1	2					2				
校外實習 2 Practice of Industrial Training2	2							2		
校外實習 3 Practice of Industrial Training3	9							9		
校外實習 4 Practice of Industrial Training4	9								9	
合 計	51	3	6	4	7	8	3	11	9	

(五)專業選修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
企業概論 Introduction to Business	3	3								
企業應用軟體 Business Application Software	3	3								
心理學 Psychology	3	3								
流通業概論 Distribution Logistic	3		3							
商事法 Business Law	3		3							
技能證照專題 Special Topics on Skill Certificate	1		1							
人際關係 Interpersonal Relations	3			3						
管理證照專題 Special Topics on professional Management Certifications	1			1						
銷售管理 Sales Management	3			3						
POS 系統概論 POS systems	3			3						
事件管理 Event Management	3				3					
創業經營 Entrepreneurial Plan	3				3					
組織理論 Organizational Theory	3				3					
資料倉儲	3				3					
零售管理 Retailing Management	3					3				
行銷研究 Marketing Research	3					3				
服務業行銷管理 Service Marketing Management	3					3				
企業倫理 Business Ethics	3					3				
消費者行為 Consumer Behavior	3					3				

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
物流管理 Logistics Management	3					3				
整合行銷傳播 Integrated Marketing Communication	3					3				
策略性行銷管理 Strategic Marketing Management	3					3				
行銷個案分析 Marketing Case Analysis	3						3			
創新管理 Innovation Management	3						3			
品牌管理 Brand Management	3						3			
顧客關係管理 Customer Relationship Management	3						3			
電子商務與網路行銷 E-Commerce and Internet Marketing	3						3			
管理個案研討 Case Study of Management	3						3			
企業診斷 Business Diagnosis	3						3			
合 計	83	9	7	10	12	24	21	0	0	

企業管理系行銷流通服務專班

Department of Business Administration

一、必修科目 Required Courses

582001 微積分 3 必 待聘 ,上

本課程主要在教導與研討有關微積分相關的學理與主題，及養成學生數學推理與計算能力，使選修同學們瞭解有關微積分學術領域及其運用。

582001 Calculus	3	R	待聘, F
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The main purpose of this course is discussing and comprehending topics. The issues include theoretical discuss, practical application and enhancing the ability of mathematical inference and calculation skills. Through this course, the students will have more clearly understanding the practical application and development for products and institutions.

582002 會計學 (2) 3 必 許文西, 下

本課程為會計學(一)之延續，主要目的是使學生了解會計準則相關規定，健全的會計理論及會計處理以及最新公報調整及補充。使學生能正確且忠實表達經濟交易的事項並完整地編製財務報表，解釋闡述報導方法如何影響財務報表的使用者之決策以及培養學生分析企業財務報表之基本能力學生並瞭解會計與財務報導的基本面。

582002 Accounting (2) 3 R W. H. Hsu, S

This course is the extension of Accounting (1). The main objective is to help students to understand the elements of financial statements. Major topics covered are: accounting principles, the conceptual framework of accounting, current liabilities and payroll accounting, accounting for partnerships, corporations: organization, capital stock transactions and dividends, income taxes, long-term liabilities, investment, the statement of cash flow, financial statement analysis.

582003 經濟學(2)	3 必	待聘,下
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本課程旨在介紹消費、投資、貨幣需求與供給、通貨膨脹、失業率與經濟成長之理論模型與實證研究，並討論各種財政政策與貨幣政策之適用時機與效果；另探討理性預期理論及其對總體經濟之影響。

582003 Economics (2) 3 R 待聘, S

The purposes of this course are to provide the theoretical models and their empirical studies in consumption, investment, demand and supply of money, inflation, unemployment, and economic growth. The effects of monetary and fiscal policy in the extended theoretical models are also discussed. In addition, the theory of rational expectation and its effect on macroeconomics are explained in the last part of the course.

582004 統計學實習(1)	1	必	待聘,上
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統計實習介紹商管科系同學關於統計學的基本應用，包括結合機率推論的資料抽樣設計與資料分析，及基本統計軟體使用。

582004 Practice of Business Statistics(1)	1	R	待聘, F
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The practice of business statistics is an introduction to statistics for students of business and economics that is based on data analysis and the design of data production join probability-based inference accompanied by computer software as major content areas.

582005 行銷管理**3 必****沈慶龍, 上**

本課程主要在教導學生有關行銷功能的基本概念、理論及技術，以作為進階行銷課程的基礎。其主要授課內容包括：行銷在今日組織與社會之重要角色、透過品質、服務與價值以建立顧客之滿意、企業與事業部門之策略規劃、行銷管理程序與行銷規劃、行銷資訊系統與行銷研究、分析行銷環境、消費者市場及其購買行為、組織機構市場及其購買行為、產業與競爭者分析、市場之衡量與預測、市場之區隔與目標市場之選擇、差異化與市場定位之行銷策略、新產品之發展、測試與上市、產品生命週期行銷策略、市場領導者、挑戰者、跟隨者及利基者之行銷策略、全球性行銷策略、產品線、品牌與包裝之決策與管理、服務業與輔助性服務之管理、定價決策、行銷通路決策、零售、批發與實價分配系統之管理、行銷溝通與促銷組合決策、廣告計劃之擬定、銷售促進與公共關係、銷售人員之管理、行銷計劃之組織與執行、行銷績效之評估與控制。

582005 Marketing Management**3 R****C. L. Shen, F**

This course is designed to meet the needs of students who wish to understand the basic concepts and techniques of marketing as a foundation for more advanced marketing courses. The major subjects of this course will include as followings: Defining marketing for the twenty-first century, Adapting marketing to the new economy, Building customer satisfaction, value, and retention, Winning markets through market-oriented strategic planning, Gathering information and measuring market demand, Scanning the marketing environment, Analyzing consumer markets and buyer behavior, Analyzing business markets and business buying behavior, Dealing with the competition, Identifying market segment and selecting target markets, Positioning and differentiating the market offering through the product life cycle, Developing new market offerings, Designing global market offerings, Setting the produce and branding strategy, Designing and managing services, Developing price strategies and programs, designing and managing value networks and marketing channels, Managing retailing, wholesaling, and market logistics, Managing integrated marketing communications, Managing advertising, sales promotion, public relations, and direct marketing, Managing the sales force, Managing the total marketing effort.

582006 統計學實習(2)**1 必****待聘, 下**

統計實習介紹商管科系同學關於統計學的基本應用，包括結合機率推論的資料抽樣設計與資料分析，及基本統計軟體使用。

**582006 Practice of Business
Statistics (2)****1 R****待聘, S**

The practice of business statistics is an introduction to statistics for students of business and economics that is based on data analysis and the design of data production join probability-based inference accompanied by computer software as major content areas.

582007 生產與作業管理**3 必****廖世義, 下**

本課程在使學生獲得生產管理之理論及實務之相關知識內容包括：商業計劃、預測、產品發展、資源需求規劃、設備位置與分銷系統設計、過程分析、過程設計與設備佈置、工作設計與工作衡量、集體生產計劃與主排程、存貨政策、投資分析、物料需求規劃、作業排程與生產控制、物料管理、品質管制。

**582007 Production and Operation
Management****3 R****S. Y. Liaw, S**

The objective of this course is designed to teach the related knowledge of the theory and practice of Production Management. The main subjects are summarized as Follows: Business Planning、Forecasting、Product Development、Resource Requirement

Planning、Facility Location and Distribution System Design、Process Analysis、Process Design and Facility Layout、Job Design and Work Measurement、Aggregate Production Planning and Master Scheduling、Inventory policy、Investment Analysis、Material Requirements Planning、Operational Scheduling and Production Control、Materials Management、Quality Control。

582008 財務管理

3 必

待聘,下

本課程旨在介紹財務管理之基本概念與理論及相關之實務專業技能，課程內容包括財務管理概論、金融環境、風險與報酬之分析、貨幣時間價值、証券之評價、資金成本、資本預算、資本結構、股利政策、融資決策、營運資金管理等主題。

582008 Financial Management

3 R

待聘, S

The main objective of the course is to introduce the students the basic concepts and theory of finance and related technique in practice. The content includes the overview of the basic financial concepts, the financial environment, risk and return analysis, time value of money, security valuation, cost of capital, capital budgeting, capital structure, dividend policy, financing decision, and working capital management.

582009 資訊管理

3 必

廖世義，上

管理資訊系統是電子化企業競爭力的策略核心，本課程旨在介紹資訊在企業經營中所扮演的角色及應用，並探討企業資訊的有效管理原則與方法。課程內容包括以下主題如：了解資訊及知識的意義和特性、管理資訊系統的需求和應用、資訊系統的組織、規劃及控制、和資訊人員的領導與激勵等。並從管理的觀點討論資訊技術的互動理論與資訊組織的相關議題，最後，也經由實務個案說明網路經濟與電子化企業新資訊技術之衝擊，以強化本程之教學目標。

582009 Information Management

3 R

S. Y. Liaw, F

Management information system is the strategic core competence of e-business. The purpose of this course is to introduce the role of MIS and its applications. Principle of MIS and system design methodologies are also discussed. Course contents include understanding the meaning and characteristics of information and knowledge, the needs and applications of the MIS, the Organizations, planning and controlling of the MIS. And, related topics with managerial overview of MIS are introduced by the interactive theory of IT and organization. Finally, in order to achieving the objectives of this course, the impacts of network economy and new IT of e-business are also discussed through empirical study cases.

582010 人力資源管理

3 必

待聘, 上

本課程旨在使學生獲得人力資源管理之相關知識。內容包括：人力資源管理導論、招募與遴選、職涯發展、薪酬與福利、人力資源管理之未來發展。

582010 Human Resource Management

3 R

待聘, F

The main subjects are summarized as follows: the introduction of human resource management, recruiting and selection, career development, compensation and benefit, the future development of human resource management.

582011 策略管理

3 必

沈慶龍, 上

本課程的目的，將給予學生一充分的了解，以確認和運用組織策略所需的正確分析技術和技能。因為，主要授課的內容將包括：策略性管理程序、利害關係人與公司使命、外部分析：確認產業的機會與威脅、內部分析：資源、潛能、能力與競爭優勢、由功能層級策略建立競爭優勢、事業層級策略、競爭策略與產業環境、全球環境下的競爭策略、公司層級策略垂直整合、多角化及策略聯盟、企業發展創立與重整企業、

組織結構的設計、策略控制系統的設計、組織、控制與策略的配合、策略性變革的實施。

582011 Strategic Management 3 R C. L. Shen, F

The aim of this course is to give learners a thorough understanding of the analytical techniques and skills necessary to identify and exploit organization strategies successfully. Thus, the major subjects of this course will cover: The strategic management process, Corporate stakeholders and mission, External analysis: the identification of opportunities & threats, Internal analysis: resources、capabilities、competencies & competitive advantages, Building competitive advantage through functional-level strategies, Business-Level strategy, Competitive strategy and the industry environment, Strategy in the global environment, Corporate Strategy-vertical integration, diversification, and strategic alliances, Building and restructuring the corporation, Designing organizational structure, Designing strategic control systems, Matching structure and control to strategy, Implementing strategic change.

582012 校外實習(1) 2 必

為強化學生專業能力，使能理論與實務相結合，特開設此課程。修課學生得選擇本課程所擇定之廠商或研究機構於暑假期間前往實習。

582012 Practice of Industrial Training(1) 2 R, F

This course is designed to strengthen students' professional capability by combining theoretical and practical aspects. Students taking this course are required to do a summer internship in a selected company or research institute.

582013 校外實習(2) 2 必

為強化學生專業能力，使能理論與實務相結合，特開設此課程。修課學生得選擇本課程所擇定之廠商或研究機構於暑假期間前往實習。

582013 Practice of Industrial Training(2) 2 R, F

This course is designed to strengthen students' professional capability by combining theoretical and practical aspects. Students taking this course are required to do a summer internship in a selected company or research institute.

582014 校外實習(3) 9 必

為強化學生專業能力，使能理論與實務相結合，特開設此課程。修課學生得選擇本課程所擇定之廠商或研究機構於暑假期間前往實習。

582014 Practice of Industrial Training(3) 9 R, F

This course is designed to strengthen students' professional capability by combining theoretical and practical aspects. Students taking this course are required to do a summer internship in a selected company or research institute.

582015 校外實習(4) 9 必

為強化學生專業能力，使能理論與實務相結合，特開設此課程。修課學生得選擇本課程所擇定之廠商或研究機構於暑假期間前往實習。

582015 Practice of Industrial Training(4) 9 R, F

This course is designed to strengthen students' professional capability by combining theoretical and practical aspects. Students taking this course are required to do a summer internship in a selected company or research institute.

二. 選修科目 Elective Courses

582016 企業概論 3 選 賴鳳儀, 上

本課程主旨在討論將企業經營管理理論與實務之基礎觀念，主要內容涵蓋：企業的本質與型態、企業的營運管理與績效評估、行銷、企業國際化等。

582016 Introduction to Business 3 E F.Y. Lai, F

This course focuses on fundamental theories and practices of business management. Main topics of this course include: the nature and types of business, business operation, management, performance assessment, marketing, and internationalization of business.

582017 企業應用軟體 3 選 廖世義, 上

電腦之應用科學是令人感到興趣且發展迅速的領域之一，現已被廣泛應用政府、工商業、藝術、教育、研究及服務業等方面。本課程講授重點以商業應用軟體為主，包含資料庫設計與操作、試算表製作與計算、統計分析與圖表製作、文書編輯與排版及多媒體製作等之應用。

582017 Business Application Software 3E SS. Y. Liaw, F

The application of computer has extended from simple number crunching to administration processes、industry、art、education、research and public services. The objective of the course is to teach the operation techniques concentrated on current business computer software packages; including database design and operation, spread sheets, statistic analysis and charts design、word processing and multi-media design.

582018 心理學 3 選 廖世義, 上

心理學乃是一門以心理學的角度來探討組織中，各個人力資源管理制度對員工心理及行為的影響。本課程目標主要讓學習者了解員工在各種不同的人力資源管理制度下，會有何種心理反應，並進而改善其工作行為，以達到最高的生產力。

582018 Psychology 3 E S. Y. Liaw, F

The psychology of human resources management is a very important subject in the environment of organizational management setting. However, many teachers do not take this topic as an individual program in the classes design. The present class in to make up this shortcoming in order to offering the wider vision to learners. Through the learning, the students will more clearly understand the psychological operations of employee in the system of organizational management practices.

582019 流通業概論 3 選 待聘, 下

在現代商業發展中，產品品質、價格、促銷手法等「檯面上」所看到的是愈來愈難有所差異了，所有的競爭成敗之分可能就在於「檯面下」的流通成本和配銷能力。消費者每購買一美元的商品時，可能其中就有 50%是在支付流通的費用，然而流通業者大多屬於小型企業，店面坪數雖然不大，但企管的各功能活動卻缺一不可，藉由本課程的規劃，試圖增加同學之流通業管理的專門知識與實務應用技術，從實務應用的觀點，結合流通業管理的理論，有系統的介紹流通業的規劃、管理、行銷及執行控制等技術，讓同學了解業者如何開創一片新天地。

582019 Distribution Logistic 3 E 待聘, S

The aim of this course is to give learners to understand about the skills of logistic management. Logistics is defined as a business planning framework for the management of material, service, information and capital flows. Logistic systems have received considerable attention in the last 10 years, as they constitute one of the cornerstones in the design and control of production systems and the modeling of supply chains. This renewed interest is partly due to the recognition that well-known planning and control systems such as “Manufacturing Resources Planning” and “Just in Time” systems fail to establish a sound integration of lead time management, capacity planning and quality considerations.

582020 商事法**3 選****待聘, 下**

本課程著重於瞭解在商事交易的社會生活中，或為強化企業組織，或為保護交易安全，或為促進交易敏活而制定各種規範。

582020 Business Law**3 E****T. H. Chen, S**

This course is designed to induce the business law to the students who wish to understand the basic concepts and techniques of related laws and regulation in the field of business management.

582021 技能證照專題**1 選****廖世義, 上**

本課程提供學生在國內、外管理技能證照方面之學習、取得、與實務運用之訓練課程。在知識經濟時代，專業技能如何衡量(Measurable)與提高其可見度(Visible)是學生在職場上競爭之利器，尤其管理知識技能多屬於內隱知識(Tacit)較不易衡量，透過認證之取得確可看出其學習之成效與程度，並提供學習之路徑(Road map)與方向，學生可隨著各學程的相關證照設定目標，朝各種不同等級的證照努力，有方向可供遵循。管理技能證照可分財務金融技能、行銷管理技能、作業管理技能、與一般管理技能等四個學程有關技能認證的課程與實務，對學生專業知識技能的專精、證照之取得、與實務運用之訓練與教學，期能幫助學生將專業知識技能轉換成顯性(Explicit)可見度高之技能證照資格，並能實際應用於實務，這也是目前產業聘用人才之依據，強調實務且易衡量之資格，作為用人之重要參考。惟認證係實際技能能力之檢定，涉及認證實務，在認證方面有一定之科目與規則，因此必須有計畫之教學並輔以實習訓練，期能以實務之運用為主讓證照所表徵之專業知識技能與程度能實際發揮於實務工作上，如電腦程式設計、語言、中英打、電腦軟體、繪圖、記帳士等專業技能。有關之實務課程內容包括介紹資格評估之標準、評估之專業知識技能、資格取得過程、評估之單位、應研習之科目、技能模擬演練、實際企業之分析等。本課程有計畫且具體的將學生由隱性知識技能提升為顯性資格證照認證，以提升其將來就業之競爭力，是各管理學程不可或缺之橋接課程(Bridge program)。

582021 Special Topics on Skill Certificate 1 E S.Y. Liaw, F

This program provides training and learning for students to acquire the qualification of professional international or Taiwan skill certificates. In knowledge economy era, profession and skill measure and visibility is growing more important for students' competition in human resources market. Especially management skill is more inclined to tacit knowledge difficult to measure. The qualification certificating not lonely facilitates measure and visibility of the skill competence of students' learning but also shows a clear direction of learning rendered as a road map. Student can set up his or her own goals and follow the program step by step to achieve different stages' skill assessment. Management skill certificate program includes teaching and intern courses of financial and banking, marketing, operation research, general management skill programs in order to focus and penetrate student' s profession skill, acquire certificate and participate practices. The objective of the program is to transform implicit profession management skill to explicit and visible certificates, highly consistent with

business practices which are most important factors for business recruiting or promotion. However there are rule and requirements of certificating relating more to real business practices, therefore planned training and teaching is crucial to success. This course includes introduction of the standards and requirements of qualification, profession skill required, the process and stage of the certification, assessment authority, required completion of subjects, simulation, rehearsal, case study, and game exercises. This is a planned and substantial bridge program to transform student's tacit skill to explicit qualification which is significant to the success of the students in the future and even his or her long-term career.

582022 人際關係

3 選

待聘, 上

組織中的人際關係，在現在的社會中，越來越重要，也一直是組織管理學者所著重的領域之一。本課程包含以下幾個主要課目：人際關係概論、團隊管理技巧、組織中之人際關係本質、工作情緒管理、溝通技巧、組織氣候與文化、協調技巧、人群關係的實務設計、衝突管理、敏感性分析、群體動力學、專題討論。

582022 Interpersonal Relations

3 E

待聘, F

The key purpose of this course is to help students learning academic concepts, knowledge, and practical skills of human relations in workplace. The teaching methods in this course will include teacher's instruction, interactive discussion, case study, and business professionals' speech of specific subjects. The subjects in this course may include the following issues: foundations of human relations, theories of interpersonal communication, methods and process of communication, interpersonal influence, interpersonal conflict, building and maintenance of human relations, negotiation and group interactions, communication and relations in organizations.

582023 管理證照專題

1 選

廖世義, 下

本課程提供學生在國內、外管理智能證照方面之學習、取得、與實務運用之訓練課程。在知識經濟時代，專業知識如何衡量(Measurable)與提高其可見度(Visible)是學生在職場上競爭之利器，尤其管理知識多屬於內隱知識(Tacit)較不易衡量，透過認證之取得確可看出其學習之成效與程度，並提供學習之路徑(Road map)與方向，學生可隨著各學程的相關證照設定目標，朝各種不同等級的證照努力，有方向可供遵循。管理證照可分財務金融、行銷管理、作業管理、與一般管理等四個學程有關認證的課程與實務，對學生專業知識的專精、證照之取得、與實務運用之訓練與教學，期能幫助學生將專業知識轉換成顯性(Explicit)可見度高之證照資格，並能實際應用於實務，這也是目前產業聘用人才之依據，強調實務且易衡量之資格，作為用人之重要參考。惟認證係實際能力之檢定，涉及認證實務，在認證方面有一定之科目與規則，因此必須有計畫之教學並輔以實習訓練，期能以實務之運用為主讓證照所表徵之專業知識與程度能實際發揮於實務工作上，如財務分析師、管理顧問、產業分析等。有關之實務課程內容包括介紹資格評估之標準、評估之專業知識、資格取得過程、評估之單位、應研習之科目、模擬演練、實際企業之分析等。本課程有計畫且具體的將學生由隱性知識提升為顯性資格證照認證，以提升其將來就業之競爭力，是各管理學程不可或缺之橋接課程(Bridge program)。

582023 Special Topics on Professional

1

E

S.Y. Liaw, S

Management Certificates

This program provides training and learning for students to acquire the qualification of professional international or Taiwan certificates. In knowledge economy era, profession measure and visibility is growing more important for students' competition in human resources market. Especially management knowledge is more inclined to tacit knowledge difficult to measure. The qualification certificating not lonely facilitates measure and visibility of the competence of students'

learning but also shows a clear direction of learning rendered as a road map. Student can set up his or her own goals and follow the program step by step to achieve different stages' assessment. Management certificate program includes teaching and intern courses of financial and banking, marketing, operation research, general management programs in order to focus and penetrate student' s profession, acquire certificate and participate practices. The objective of the program is to transform implicit profession knowledge to explicit and visible certificates, highly consistent with business practices which are most important factors for business recruiting or promotion. However there are rule and requirements of certificating relating more to real business practices, therefore planned training and teaching is crucial to success. This course includes introduction of the standards and requirements of qualification, profession required, the process and stage of the certification, assessment authority, required completion of subjects, simulation, rehearsal, case study, and game exercises. This is a planned and substantial bridge program to transform student' s tacit knowledge to explicit qualification which is significant to the success of the students in the future and even his or her long-term career.

582024 銷售管理

3 選

沈慶龍, 下

本課程的目的，在教導學生有關銷售或行銷主管在銷售力策略的決策範疇，替代方案及其制定之準則。因此，主要的授課內容將包括：銷售管理與企業機構、銷售管理，人員推銷與推銷術、人員推銷的目標、劃定與推銷策略、劃定人員推銷策略、優秀的推銷主管、推銷組織、銷售組織的人事管理、業務員的招募、業務員的甄選、銷售訓練的規則、銷售訓練之執行與績效評估、業務員的激勵、業務員薪資、銷售費用之管理、銷售會議與銷售競賽、業務員的控制、銷售預算、銷售配額、銷售區域的規劃、銷售控制與成本分析、國際銷售管理、個案研討。

582024 Sales Management

3 E

C. L. Shen, S

This course is aimed toward accomplishing three objectives: (1) to delineate the areas in which sales executives make decisions; (2) to analyze decision alternatives and criteria in these areas; and (3) to provide cases as real-world illustration of decision situations. The major subjects will cover: Sales management and the business enterprise, Sales management, personal selling, and salesmanship, Setting personal-selling objectives, Determining sales-related marketing policies, Formulating personal-selling strategy, The effective sales executive, The sales organization, Personal management in the selling field, Recruiting sales personnel, Planning sales training programs, Executing and evaluating sales training programs, Motivating sales personnel, Compensating sales personnel, Managing expenses of sales personnel, Sales meeting and sales contests, Controlling sales personnel, The sales budget, Quotas, Sales territories, Sales control and cost analysis, International sales management, Case study.

582025 POS 系統概論

隨著資訊科技進步，銷售點系統，是現今餐飲業不可或缺的門市資訊管理系統，銷售點系統的建立雖可提餐飲業提升工作效率與服務品質；但系統在設計上若未考量介面使用性及人機互動，反而會致使諸多問題發生，這些問題包含使用者操作系統之低滿意度及低接受度，以及造成操作錯誤等。本研究之研究目的為透過人機互動觀點，評估銷售點系統之人機互動及介面使用性，針對系統之介面設計問題提出改善方法，並發展一套未來設計、建立及改善銷售點系統介面設計準則的參考依據。

582025 POS systems

With the progress of information technology, point-of-sale system is an indispensable information management system in the restaurant industry. Although the establishment of the point-of-sale system can improve the efficiency and service

quality of the restaurant industry, the system is not considered in the design And human-computer interaction, but will cause a number of problems, these problems include low satisfaction and low acceptance level of the user's operating system, as well as causing operational errors. The purpose of this research is to evaluate the human-computer interaction and interface usage of the point-of-sale system through the human-machine interaction viewpoint. The improving method of the interface design of the system is proposed and a future design, establishing and improving the interface design Guidelines of the point-of-sale system for reference can be developed.

582026 事件管理 3 選 賴鳳儀, 下

本課程設計著重在介紹學生對於特殊事件(如節慶、運動、藝術、觀光、娛樂、慈善)與會議展覽在營利與非營利機構運用之概念, 以及在事件規劃之專案管理能力。

582026 Event Management 3 E F. Y. Lai, S

This course emphasizes the development of project management skills for students who may become involved in special event management through festival, sport, art, tourism, entertainment, charitable or marketing organizations in a professional or volunteer capacity. On successful completion of this course, students are able to practice marketing and management skills to various special events.

582027 創業經營 3 選 待聘, 下

企業創業艱辛, 尤其是科技人, 若能給予良好優厚條件之環境及支援, 則新創企業將得以快速安穩地成長, 創業成功的機會也就大的多了。這門課的目的就是在介紹這創業育成相關的主題 Subject, 議題 Issues 及內容 Contents, 同時, 將要求學生作創業及育成相關的觀察、研究、調查、面訪、統計、分析作專題報告。

582027 Entrepreneurial Plan 3 E 待聘, S

The purpose of this course is to introduce Entrepreneurship, especially in high-technology industry. With high quality of human resource, to investment a venture in high technology would be hard and risky. It needs subjects related to strategies in Marketing Planning, R&D, Law and Finance, etc.

582028 組織理論 3 選 蔡展維, 下

本課程主要在教導與探討有關組織理論相關的學理與課題, 期使選修同學對企業管理有更進一步的認識。課程範圍包含組織結構、組織設計, 組織變化、與組織學習等議題。

582028 Organizational Theory 3 E C. W. Tsai, S

The main purpose of this course is discussing and comprehending the related knowledge and issues about organizational theory. The major contents will cover: Organizational Structure, Organizational Design, Organizational Change and Organizational Learning. Through this course, the students will have more clear understanding about the development of management.

582029 資料倉儲

課程內容包括資料倉儲 課程內容包括資料倉儲、OLAP、資料探勘、商業智慧、即時分析處理, 資料方塊, 關聯分析、分類、分群、社會網路分析、文字探勘、與網頁探勘。

582029 Data warehousing

Topics include data warehousing, data mining, business intelligence, OLAP, data cube, association analysis, classification, cluster analysis, social network analysis, text mining, and web mining.

The courses include data warehousing, data warehousing, OLAP, data mining, business intelligence, real-time analysis and processing, data blocks, association analysis, classification, clustering, social network analysis, text mining and web exploration.

Topics include data warehousing, data mining, business intelligence, OLAP, data cube, association analysis, classification, cluster analysis, social network analysis, text mining, and web mining.

582030 零售管理

3 選

沈慶龍, 上

本課程旨在使學生獲得零售管理之理論及實務之相關知識。內容包括：零售的本質與發展、今日的零售業、零售環境、零售型態、零售策略、消費者的心理因素、消費者行為、商店的位置、商店設計、零售業的人力資源管理、零售業員工的領導統御、商品計劃、商品的管理及控制、零售訂價、零售採購、零售服務、零售業的推廣活動、零售業的廣告、零售展示、商店人力銷售。

582030 Retailing Management

3 E

C. L. Shen, F

The objective of this course is designed to teach the related Knowledge of the theory and practice of Retail Management The main subjects are summarized as follows: The Nature of Development of Retail, Present Retailer, Retail Environment, Retail Type, Retail Strategies, The Psychological Factor of Consumer, Consumer Behavior, The Location of Shop, The Design of Shop, Human Resource Management of Retailer, Leadership of Retailer, Product Planning, Product Management and Control, Retail Pricing, Retail Purchasing, Retail Service, Retail Promotion, Retail Advertisement, Retail Display, Retail Personal Selling.

582031 行銷研究

3 選

沈慶龍, 上

本課程主要目的在教導學生，如何利用行銷研究的技術來蒐集和皆析所而的各種資訊，以應付行銷決策上的需要。主要授課內容綱要如下：行銷研究與行銷管理、行銷研究的發展、行銷資訊的價值、行銷資訊系統、科學方法、研究設計、行銷研究的程序、次級資料、收集資料的方法、無反應偏差的問題、問卷設計、實驗設計、抽樣方法、樣本大小的決定、態度的衡量、現場作業的管理、投射技術、深度技術、資料分析的程序、統計顯著性檢定、多變量分析、研究報告。

582031 Marketing Research

3 E

C. L. Shen, F

The objective of this course is designed to teach the students how to use the technology of marketing research to collect and analyze the needed information for the purpose of marketing decision-making. The major subjects are summarized as follows: Marketing Research & Marketing Management. Knowledge development of Marketing Research. Value of marketing information. Marketing information system. Scientific methodology. Research design. Marketing research process. Secondary data. Survey method. Nonresponse bias. Questionnaire design. Experimentation. Sampling design. Sample size. Measurement. Field operation. Projection. In-depth group interview. The process of data analysis. Hypothesis testing. Multivariate analysis. Presenting report: written & oral report.

582032 服務業行銷管理

3 選

待聘, 上

本課程之目的，在教導學生在服務行銷規劃與執行相關理論與實務作為上的了解，以達到服務品質與生產力之增進。課程主要內容涵蓋：服務與服務品質的定義、顧客行為、服務的理論架構、價值傳遞的規劃管理與科技、服務業的人員管理、服務行銷之執行與績效評估。

582032 Service Marketing Management

3E

待聘, F

This course seeks to provide basic understanding on the definition of services, customer behaviors, service-related theories and frameworks, planning and managing value delivery system, technology and service design, managing service personnel, and executing service marketing and performance evaluation.

582033 企業倫理

3 選

待聘, 上

在當今企業的經營環境中，企業倫理的議題較諸以往更加顯示其重要。現今，員工與顧客皆將企業倫理視為首要議題；因此，我們不能忽視這一個重要議題。另一方面，因為企業倫理所牽涉到的課題相當廣泛，我們將從以下幾個主要方向加以討論：基本理論介紹、職業與工作倫理、管理倫理、環境倫理、社區倫理、產品及服務倫理、行銷倫理、資訊管理倫理。

582033 Business Ethics

3 E

待聘, F

Business Ethics is more important in the present environment than before. Employees and customers see business ethics as the most important in the management process. We can not ignore this issue in contemporary management. Business ethics relate to many issues and the program includes following topic: Introduction of the theory of business ethics, Work ethics, management ethics, environment ethics, community ethics, product and service ethics, marketing ethics, information management ethics.

582034 消費者行為

3 選

待聘, 上

本課程旨在使學生獲得消費者行為之理論及實務之相關知識。內容包括：消費者行為導論、消費者之資訊處理與決策、消費者行為之微觀面、消費者行為之宏觀面。

582034 Consumer Behavior

3 E

待聘, F

The main subjects are summarized as follows: the introduction of consumer behavior, consumer information processing and decision, the micro-perspectives of consumer behavior, the macro-perspectives of consumer behavior.

582035 物流管理

3 選

待聘, 上

本課程的主要目的，在於教導學生物流管理所涉及之相關概念，決策範圍及實務。因此，主要的授課內容將包括：物流導論、顧客服務、供應鏈管理、物流資訊、網際網路與物流整合、全球物流、物流定位與策略、物流組織。

582035 Logistics Management

3 E

待聘, F

This course will teach students the related concepts, scope of decision-making and practice of logistics management. Therefore, the major subjects will include: overview, customer services, supply-chain management, business logistic information, internet and logistics resources, inventory management, transport management, warehousing management, logistics integration, global logistics, position and strategies of logistics, organization of logistic.

582036 整合行銷傳播

3 選

賴鳳儀, 上

本課著重於如何協調各項促銷元素與行銷活動的整合運用，以在整體行銷策略上達到綜效。從「整體、整合」觀點下規劃相關的行銷計畫與促銷活動，並協調運用各項傳播功能的運用，企業體可因而創造出一個具整體性、一致性形象，而非單靠過去傳統的使用廣告達到而已。

582036 Integrated Marketing

3 E

F. Y. Lai, F

Communication

This course emphasizes on the concept of coordinating various promotional elements and other marketing activities in a more integrated strategic approach.

Through using the “big picture” approach to planning marketing and promotion programs and coordinating the various communication functions to create a consistent, unified image of a firm, rather than primarily based on advertising along.

582037 策略性行銷管理 3 選 沈慶龍, 上

本課程提供學生以一更具完整性、系統性與策略性的規劃、分析與執行模式，對策略性行銷管理兼具理論與實務上的了解。主要教材內容包括：行銷倫理與社會責任、事業策略上的行銷角色、策略性使命、目的與目標、環境管理、策略性行銷模式與方案選擇、行銷計畫之財務性分析、行銷努力之執行與評估。

582037 Strategic Marketing Management 3 E C. L. Shen, F

This course will provide both theoretical and practical approach to planning, analyzing and implementing marketing strategies with a more holistic, systematical and strategical framework. The major subjects of this course will include: marketing ethics and social responsibility, marketing role in the implementation of business strategies, strategic mission, goals & objectives, environmental management, marketing strategy models & selection, financial analysis in marketing plan, implementation and assessing the marketing efforts.

582038 行銷個案分析 3 選 賴鳳儀, 下

本課程主要目的在於透過教師授課與師生互動方式進行行銷案例的分析與討論理解行銷在實務上的運用。課中著重在培養學生透過國內外行銷成功與失敗案例經驗累積思考、判斷、分析企業實務能力。

582038 Marketing Case Analysis 3 E F. Y. Lai, S

The main purpose of this course is through interactive teaching of marketing cases to understand the application of marketing concepts. It emphasizes on examining marketing success and failure cases to cultivate students' abilities on critical thinking, judgment, and analyses in business practices.

582039 創新管理 3 選 待聘, 下

本課程主要目的在介紹創新管理與研究發展之相關議題主要內容包括創新的價值、創意的來源、創意的篩選、創意的具體化、創新的流程與模式、創新的商業化、新產品研究發展之相關課題。希望透過課程之介紹，使得學生對創新及創意有具體之認識，並透過個案分析以培養訓練學生落實創新及創意的概念及想法，以提升競爭力。為了鼓勵修課學生的積極參與，課程要求包括：專書閱讀、課程討論與個案討論等。

582039 Innovation Management 3 E 待聘, S

The purpose of this course is to introduce some topics in innovation management and R&D management. Course contents include value of innovation, idea generating, idea screening, concept development and testing, procedure and model of innovation, the commercialization of innovation, case study in innovation management. and relevant topics in R&D management. To encourage regular feedback, course requirements include book review, class participation and discussion, and case analysis, etc.

582040 品牌管理 3 選 蔡展維, 下

本課程將提供學習者，有關品牌管理上，一兼具理論與實務的充分了解，因此，授課內容主要將包括下列的主題：概論、品牌的挑戰、品牌建立決策、品牌提供決策、品牌名稱決策、品牌建立的工具、品牌建立的行銷計畫、品牌權益、品牌生命週期的品牌權益管理策略，品牌策略之決策，品牌延伸，側翼品牌，品牌稽核，品牌重定位。

582040 Brand Management 3 E C. W. Tsai, S

This course will provide students the related theories and practices of Brand Management. The major subjects of this course are summarized as following: Introduction, Branding challenges, Branding decision, Brand sponsor decision, Brand name decision, Brand building tools, Marketing plan for building brand, Brand strategy decision, Brand extensions, flanker brand, Brand auditing, Brand reposition.

582041 顧客關係管理

3 選

蔡展維, 下

本課程之主要在教導學生有關顧客關係管理相關的學理與概念，使其對關係行銷之概念有深入的認識與了解。主要授課內容將包括：關係行銷的範疇及概念，企業關係的資產與負債，服務業的關係行銷、買賣雙方關係的整合性模式，大眾市場的關係行銷，會員制顧客與關係行銷，全國性大型客戶管理，關係行銷的水平式聯盟，關係行銷與行銷策略，關係行銷的組織，資訊科技的應用與顧客獲利力。

582041 Customer Relationship

3 E

C. W. Tsai, S

Management

The main purpose of this course is discussing and comprehending the related knowledge and issues about Customer Relationship Management. The main subjects are summarized Follows: the domain and conceptual Foundations of relationship marketing, the evolution of relationship marketing, relationship marketing of services, relationship marketing and distribution channels, an integrated model of buyer-seller relationships, strategic alliance, relationship marketing in mass markets, membership customers and relationship marketing, relationship marketing and key account management, horizontal alliances for relationship marketing and marketing strategy, organizing for relationship marketing, information technology, customer profitability.

582042 電子商務與網路行銷

3 選

廖世義, 下

本課程涵蓋部門間的數位化商業資訊之換資訊與媒體技術的相關性及企業內、組織間的商業活動。討論主題包含：企業與企業、企業與客戶、客戶與客戶、及客戶與企業間的商業模式、網路市場行銷與品牌塑造。經由網際網路和行動通訊技術的應用，行銷組合及電子化廣告已對傳統企業之商業行為及消費者行為產生相當大的衝擊。本課程主題包含資料、一對一線上行銷、無線通訊技術、一對一線上行銷、病毒行銷和網路購物。亦介紹幾種上網路購物。亦介紹幾種線上網路廣告之型態、電子化採購和資料挖掘分析工具於客戶關係管理方面的應用等。最後也針對第三代行動商務對不同產業的創新服務進行個案教學與討論。

582042 E-Commerce and Internet

3 E

S. Y. Liaw, S

Marketing

This course includes breadth of study in the exchange of digitized information between parties, technology-enabled transactions, technology-mediated relationships, and intra- and inter-organizational activities that support exchange. Discussed topics include B2B, B2C, C2C, C2B relationships, e-market communication and branding. Through Internet application and mobile communication technology, marketing mix and e-advertisement affect the traditional business behaviors of enterprises and consumers greatly. Among topics include database marketing, one-to-one on-line marketing, wireless communication technology, virus marketing and E-shopping. By the way, several patterns of on-line advertisement, E-purchasing, and analysis tools of data mining applied into custom relationship management are also introduced. Finally, innovative services of 3G mobile commerce and their impacts on diverse industries are discussed in our case studies.

582043 管理個案研討**3 選****林鈺琴, 下**

本課程主要教學目的在於透過教師授課、師生互動討論、個案分析與實務界專業人士之專題演講，使修課學生得以將之前所學各種管理課程的學術概念、知識與實務技能，應用至實際國內外管理個案的討論分析演練中。本課程將包含數項主題：行銷管理的個案研討、人力資源管理的個案研討、財務管理的個案研討、資訊管理的個案研討、生產與作業管理的個案研討、研發管理的個案研討、策略管理的個案研討。

582043 Case Study of Management**3 E****C. C. Lin, S**

The key purpose of this course is to help students applying academic concepts, knowledge, and practical skills of each management-related course learned to the analysis and discussion of real domestic and abroad business management cases. The teaching methods in this course will include teacher's instruction, interactive discussion, case study, and business professionals' speech of specific subjects. The subjects in this course may include the following issues: case studies in marketing management, case studies in human resource management, case studies in financial management, case studies in production and operation management, case studies in information management, case studies in research and development management, case studies in strategic management.

582044 企業診斷**3 選****待聘, 下**

本課程之目的，在教導學生相關的知識與方法，以整體系統的觀點，對企業營運的過程中，不斷地加以觀察、分析與診斷，隨時發掘經營上的缺失，並加以導正，以提高企業經營績效，課程主要內容包括：除神話---及確認需求、管理及營運控制---概論、策略要素、策略目標、計劃報告書、計劃目標、如何設定管理效標、如何衡量行銷管理的績效、如何衡量銷售管理的績效、如何衡量研發管理的績效、如何衡量採購管理的績效、如何衡量生產規劃與控制之績效、如何衡量生產管理的績效、如何衡量製造、工業工程的績效、如何衡量物料管理的績效、如何衡量維護管理的績效、如何衡量廠房與設備管理的績效、如何衡量品質管理的績效、如何衡量財務管理的績效、如何衡量審計管理的績效、如何衡量行銷資訊系統管理的績效、如何衡量人力資源管理的績效、最後的提醒----人。

582044 Business Diagnosis**3 E****待聘, S**

This purpose of this course seeks to give students a comprehensive understanding on the concepts, principles and methods of performance assessment and management diagnosis. Through the continuous measurement on productivity, objectives and planning for every function and at all levels, the managerial weaknesses can be detected and then the correct actions can be taken to improve the overall performance.

The main subjects of this course will include: Let's Destroy Some Myths-and Identify the Needs. Management and Operating Control: An Overview. The Elements of Strategy. Organizing Strategy Objectives. Plan Statements. Plan Objectives. How To Set Management Performance Standards. How To Measure Marketing Management Performance. How To Measure Sales Management Performance. How To Measure Engineering Research and Development Management Performance. How To Measure Purchasing Management Performance. How To Measure Production Planning and Control Management Performance. How To Measure Production Management Performance. How to Measure Manufacturing, Industrial Engineering Management Performance. How To Measure Materials Handling Management Performance. How To Measure Maintenance Management Performance. How To Measure Plant and Facilities Management Performance. How To Measure Quality Assurance Management Performance. How To Measure the Management Performance of the Treasurer. How To Measure Controller ship Management Performance. How To Measure EDP/MIS Management Performance. How To Measure Personnel Management Performance. A Final Note ...PEOPLE !

. 進修部四年制 休閒運動健康系產學攜手合作專班(實用休閒觀光專班)

(一)教育目標

本系結合運動、休閒、管理及社會等現代科學及實務，培養兼具國際宏觀、理論與實務相互應用之休閒運動管理與健康促進指導專業人才。

- 1.休閒產業經營管理專業人才。
- 2.健康促進與運動傷害防護專業人才。
- 3.休閒運動指導專業人才。

(二)校定共同必修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
通識課程 General Education	12	2	2	2	2	2	2			通識選項課程： 人文學科：2 門 社會科學：2 門 自然與生命科學：1 門 數理與應用科學：1 門
國文 Chinese	4	2	2							國文(閱讀與寫作)(1) 國文(閱讀與寫作)(2)
大一英文 Freshman English	4	2	2							大一英文(1) 大一英文(2)
英語聽講練習 101~102 English Listening & Speaking Practice	2	1	1							英語聽講練習 101 英語聽講練習 102
憲法 Constitution	2				2					
體育 Physical Education	4	1	1	1	1					一年級： 大一體育(1)、 大一體育(2) 二年級： 體育選項(需修讀不同興 趣體育課程)
通識教育講座 Lectures on General Education	1		1							各系依序開課，開課 學期不定
外語實務 Foreign Language Proficiency Test	0	0								畢業前修畢 通過標準依「外語實 務課程實施要點」規 定
合 計	29	8	9	3	5	2	2	0	0	

(三) 學院共同必修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
心理學 Psychology	2	2								
社會學 Sociology	2	2								
運算思維與資訊科技應用 Computational Thinking and Information Technology Applications	0			0						
合 計	4	4	0	0	0	0	0	0	0	

(四)專業必修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
人體解剖學 Human Anatomy	2	2								
運動體能訓練 Sports Conditioning Training	2	2								
休閒遊憩經營管理 Leisure and Recreation Management	2	2								
人體生理學與實驗 Human Physiology	2		2							
舞蹈運動與指導 Dance and Guidance	2		2							
運動行銷學 Sport Marketing	2		2							
觀光資源概要 Introduction to Tourism Resources	2		2							
統計學 Statistics	2			2						
體驗與探索教育 Experiential Education	2			2						
運動生理學與實驗 Exercise Physiology and Energy Metabolism	2			2						
運動傷害防護學與實驗 Principle and Practice in Athletic Training	2			2						
體適能與肌力訓練 Fitness and Strength Training	2			2						
運動推拿指壓學 Sports/Exercise Massage and Practice	2				2					
體適能測驗與評量 Testing and Assessment in Physical Fitness	2				2					
水上活動與安全指導 Coaching of Water-based Sports and Safety	2				2					
服務業管理 Service Industry Management	2				2					
運動心理學 Sport Psychology	2				2					

中 文 科 目 名 稱 英	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
團體運動訓練與指導 Group Sports Training and Guidance	2					2				
運動處方 Exercise Prescription	2					2				
戶外遊憩領導 Leadership for Outdoor Recreation	2					2				
運動生物力學 Biomechanics	2					2				
實務專題(1) Special Projects(1)	1						1			
領隊導遊實務 Practice of Leadership and Guidance	2						2			
運動科技應用 Sports Technology Applications	2						2			
運動銷售實務 Sports Sales Practice	2						2			
休閒運動方案企劃實務 Leisure sports program planning practice	2						2			
實務專題(2) Special Projects(2)	1							1		
休閒運動職場實務 On job training and practice in leisure and sport businesses	2							2		
導覽解說實務 Practice of Guidance and Explanation	2							2		
校外實習 Practice of Industrial Training	9								9	
合 計	65	6	8	10	10	8	9	5	9	

(五)專業選修科目

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
運動與健康專業英語 English of Sport	2	2								
球類運動與指導 Ball Sports and Coaching	2	2								
網球運動與指導 Coaching of Tennis	2	2								
羽球運動與指導 Coaching of Badminton	2	2								
桌球運動與指導 Coaching of Table Tennis	2	2								
單車運動與指導 Instruction in Cycle Sports	2	2								
攀岩運動與指導 Coaching of Sport Climbing	2	2								
徒手肌肉功能測試 Manual muscle testing and function	2		2							
運動技術教材教法 Teaching Methods and Materials in Physical Education	2		2							
繩索挑戰安全操作 Safety Practice for Challenge Courses	2		2							
運動觀光 Sports Tourism	2		2							
社區健康營造 Community Health Building	2		2							
單車保養與維修實務 Practice for Bike Maintenance and Repair	2		2							
進階球類運動與指導 Advanced Ball Sports and Coaching	2		2							
進階網球運動與指導 Coaching of Advanced Tennis	2		2							
進階羽球運動與指導 Advanced Coaching of Badminton	2		2							
進階桌球運動與指導 Advanced Coaching of Table Tennis	2		2							

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
旅運管理實務 Travel Management	2			2						
有氧舞蹈運動與指導 Aerobic Dance Exercise and Coaching	2			2						
急救學與實驗 First Aid and Practicum	2			2						
運動傷害評估學 Physical Examination of the Spine and Extremities	2			2						
休閒行為 Leisure Behavior	2			2						
墊上核心運動與指導 Mat Science	2				2					
運動保健學 Principles of Athletic Training	2				2					
運動賽會管理 Sport Event Management	2				2					
觀光學 Introduction to Tourism	2				2					
大數據行銷與實務應用 Big Data Marketing and Practice	2				2					
休閒服務品質管理 Service Quality Management in Leisure Industry	2				2					
戶外冒險教育 Outdoor Adventure Education	2				2					
休閒教育 Leisure Education	2				2					
樂齡運動與健康促進 Aging Exercise and Health Promotion	2					2				
運動貼紮與實驗 Strap/Bandaging Techniques in Athletic Training	2					2				
運動復健學 Rehabilitation Techniques in Sport Medicine	2					2				
飛輪運動指導 Flywheel Sports instruction	2					2				

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
團康活動遊戲設計 Planning and Design for Group Activity of Peace	2					2				
生態旅遊 Ecology Traveling	2					2				
進階水上活動與安全指導 Advanced Coaching of Water-Based Sport and Safety	2					2				
旅遊糾紛實務與管理 Travel Dispute Management	2					2				
民宿經營管理與實務 The Operation Management and Practice of B&B	2					2				
進階墊上核心運動與指導 Advance Mat Science	2					2				
運動傷害防護儀器之運用 Therapeutic Modalities for Sports Medicine and Athletic Training	2						2			
運動保健之經營與管理 Management Strategies in Athletic Training	2						2			
鐵人三項運動與指導 Triathlon Training and Instruction	2						2			
肌能系貼紮應用 Applications of Kinesio Tape	2						2			
運動營養學 Sports Nutrition	2						2			
高爾夫球運動與指導 Coaching of Golf	2						2			
遊程設計 Package Tours Management	2						2			
運動行為改變技術 Exercise related Behavior Modification	2						2			
海洋運動 Marine Sports	2						2			
體驗教育引導技術 Facilitation Techniques for Experiential Education	2						2			
特殊族群運動指導理論與 實務 Exercise in Special Population:from Theory to Practice	2						2			

中 英 文 科 目 名 稱	學 分 數	第一學年		第二學年		第三學年		第四學年		備 註
		上	下	上	下	上	下	上	下	
運動防護實習 Practicum in athletic training	2							2		
個人運動訓練與指導 Personal Training and Guidance	2							2		
兒童體適能 Youth Fitness	2							2		
探索教育方案規劃 Explore educational program planning	2							2		
進階高爾夫球運動與指導 Advanced Coaching of Golf	2							2		
旅行業行銷與企劃 Planning and Marketing in tourism Industry	2							2		
活動風險管理 Event Risk Management	2							2		
活動規劃管理與設計 Program planning Management and Design	2							2		
進階海洋運動 Advanced Marine Sports	2							2		
運動創新創業 Sport sindustry innovation and entrepreneurship	2							2		
銀髮族體適能保健與實務 Elderly Physical Fitness and Health Promotion	2							2		
合 計	124	14	20	10	16	20	22	22	0	

休閒運動健康系

Department of Recreational Sport and Health Promotion

一、必修科目 Required Courses

642001 人體解剖學 2 必

本課程之目的在教導學生了解人體之基本構造，包括肌肉、骨骼、關節、結締組織及神經系統等，並將其理論運用在運動指導與運動技能之發展。

642001 Human Anatomy 2 R

The purpose of this course is to introduce the basic structure of human body such as muscles, bones, joints, connective tissue and nervous system...etc., in addition, to apply this knowledge to develop the sports guidance and sports skills.

642002 運動體能訓練 2 必

本課程介紹運動訓練學的各項理論，及運動競賽時應用的時機。除了理論的介紹外，也研讀近年有關運動訓練的研究。期能將理論與實務結合，於未來提升運動員的成績。

642002 Sports Conditioning Training 2 R

The purpose of this subject is to introduce training theories and when and how to use these theories. In addition to the introduction of training theories, graduate students are instructed to research the latest reports and studies. We hope that a combination of theories and practice can promote athletes' performance in the future.

642003 休閒遊憩經營管理 2 必

本課程之目的希望將管理學的企業功能與管理功能，充分應用至休閒遊憩產業，希望學生在學習過程中不斷應用、創新，對於未來進行休閒遊憩產業經營時，可達高品質與高效率之效益。

642003 Leisure and Recreation Management 2 R

The purpose of this course is to make full use of the functions and management functions of management in the leisure and recreation industry. We hope that students will continue to apply and innovate in the learning process and achieve high quality and high efficiency for the leisure and recreational industry in the future benefit.

642004 人體生理學與實驗 2 必

本課程之目的在增進學生對於人體基礎生理構造及機轉之認識並以其為根基進而活用於運動專業領域。

642004 Human Physiology 2 R

The purpose of this course is to introduce the physical structure of the human body, and the relationship between the human physiology and daily life. Students will apply this knowledge to the related courses after learning. It includes physical structure and organs of human body.

642005 舞蹈運動與指導 2 必

本課程之目的在透過舞蹈運動之教學，讓學生舞蹈運動之過程中，體驗身體律動之感

受，學習控制自我肢體肌肉之能力，並從而學習各項舞蹈之基本知識及指導方式。其內容包括有氧舞蹈、韻律律動、社交舞、現代舞等。

642005 Dance and Guidance 2R

The purpose of this course is to introduce the comprehensive concept and skill of dance, in addition, to cultivate learners' guide ability in dance is also emphasized in this course.

642006 運動行銷學 2 必

本課程之目的在使學生正確瞭解休閒運動市場中消費者的需求，並透過行銷研究以擬定行銷策略以符合當前之休閒運動消費。

642006 Sport Marketing 2 R

The purpose of this course is to introduce the system of sports markets, in addition, by marketing research, students is expected to submit several proposals to improve the consumers' satisfactions.

642007 觀光資源概要 2 必

教授觀光資源概要及介紹觀光遊憩資源定義與特性，具備初步與通盤的理解及概念，並增進領隊導遊考試之能力。主要包含：觀光遊憩資源定義與特性、觀光資源分類、觀光遊憩資源開發基本原則與永續發展策略，介紹台灣的觀光遊憩資源：國家公園、國家風景特定區、古蹟、自然保留區，並強調觀光資源相關法規與維護的重要性。

642007 Introduction to Tourism Resources 2 R

Teaching tourism resources overview and introduction the definition of tourism resources and characteristics, with an initial understanding and with the overall concept and enhance the ability of test leader guides. Mainly includes: the definition of tourism resources and characteristics, tourism resources, classification, tourism resources of developing the basic principles and sustainable development strategy, described Taiwan's tourism resources: national parks, national scenic areas, monuments, nature reserves, and stressed that tourism resource-related laws and regulations and the importance of maintains.

642008 統計學 2 必

本課程目的在教導學生了解基礎統計學原理，並正確使用統計分析軟體，正確解釋分析結果，並能正確呈現結果於正式報告中。

642008 Statistics 2 R

The purpose of this course is to introduce the basic theory of statistics, teach students how to use statistics software properly, explain the output correctly, and to wrap up the results in the formal report.

642009 體驗與探索教育 2 必

本課程主要目的在探討體驗教育在休閒運動產業之基本概念與應用技本課程主要目的在介紹體驗與探索教育領域之基本概念與技巧。授課內容包括：體驗教育的理論、平面探索活動、探索體驗活動與服務學習方案執行。

642009 Experiential and Adventure Education 2 R

The purpose of this course is to introduce the basic ideas and skills for experiential and adventure education. The contents of this course included: theory for experiential education, portable adventure activities, adventure activities and service-learning project.

642010 運動生理學與實驗 2 必

本課程目的為將人體生理學的知識應用在運動員，特別是當人體暴露在急性與慢性的身體活動時，人體結構與功能的改變。再者，運動時體內能量的來源與運用也是焦點之一。

642010 Exercise Physiology and Energy Metabolism 2 R

The purpose of this subject is to apply human physiology to people who engage in exercise, especially for the fact that the human functions and structures change when they expose to acute and chronic physical activities. Moreover, energy source and application during exercise are one of focuses in this subject.

642011 運動傷害防護學與實驗 2 必

本課程之目的在培養學生正確的運動傷害防護之概念，並訓練熟練正確之運動傷害防護實作技術應用於職場上，內容包括運動傷害病理學及上肢各關節部位之介紹。

642011 Principle and Practice in Athletic Training 2 R

The purpose of this course is to introduce the theoretical background of Sports Injury Prevention, in addition, application of the comprehensive concept into the practical circumstance is also emphasised. The content includes mechanisms and characteristics of musculoskeletal and nerve trauma, tissue response to injury and introduction of various joints in the upper extremity.

642012 體適能與肌力訓練 2 必

體適能可分為健康適能及運動適能，兩者相互聯繫，而健康體適能是所有體適能的基礎。健康適能包含的要素有：心肺耐力適能、肌力適能、肌耐力適能、柔軟性適能、身體組成。運動適能包含的要素有：協調性、速度、爆發力、平衡性、敏捷性、反應時間。肌力訓練：利用各種不同的訓練方式來達到增加肌肉量的訓練，所以只要是能夠「增加人體肌肉力量的訓練」，就是「肌力訓練」。

本課程目的即在透過學理基礎的教授，以及實務操作的訓練，培養學生在體能訓練指導方面之技能與知識。

642012 Fitness and Strength Training 2 R

Physical fitness can be divided into healthy fitness and exercise fitness, the two are linked to each other, and healthy fitness is the basic foundation for all physical fitness. Elements of healthy fitness include: cardiorespiratory endurance, muscle strength, muscle endurance, flexibility, and body composition. Exercise fitness include the elements: coordination, speed, power, balance, agility, and reaction time. Strength Training: Use a variety of training methods to achieve increased muscle training, so long as it is able to "increase the training of human muscle strength," is "muscle training."

The purpose of this course is to train students' skills and knowledge of physical training coaching through the academic teaching and practical training.

642100 運動推拿指壓學 2 必

此課程目的在使學生瞭解推拿指導之基本理論，並使其具備應用於運動之相關能力。

642100 Sports/Exercise Massage and Practice 2 R

The purpose of this course is to introduce the basic concepts and skills of massage to relax the muscle. In addition, students are expected to build the advantages on sports massage after taking this course.

642014 體適能測驗與評量 2 必

本課程之目的在培養學生習得各項體適能測驗之標準方式，並在實作過程中，訓練合宜之測驗態度及解說能力。對於測驗資料之蒐集與分析，也是本科目欲強調之目標之一。期能透過此項教學課程，使學生在面對不同的受測對象時，能夠對測驗的內容及結果，作詳盡的解說及提供正確的建議。

642014 Testing and Assessment in Physical Fitness 2 R

The main purpose of this course is to introduce the standard method of diverse physical fitness test, positive attitude, explanatory ability of data collecting and analysis during practical process.

642015 水上活動與安全指導 2 必

本課程之目的在於培養學生游泳技能與安全知識，並應用於教導、規劃、執行水域各類型休閒活動。

642015 Coaching of Water-based Sports and Safety 2R

The purpose of this course is to introduce the basic swimming skills and safety knowledge. The related topics will include instruction/design abilities of recreational activities of waterside.

642016 服務業管理 2 必

本課程針對服務業之管理暨實地參與學習服務作探討，課程包函學生戶外社區服務實習暨服務業的本質與定義、顧客需求、服務系統設計與作業管理、服務地點與佈置、服務業人力資源與行銷管理、服務等候線管理及服務品質管理與顧客滿意等。經此課程的學習可使同學真正瞭解服務業管理的內容，並安排實地參與學習且導入資訊科技的運用以改善服務業之效率與效能。

642016 Service Industry Management 2R

This course for the management of the service involved in learning and on-site services to probe further into the curriculum package letter outdoor student internships and community service with the definition of the nature of the service industry, customer demand for services, system design and operations management, service and location arrangement, the human services sector Resources and marketing management, service management and service lines to wait for quality management and customer satisfaction, and so on. After learning this course will enable students to truly understand the management of the service, and arrange on-site and participate in the study into the use of information technology to improve the efficiency and effectiveness of the service industry.

642017 運動心理學 2 必

本課程之目的在介紹健身運動相關之心理學各項理論與應用實務；主要議題如參與運動之動機、面對競賽之焦慮與壓力處理、教練與選手互動及團隊凝聚力等。課程中並將導入實務案例，以教導學生能應用心理輔助技巧於健身運動之情境。

642017 Sport Psychology 2R

The purpose of this course is to introduce the theory and practice of exercise and sports psychology. Related topics included in the class are as follows: motivation for participation, sport stress, and the interactio of coaches and athltetes, as well as team cohension. More importantly, students will learn how to apply psychological counseling techniques in sports and exercise field.

642018 團體運動訓練與指導 2 必

其目的是輔助學生對團體運動的參與者能夠充分運用指導能力而開發。學習體適能之五大要素：肌力、肌耐力、柔軟度、心肺功能、身體組成。由實作之過程中，發展本身之體適能及創造出各種模式之體適能活動，以增進其課程設計及運動指導之能力。

642018 Group Sports Training and Guidance 2 R

The purpose is to assist the student participants in team sports can make full use of coaching skills and development. Five elements to learn physical fitness: muscle strength, muscle endurance, flexibility, cardiopulmonary function, body composition. In the process of implementation, we develop our physical fitness and create various modes of physical fitness activities so as to enhance their ability in curriculum design and sports instruction.

642019 運動處方 2 必

本課程之目的在教導學生建立正確之運動處方開立之概念，其內容包括肌肉適能、心肺適能、柔軟度、身體組成．．等之運動處方開立之原則。期透過課程之實際經驗，協助學生增進其運動指導及處方開立之正確觀念。

642019 Exercise Prescription 2 R

The object of this course is to teach students having correct concept of sports prescription, which include muscle fitness, cardio respiratory fitness, limpness, and body composition. Students will have the basic concept of sports guidance, and sports prescription through the actual practice.

642020 戶外遊憩領導 2 必

本課程主要目的在培養學生戶外遊憩活動的領導與引導能力，透過領導與引導理論的介紹，學習戶外遊憩活動的進階知識與技能，並實際參與戶外遊憩活動的帶領。

642020 Leadership for Outdoor Recreation 2R

The purpose of this course is to train students to practice advanced leadership and facilitation in outdoor recreation activities through the introduction of theory and practice as well as the integration of knowledge of skill. Also, students are required to actually participate in leadership for outdoor recreation activities.

642021 運動生物力學 2 必

本課程目的在於介紹運動生物力學方法的基礎觀念與理論，以及蒐集、分析、解讀運動生物力學資訊所需的方法，包括：分析骨骼肌肉系統運作所需的力學知識、運動生物力學量測原理、現代運動生物力學量測方法、以及運動生物力學對神經肌肉疾患治療之應用。此外，課程亦從輔具及足部疾病的觀點探討輔具的運動生物力學，同時探討常用評估動作的運動生物力學，因此對於綜合健康領域的大學生而言，可幫助他們增進基礎與實作方面的運動生物力學知識。

642021 Biomechanics 2 R

The goal of this course is to introduce the basic concept and theory of biomechanics, as well as the method to collect, analyze and interpret kinetic and kinematic information. This course include the knowledge of mechanics, kinetics, kinematics, and the implication of biomechanics to neuromuscular disease. In addition, the implication to technologically assistive device and foot disease are also introduced. This class will help students develop basic and practical knowledge of biomechanics.

642022 實務專題(1) 2 必

本課程在訓練學生運用適當之研究方法完成專題計畫。學生將以團隊合作方式進行資料蒐集、分析、論文撰寫、與專題發表。

642022 Special Projects(1) 2 R

This course aims to develop students' ability in completing research as well as cooperation work. Students will have to work as a group to finish a study with a special topic they choose. A final oral presentation will be held later this year.

642023 領隊導遊實務 2 必

此課程將會授與學生領隊與導遊實務方面的技巧與觀念，重要的是將來從事此一行業的正確工作態度與服務的精神，從而認清領隊與導遊的工作真相，以便及早調整自己的就業方向。

642023 Practice of Leadership and Guidance 2 R

The course will introduce the conceptions and skills of leadership and guidance for students as to understand the working connotation of leadership and guidance. It also cultivates students to have the convenient attitude of service to looking for a good job.

642024 運動科技應用 2 必

本課程提供學生有關過去與現今運動科技的概念。幫助學生了解運動科技重要發展與目前最先進的資訊。透過學習運動科學相關知識轉化成運動科技產品，這將幫助學生建立基本運動科技的理論應用。

642024 Sports Technology Applications 2 R

This course provides students with the concepts of past and present sports science and technology. To help students understand the important development of sports science and technology and the most advanced information. Transforming into sports technology products through learning about sports science will help students to establish theoretical applications of basic sports science and technology.

642025 運動銷售實務 2 必

本課程主要目的是使學生針對瞭解運動實體產品與服務核心價值的，訓練學生覺察消費者的需求，透過合宜的態度與溝通能力，以促成實體商品或服務之價值交換可以滿足供需雙方需求。

642025 Sports Sales Practice 2 R

The main purpose of this course is to enable students to understand the core values of sports entities' products and services so as to help them identify the needs of consumers and facilitate the exchange of value of physical goods or services through the appropriate attitude and communication skills so as to meet the needs of both supply and demand parties.

642026 休閒運動方案企劃實務 2 必

休閒運動發展在台灣已邁入另一個嶄新的里程碑，現今各大城市極力開發運動觀光財(如申辦大型國際賽事，棒、足球賽、馬拉松等；及外國職業隊冬訓等)，並有效帶動周邊附屬產業成長與城市行銷。

本課程目的在培育產業專業領導人才及運動行銷公司專業人才能力養成。授課內容包括：產業發展趨勢與轉型、企劃專業人員角色、方案企劃與執行、方案評估與考察等四個方向，並透本課程案例分享、實際訪視(訪談)，有效引導學員內在探討與分享。

642026 Leisure sports program planning practice 2 R

Leisure sports development has entered another new milestone in Taiwan. In today's major cities, great efforts are being made to develop sports and tourism attractions (such as bidding for major international events, baseball, football, marathons and winter training for foreign professional teams) and to effectively promote peripheral affiliations Industrial Growth and Urban Marketing.

The purpose of this course is to nurture industry professionals and sports marketing professionals to develop professional ability. The course contents include: industrial development trends and transformation, the role of planning professionals, program planning and implementation, program evaluation and inspection in four directions, and through the case to share the case, the actual visit (interview), effectively guide students to explore and share .

642027 實務專題(2) 2 必

本課程之主要目標在協助學生完成專題研究及其他應具備之知能

642027 Special Projects(2) 2 R

The purpose of this course is to provide the necessary knowledge regarding individual projects, in addition, to provide comprehensive skills of this field.

642028 休閒運動職場實務 2 必

此課程旨在於讓學生能至職場實際體驗工作情形與環境，增加實際工作經驗，了解職場運作情形及工作所需，以期學生於畢業後能迅速與職場銜接。

642028 On job training and practice 2 R **in leisure and sport businesses**

The purpose of this course is to make students experience the working environments and situations, helping them to understand how a leisure/sport business runs and what skills the business needs. This course can help students to fit into the working environment quickly.

642029 導覽解說實務 2 必

本課程主要目標在教導學生增進各種休閒場域的服務禮節與解說技巧。

642029 Practice of Guidance and Explanation 2 R

The purpose of this course is to introduce the skills of service manners and explanation in the recreational sports settings.

642030 校外實習 2 必

本課程目的在，讓學生於校內學習後，對產業的運作有初步的認識與瞭解後。進而實際投入產業的運作，更進一步讓學理與實際的配合，更能充分瞭解的全程實際運作，時所遇到的問題與結局方法的訂定。作為日後投入業界的基礎訓練。

642030 Practice of Industrial Training 2 R

This course aims to enable students to learn at school after the initial operation of the industry's awareness and understanding later. And thus the operation of actual investment industry, further to the theoretical and practical cooperation, better understanding of the actual operation of the whole, the problems encountered when the method set with the outcome. The basis for future investment in industry training.

二、選修科目 Elective Courses

642031 運動與健康專業英語 2 選

本課程之目的在介紹幼兒體能基本動作能力之發展等相關理論，並配合遊戲理論使學生具備幼兒體能遊戲課程設計之能力。

642031 English of Sport 2 E

The purpose of this course is to help students improve the English abilities related to sports, exercise, and leisure activity in order to promote the reputation in the international market.

642032 球類運動與指導 2 選

本課程是希望透過學生透過運動的技術練習、規則講解、分組個人與團隊練習，提升學生對球類運動之運動技能與參加比賽之能力。

642032 Ball Sports and Coaching 2 E

The purpose of this course is to enhance the students' ability to exercise and participate through the exercise of technical exercises, rules to explain, group individual and team practice, improve students' sports skills and participate in the competition ability.

642033 網球運動與指導 2 選

本課程主要目的在培養網球基本動作、綜合應用技術、裁判規則及指導能力。授課內容包括：基本動作學習、單、雙打簡易比賽方法、綜合應用技術、比賽技術結構、戰術與戰略之應用、個別指導、教學、訓練及比賽之能力。

642033 Coaching of Tennis 2 E

The object of this course is to cultivate students to possess the base skills, synthesize skills, judgment and instruction ability of tennis. The contents of this course include base skills, singles game, double game, synthesize skills, tactics, strategy, individual instruction, teaching, training and competition technology.

642034 羽球運動與指導 2 選

本課程主要目的在培養羽球基本動作、綜合應用技術、裁判規則及指導能力。授課內容包括：基本動作學習、單、雙打簡易比賽方法、綜合應用技術、比賽技術結構、戰術與戰略之應用、個別指導、教學、訓練及比賽之能力。

642034 Coaching of Badminton 2 E

The object of this course is to cultivate students to possess the base skills, synthesize skills, judgment and instruction ability of badminton. The contents of this course include base skills, singles game, double game, synthesize skills, tactics, strategy, individual instruction, teaching, training and competition technology.

642035 桌球運動與指導 2 選

本課程的目的在使學生了解桌球運動的歷史、發展、規則技術與未來發展的趨勢。

642035 Coaching of Table Tennis 2 E

The purpose of this course is to introduce the comprehensive concept and skill of table tennis, in addition, to cultivate learners' guide ability in table tennis is also emphasized in this course.

642036 單車運動與指導 2 選

教會孩子兩件事：

- 一. 節能、減碳護地球。
- 二. 健康、養生 LOHAS。

642036 Instruction in Cycle Sports 2 E

Students taken this course will learn two things: (1) save energy and protect the earth; (2) keep healthy and maintain LOHAS.

642037 攀岩運動與指導 2 選

本課程目的在培養學生運動攀岩基本技能。攀岩安全求則、設備操作使用、攀登及確保的正確觀念，最後學習運動攀岩個別指導、教學、攀岩活動設計及規劃之能力。

642037 Coaching of Sport Climbing 2 E

The key purpose of this course is to cultivate students' basic sports climbing skills, safety concepts, equipment using, climbing and belay techniques to have competence of guidance, teaching, design and planning of sports climbing activities.

642038 徒手肌肉功能測試 2 選

本課程旨在使學生瞭解人體各關節骨骼肌的結構、起終點、神經支配及其執行的動作，並應用檢查必用的評估工具－徒手肌肉測試，提供臨床運動防護師一套完整的測試方法。

642038 Manual muscle testing and function 2 E

The purpose of this course is to introduce various musculoskeletal structure and function of the joint in the body which include the origin and insertion、innervation and its function。Throughout the application of evaluation and assessment tool－manual muscle testing, we provide clinical athletic trainers with thorough techniques of manual examination。

642039 運動技術教材教法 2 選

本系指導效率是整合運動技術教材在理論之質和量實際情況中，體育教師，教練，訓練員在思維上應當教什麼給學習者，運動技術是什麼、什麼運動技術是最好、什麼運動技術是錯的，依據什麼原理是辨別、錯的動作如何改正、使得運動員信任，獲得有效的結果，等等問題都是運動技術教材面臨的基本因素，都要經過適當的分析，才能圓滿解決，達到學習的效果。

**642039 Teaching Methods and Materials 2 E
in Physical Education**

The purpose of this course is to let students know how to be a good instructor in P.E. Especially, students taken this course will lean the correct PE. skills, how to correct a wrong posture, and the fundamental principles in P.E.. In this way, students will be equipped with the knowledge about how to be a good instructor in P.E.

642040 繩索挑戰安全操作 2 選

本課程主要目的在培養學生繩索挑戰安全操作能力，透過基本知識與技能介紹，加上課堂上實際操作，讓學生能夠獲得初級繩索挑戰安全操作能力，進而進行活動指導。

642040 Safety Practice for Challenge Courses 2 E

The purpose of this course is to develop students' competence for safety practice for challenge ropes courses through the introduction of basic knowledge and skills as well as the

actual practice in class to obtain the competence for basic instruction.

642041 運動觀光 2 選

本課程主要目的在培養觀光旅遊地區之運動設施服務之經營管理觀念。授課內容包括：探討運動觀光之意義、理論及範疇；運動觀光產業之特性及經營之關鍵成功因素；運動觀光產業之發展現況及運動觀光行為分析；運動觀光設施服務之整體規劃、管理、行銷規劃；運動觀光設施服務進行個案探討。

642041 Sports Tourism 2 E

The object of this course is to cultivate students to possess the concept of manage regarding infrastructures of sport in relation to tourism destination. The contents of this course include the meaning, theory, scope, characteristic, critical factor, current situation, sport tourism behavior, plan, manage, marketing and case study of infrastructures of sport in relation to tourism destination.

642042 社區健康營造 2 選

本課程主要在介紹、導讀及分享健康營造的基礎概念與立論，並以世界衛生組織對健康營造的相關案例為範圍，以教導學生在社區健康營造上專業知識與技能。因應本系學生畢業職場所需，課程中將特別著重社區中健身運動之推廣與應用。

642042 Community Health Building 2 E

Through the process of reading, presentation, discussion and sharing, students will familiarize the theories and skills related to community health building. The purpose of this course is to provide the whole concept of community health building under the structure of World Health Organization, additionally, to provide the opportunity for practical training on related domains. In addition, how to design and promote physical activity in the community setting.

642043 單車保養與維修實務 2 選

單車早期為代步用的工具，發展至今已經成為一項多元的運動器材，本課程的目的在使學生了解如何選擇單車與騎乘設定、單車機械運作的原理以及保養維修。

642043 Practice for Bike Maintenance and Repair 2 E

Bikes were used as transport means in early days. Nowadays, it has become one type of diverse sports equipment. The purpose of this course is to enable students to learn how to choose bikes, fittings, the theory of mechanical operation and the maintenance.

642044 進階球類運動與指導 2 選

本課程是希望透過學生透過運動的戰術應用、技術訓練、分組比賽等方式增加學生之專業指導能力。

642044 Advanced Ball Sports and Coaching 2 E

The purpose of this course is to enhance the students' coaching ability through the tactical application of sports, technical training, group competitions and other ways to increase the professional coaching of students.

6420445 進階網球運動與指導 2 選

本課程主要目的在培養進階網球基本動作、綜合應用技術、裁判規則及指導能力。授課內容包括：基本動作學習、單、雙打簡易比賽方法、綜合應用技術、比賽技術結構、戰術與戰略之應用、個別指導、教學、訓練及比賽之能力。

642045 Coaching of Advanced Tennis 2 E

The object of this course is to cultivate students to possess the advanced skills, synthesize skills, judgment and instruction ability of tennis. The contents of this course include advanced skills, singles game, double game, synthesize skills, tactics, strategy, individual instruction, teaching, training and competition technology.

642046 進階羽球運動與指導 2 選

本課程主要目的在培養學生進階之羽球動作、綜合應用技術、裁判規則及指導能力。授課內容包括：進階動作學習、單、雙打比賽戰術與戰略之應用、個別指導、教學、訓練及比賽之能力。

642046 Advanced Coaching of Badminton 2 E

Purpose of this course is to cultivate students to possess the advanced skills, synthesize skills, judgment and instruction ability of badminton. The contents of this course include advanced skills, singles game, double game, synthesize skills, tactics, strategy, individual instruction, teaching, training and competitive skills.

642047 進階桌球運動與指導 2 選

本課程之目的，在以基礎桌球課程作為根基，教導學生更純熟及高難度之桌球技巧。並透過實作過程，協助學生建立桌球教學之概念及實戰經驗。

642047 Advanced Coaching of Table Tennis 2 E

This course is based on the basic table tennis. The purpose of this course is to help student to learn more mature level of table tennis skill including the instructing skills and competition experience.

642048 旅運管理實務 2 選

本課程以概論方式介紹旅行業經營與管理領隊相關基本知識與概念，讓同學瞭解現代旅行業從業人員的工作內容，讓學生瞭解旅行業相關產品，現代旅遊發展趨勢及觀光行銷的技巧與觀念，以作為未來從事旅遊相關行業及後續課程之深造基礎。

642048 Travel Management 2 E

This course introduces structures and functions of travel agents, basic operations of arranging tours, accommodations, transportation and meals for the travelers domestically and overseas . It also tells the trend of development of travel agents in the areas of marketing, computer application, internet. In addition, the laws and regulations about hospitality are taught , the future of this industry is studied.

642049 有氧舞蹈運動與指導 2 選

有氧舞蹈以有趣的方式強化體適能。有氧舞蹈配合特定音樂，內容主要分為燃燒脂肪、肌肉雕塑以及伸展的部分。有氧舞蹈類型有高低衝擊有氧、階梯有氧和水中有氧。本課程之目的在透過有氧舞蹈運動之教學與練習，讓學生學習有氧舞蹈之基本技能及指導方式。

642049 Aerobic Dance Exercise and Coaching 2 E

Aerobic Dance is a fun way to get fit. It combines fat-burning aerobic movements, muscle-building exercise, and stretching into that are performed to music. Aerobic dance can be classified into high-impact exercises, low-impact, step aerobics and water dance aerobics. The purpose of this course is to teach skill of aerobic dance, in addition, to cultivate learners' guide ability in aerobic dance is also emphasized in this course.

642050 急救學與實驗 2 選

本課程之主要目的在教導學生了解急救學之理論與實際操作技巧，並能應用於運動領域中。

642050 First Aid and Practicum 2 E

The major purpose of this course is to introduce the theoretical concept of first aid. In addition, it is expected that students will learn and apply the first aid skills to practical circumstance.

642051 運動傷害評估學 2 選

本課程之目的在教導運動傷害評估之基礎理論，並培養學生面臨運動傷害事件發生時，對傷者患部傷害程度及急救處理原則之判斷能力。

642051 Physical Examination of the Spine and Extremities 2 E

The purpose of this course is to introduce the basic theory and evaluation skills of sports injury in sports field. Students should be trained in the judgment of injury degree and first aid treatment in the event of sports injuries.

642052 休閒行為 2 選

本課程主要從哲學觀點來分析人類休閒行為，希望培養學生對此領域的基本知能。

642052 Leisure Behavior 2 E

The aim of this course is through the views of philosophy to analyze leisure behaviors of human, and hope to cultivate students' knowledge and abilities in this field.

642053 墊上核心運動與指導 2 選

墊上核心運動與指導課程，融合了瑜珈、運動調節、復健、舞蹈等精髓，可提高全身肌肉的強化、柔軟度與平衡，將重點置於身體軀幹，培養身體安定的力量，以組合的方式活動身體，以求改善姿勢、調整體線、增進健康，而且適用於各種體能水準的學生。

642053 Mat Science 2 E

Mat Science is a program that includes a progressive series of exercises that accommodate all fitness levels to increase strength, flexibility and balance of the entire body. The Mat Science exercises are derived from classic disciplines such as yoga, dance and sports rehab conditioning. The focus of Mat Science is on mindful movement, core stabilization technique and unified body movements.

642054 運動保健學 2 選

本課程之目的在讓學生了解運動與身體保健間之關聯性，進而能夠培養運動與疾病預防及疾病治療領域之正確概念。

642054 Principles of Athletic Training 2 E

The purpose of this course is to offer the comprehensive concept of sports and physical care relationship; the relative topics include the relationship between sports and diseases prevention, and correct concept of disease treatment.

642055 運動賽會管理 2 選

本課程授課內容主要在於介紹管理方面的理論知識，並結合賽會管理的實務操作，以達到如何管理各類大小賽會的實務知識。透過成果報告的繳交，讓學生學習並紀錄自己所學的實務知識，達到學以致用的目的。

642055 Sport Event Management 2 E

The purpose of this course is to equip students in class with the theoretical and practical knowledge about how to manage a sport event reasonably by case studies. Also, students will have to get involved in a real case of the sport event in any kind and then give the instructor a final report.

642056 觀光學 2 選

本課程旨於介紹觀光的重要性，觀光產業之基本組成及要素，其運作機制，觀光發展及環境變化對應之議題，並使學生瞭解觀光相關產業之發展趨勢。透過課程教導、分組討論、專題研討等教學方式加深學生對觀光產業的認識。

642056 Introduction to Tourism 2 E

The purpose of this course is to make students understand the importance of tourism, the realm of tourism, the tourism industry, the mechanism of tourism, the development of tourism and the issues of tourism and environment. Meanwhile, it is important to enable students to possess the sense of the development of tourism. In order to achieve this purpose, course teaching, group discussion, and studying specific issues will be employed in this course.

642057 大數據行銷與實務應用 2 選

本課程透過介紹大數據分析相關軟體之介紹與應用，幫助學生具備基礎的巨量資料擷取與分析能力，並透過實務個案資料分，提升學生資訊應用及行銷的能力。

642057 Big Data Marketing and Practice 2 E

The purpose of this course aims to introduce statistical software related to big data to students and equips them with abilities of retrieving and analyzing huge data. By analyzing practical cases, students also learn how to manage and apply these data to real cases in marketing filed.

642058 休閒服務品質管理 2 選

針對休閒產業的特性，提供學生從事服務品質管理、調查顧客滿意度、進行顧客關係管理以及建立長期顧客關係 所應具備之知識。

642058 Service Quality Management in Leisure Industry 2 E

Based on the characteristics of the leisure industries, the course provides students the knowledge in managing service quality, conducting the surveys of customer satisfaction, engaging in customer relationship management and building the long-term customer relationships.

642059 戶外冒險教育 2 選

本課程主要目的在培養學生戶外冒險教育活動指導能力，透過冒險教育理論與指導方式的介紹，學習戶外冒險教育的基本知識與相關技能。

642059 Outdoor Adventure Education 2 E

The purpose of this course is to train students to practice instruction in outdoor adventure education through the introduction of theory and practice as well as the integration of knowledge of skill.

642060 休閒教育 2 必

本科目之目的為了解休閒教育的基礎及實行的方法。休閒教育的理論與實際操作方式

將在本課程中討論以促進學生體驗休閒教育功能。

642060 Leisure Education 2 R

The purpose of this course is to provide the student with a basis understanding and the ability to conduct leisure education. Theories and practices of leisure education will be introduced in this course for students to be able to have the exploration of self and leisure.

642061 樂齡運動與健康促進 2 選

本課程主要目的係因應高齡社會與健康促進之議題，指導學生應用運動休閒相關知能於實務操作，藉以提高學生在健康照護職場之服務經驗與能力。

642061 Aging Exercise and Health Promotion 2 E

Within the topic of aging society, the purpose of the class is aimed to apply the knowledge and practical skills of the recreational sports to clinical settings of aged people, in addition, to enhance students' clinical experiences for their career.

642062 運動貼紮與實驗 2 選

本課程之目的在介紹貼紮之基本理論，讓學生具備運動傷害防護之貼紮技巧。

642062 Strap/Bandaging Techniques in Athletic Training 2 E

The main purpose of this course is to introduce the basic theory of sports taping and strapping techniques including the upper and lower extremities. The practical skills will be emphasized during the course

642063 運動復健學 2 選

本課程旨在提供運動理療師一套與運動傷害復健相關內容的設計、執行及監督之完整指導課程。課程內容包括骨骼肌肉傷害之復原過程及生理病理學、運動醫學上之復健目標設立，維持及改善柔軟度、肌力及肌耐力訓練、等速肌力訓練、藥球在復健上的應用、閉鎖式復健運動、心肺耐力的維持、本體感覺、關節感知及神經肌肉控制的建立、關節鬆動術及牽引的復健應用、本體感覺神經肌肉促進術、功能式之漸進訓練以及身體關節各部位之復健。

642063 Rehabilitation Techniques in Sport Medicine 2 E

The purpose of this course is to provide the sports therapist with a comprehensive guide to the design, implementation and supervision of rehabilitation programs for sport-related injuries. The content includes the healing process and the pathophysiology of musculoskeletal injury, rehabilitation goals in sports medicine, maintaining and improving flexibility, muscular strength and endurance, isokinetics in rehabilitation, plyometric exercise in rehabilitation, closed-kinetic chain exercise, maintenance of cardiorespiratory endurance, reestablishing proprioception、kinesthesia、joint position sense and neuromuscular control in rehabilitation, mobilization and traction techniques in rehabilitation, proprioceptive neuromuscular facilitation techniques, functional progression in rehabilitation, and rehabilitation of human related joints.

642064 飛輪運動指導 2 選

本課程的目的是讓學生具備帶領室內飛輪團體運動課程之能力，並且能夠規劃相關課程符合不同運動族群之需求。

642064 Flywheel Sports instruction 2 E

The purpose of this course is to training students with the ability to lead in-house flywheel group exercise class and to design relevant courses to meet the needs of different exercise groups.

642065 團康活動遊戲設計 2 選

本課程主要目的在培養學生團康活動企劃、設計、組織、領導與帶領等能力。藉由大地遊戲、晚會活動、營隊等團康活動讓學生具有獨立規劃、設計以及承辦相關活動的能力。授課內容將帶入各種案例研討、小組活動、模擬教學等方式引導學生從實做的過程中達到學習目標。

642065 Planning and Design for Group Activity of Peace 2 E

The purpose of this course is to develop students' abilities of planning, design, organization and leadership for Group Activity of Peace. Students will be able to independently plan, design and undertaken the group activities of peace through the practice of field games, evening entertainment, camp group activity etc. The course refers to case study, group work, simulation teaching to lead students to achieve learning outcomes in the process of doing.

642066 生態旅遊 2 選

生態旅遊是兼顧生態保育、地方社區與旅遊發展的新興遊憩活動。本課程探討生態旅遊的各個層面，期能培養學生正確生態旅遊的概念。

642066 Ecology Traveling 2 E

Ecotourism is a new recreational activity that includes ecology, environment protection, community, and tourism. The aim of this course is to introduce the coverage of ecotourism as to cultivate convenient conceptions of ecotourism for students.

642067 進階水上活動與安全指導 2 選

本課程主要目的在深化學生有關水上活動與安全指導之實作經驗與能力並能取得相關專業證照。課程內容包括：水上救生、浮潛、水肺潛水、衝浪、海洋獨木舟、風浪板活動與指導，以提升學生水上活動技指導能與安全維護能力。

642067 Advanced Coaching of Water-Based Sport and Safety 2 E

Course this main purpose to deepen student make experience and ability and can make relevant certificates about water activity and whom security instruct in fact. The course content includes: water lifesaving, skin-dive, dive, surfs, marine dugout canoe, stormy waves board activity and guidance, it can be with safeguarding ability safely to guide in order to improve student's water activity skill.

642068 旅遊糾紛實務與管理 2 選

此課程介紹旅遊時要注意的事項,旅遊時遇有糾紛時應該如何危機處理. 並配合國內旅遊糾紛實例為教學內容。

642068 Travel Dispute Management 2 E

This course introduces the matters needing attention when traveling, how to deal with the crisis when there is a dispute, and to cooperate with the domestic tourism disputes as the teaching content.

642069 民宿經營管理與實務 2 選

本課程旨在介紹休閒民宿的意義、設施、相關法規、休閒民宿在世界及台灣的發展概況，以訓練學生如何當一個稱職的民宿主人。

642069 The Operation Management and Practice of B&B 2 E

This curriculum introduces students the meaning, facility, related law and development situation of B&B in the world and Taiwan. It also trains students to be a convenient manager of

B&B.

642070 進階墊上核心運動與指導 2 選

進階墊上核心運動與指導課程，以瑜珈、運動調節、復健、舞蹈等精髓，可提高全身肌肉的強化、柔軟度與平衡，將重點置於身體軀幹，培養身體安定的力量，以組合的方式活動身體，以求改善姿勢、調整體線、增進健康，而且適用於各種體能水準的學生。並將輔導學生增進運動指導能力與相關証照考取。

642070 Advance Mat Science 2 E

Mat Science is a program that includes a progressive series of exercises that accommodate all fitness levels to increase strength, flexibility and balance of the entire body. The Mat Science exercises are derived from classic disciplines such as yoga, dance and sports rehab conditioning. The focus of Mat Science is on mindful movement, core stabilization technique and unified body movements. Furthermore, this advance program will improve student's instructing abilities and assist student in related license qualified.

642071 運動傷害防護儀器之運用 2 選

本課程目的在於教導學生正確的運動治療的方法與概念，課程內容涵蓋儀器治療的理論基礎、溫度儀器、電療儀器、機械性儀器、以及其他儀器之應用。

642071 Therapeutic Modalities for Sports 2 E Medicine and Athletic Training

The purpose of this course is to introduce the theoretical concepts on exercise therapy and practice. The topics of this course include foundation of therapeutic modalities, thermal modalities, electrical modality, mechanical modalities and other modalities

642072 運動保健之經營與管理 2 選

本課程的主要目的是提供給運動傷害防護師各種行政知識與管理技巧的一套標準模式。課程內容包含管理的理論基礎、工作計畫表的管理、人際資源的管理、經費來源的管理、設施的設計與計畫、保健資料的處理等。

642072 Management Strategies in Athletic Training 2 E

The primary purpose of the course is to provide a standard mode for the kinds of administrative knowledge and managerial skills that every athletic trainer should master. The content of this course includes the theoretical basis of management, program management, human resource management, financial resource management, facility design and planning, information management and so on.

642073 鐵人三項運動與指導 2 選

鐵人三項是由三個傳統運動項目合組而成的綜合運動項目。當中包括游泳、單車及跑步。從事三項全能的運動員必須往往擁有完美的體形和身體素質，因為三項運動都是耐力運動，而所有的三項全能訓練都是有氧運動。鐵人三項運動必須在游泳、單車及跑步三項運動間，完成成功的運動型式轉換。本課程之目的，在於教導學生如何調配體能，教導游泳、自行車、跑步的進階技術練習，提高運動的經濟性，並同時教育學生如何安排訓練計畫與記錄訓練日誌，並至少完成一項鐵人三項比賽。

642073 Triathlon Training and Instruction 2 E

Triathlon is a multiple-stage competition involving the completion of three continuous and sequential endurance disciplines. Triathlon involves swimming, cycling, and running in

immediate succession over various distances. Triathletes compete for fastest overall course completion time, including timed "transitions" between the individual swim, cycle, and run components. The purposes of this course include coaching students to build up their physical fitness, and improve swim, cycling and running skill. Training schedule and diary will be included in the class. At final stage, students have to finish a triathlon competition at least.

642074 肌能系貼紮應用 2 選

本課程目的在介紹一般常見的身體問題，以及肌能系貼紮之應用，例如：腕隧道症候群、五十肩、網球肘、下背痛、抽筋、水腫、暈車、氣喘、月經痛等的問題。本課程中將討論這些健康問題可能原因、機制與軟組織貼紮改善之方法，幫助學生建立解決這些健康問題的正確觀念與方法。

642074 Applications of Kinesio Tape 2 E

The goal of this course is to introduce the common health problems and the implication of kinesio tape, for example: carpal tunnel syndrome, frozen shoulder, tennis elbow, low back pain, muscle cramp, edema, motion sickness, asthma, and dysmenorrhea (pain on menses) and etc. The possible reasons, mechanism and the implication of kinesio tape will be introduced, and discussed. This class will help students develop correct opinions and methods for solving health problems.

642075 運動營養學 2 選

本課程提供學生運動營養之基礎知識。內容包含運動營養及相關策略對身體組成、運動表現與新陳代謝之急性和慢性影響。

642075 Sports Nutrition 2 E

This course provides the basic knowledge of sports nutrition. Including acute and chronic effect of sports nutrition and supplementation strategies on body composition, sports performance and metabolism.

64276 高爾夫球運動與指導 2 選

本課程之目的在教導學生之高爾夫球擊球基本技巧，並能了解和運用規則，藉以培養學生具備於畢業後在休閒度假場域中的高爾夫球指導能力。

64276 Coaching of Golf 2 E

The purpose of this course is to introduce the comprehensive concept and skill of golf, in addition, to cultivate learners' guide ability in golf is also emphasized in this course.

64277 遊程設計 2 選

本課程主要針對旅行社的套裝行程來設計天數不等的遊程，以滿足旅客的不同需求，並作成本分析以收合理的利潤。

64277 Package Tours Management 2 E

The curriculum focuses on designing different package tours for traveling agents to appease tourist needs, and analyzes the costs to get the advisable interest.

64278 運動行為改變技術 2 選

本科目之目的在教導學生了解行為改變技術之理論形成的背景，並能應用「行為改變技術」的各項基本原理與策略應用於休閒與運動領域上；並期學生能應用「行為改變技術」之實施計劃，處理個體之欲改變之健身運動行為。

64278 Exercise related Behavior Modification 2 E

The purpose of this course is to provide the student with a basis understanding and the ability regarding behavior modification. Theories and practices of behavior modification will be introduced in this course for students, moreover, a self-selected and exercise related behavior that apply to behavior modification techniques will be conducted in this course.

642079 海洋運動 2 選

本課程希望延伸游泳技術，學習多樣化之海洋運動，例如浮潛、潛水、海洋獨木舟、風浪板與帆船；以及透過校外實際參訪與體驗，培養學生加入海洋運動產業之專業知能。

642079 Marine Sports 2 E

The purpose of this course is hope to extend swimming skills and learn a variety of marine activities such as snorkelling, diving, marine canoeing, windsurfing and sailing; and developing students' professional know-how in the marine sports industry through practical school visits and experiences.

642080 體驗教育引導技術 2 選

本課程主要目的在培養學生體驗教育活動的領導與引導能力，透過領導與引導理論的介紹以及實際參與體驗教育活動的方式獲得相關知識與技能。課程內容包括體驗教育相關基礎理論、引導技巧教學、引導反思能力與實務體驗等。

642080 Facilitation Techniques for Experiential Education 2 E

The purpose of this course is to develop students' leadership and facilitation skills in Experiential Education through the introduction of the relevant theories and actual participation of EE activities. The course content includes: fundamental theory of EE, leadership and facilitation, reflection ability, practical experience etc.

642081 特殊族群運動指導理論與實務 2 選

本課程內容涵蓋的範圍為特殊族群在參與運動時應注意的事項與運動計畫的設計原則。首先必須先分析各族群的身體特性，包括生長發育與成熟度、老化現象，以了解身體需求與生理限制及探討運動參與的重要性，並進行實務指導練習，以期具備指導特殊族群運動之專業知識與指導能力。

642081 Exercise in Special Population:from Theory to Practice 2 E

The purposes of this course include exercise program design and sports participation notices for special population. The first step, the body characteristic and limitation for those special groups should be analyzed, including mature, aging etc. That will help students understand the physiological need and limitation for special population, and realize the importance of exercise participation. Further, students could practice exercise instructing to enhance their knowledge and abilities in this area.

642082 運動防護實習 2 選

本課程之目的在於使學生將大學課堂所習得的運動傷害防護知識及技術，實際應用於臨床實務上。學生將透過運動傷害防護室的參與及校隊跟隊的方式完成此課程，有助於學生成為一位獨當一面的運動傷害防護師。

642082 Practicum in athletic training 2 E

The purpose of this course provide students with knowledge and techniques background in the athletic training to practice in clinical settings. Students will need to follow school team's activities and practice assessment, taping and strapping, and treatment skills for various cases in athletic training room throughout the course. It will aid students in obtaining the capability to be

an independent athletic trainer for themselves.

642083 個人運動訓練與指導 2 選

本課程之目的在培養學生成為個人指導員，並考取相關証照。課程內容包含：運動科學、教育概論、輔導的學習。其中包括下列細項：健康及生活型態、心肺持久力及運動處方、柔軟度、抗阻訓練、肥胖、壓力管理、特殊族群等。

642083 Personal Training and Guidance 2 E

The purpose of this program is to assist students to be a qualified personal exercise trainer. The curriculum includes: Anatomy and kinesiology, Fitness assessment testing procedures, Nutrition fundamentals and weight management, Special populations and medical considerations, Listening, leadership and motivational skills, Exercise programming in the weight room, and Wellness programming and screening guidelines.

642084 兒童體適能 2 選

本課程之目的在介紹幼兒、兒童階段的動作能力之發展等相關理論，並配合遊戲理論使學生具備幼兒至兒童階段體適能遊戲課程設計與指導之能力。

642084 Youth Fitness 2 E

The purpose of this course is to introduce the theoretical background of children's physical fitness and basic movement, in addition, to offer the basic concept and skills in designing and teaching children's physical activities.

642085 探索教育方案規劃 2 選

探索教育屬體驗式學習的領域。ADVENTURE 是冒險的意思，國內八十六年被引進台灣，並將 Project Adventure 翻譯為「主題式冒險活動」或「突破休閒」，國內廣泛使用「探索教育」一詞。本課程目的在培育產業專業領導人才及企業人力發展系統師資養成。授課內容包括：活動體驗、方案規劃、方案評估、探索教育方案規劃等四個方向，並透過共創互動式教學「遊戲」引導學員內在探討與分享；及「活動」強調探討與分享互動部份；進而透過「方案」係依循課程主題或目標，並經由一連串的遊戲與活動組合一套有系統的方案。

642085 Explore educational program planning 2 E

Exploring education is an area of experiential learning. Adventurous is adventurous. It has been introduced into Taiwan for 86 years and translates Project Adventure as "thematic adventure" or "break through leisure". The word "exploration education" is widely used domestically. The purpose of this course is to nurture industry professional leaders and enterprise human resources development system. The lectures cover four aspects: activity experience, program planning, program evaluation and exploration of educational program planning. Students are also encouraged to explore and share their experiences through the creation of an interactive teaching "game"; and "activities" emphasize the exploration and sharing of interactive components ; And through the "Program", follow a course theme or goal and combine a systematic program through a series of games and activities.

642086 進階高爾夫球運動與指導 2 選

本課程之目的在教導學生習得高爾夫球運動之進階技巧，並培養學生具備高爾夫球運動教練指導能力。此外，本課程亦協助取得高爾夫球各級相關教練裁判證照。

642086 Advanced Coaching of Golf 2 E

The purpose of the course is to advance students' golf techniques and to cultivate the coaching ability in golf. In addition, the course will assist students to acquire different levels of golf judge and coach certifications.

642087 旅行業行銷與企劃 2 選

本課程主要將使學生瞭解旅行業行銷相關理論並能應用於實務。其次將培養學生思考分析能力，並學習行銷計畫書的撰寫。

642087 Planning and Marketing in tourism Industry 2 E

This course will enable students to understand the theory of marketing related to travel industry and apply it to practice. Secondly, we will develop students' thinking and analysis ability and study the writing of marketing plan.

642088 活動風險管理 2 選

本課程主要目的是在促進學生在辦理各種規模之活動，能有系統性的思維與預防措施，降低各種舉辦活動可能造成之風險，確保運動消費者安全。

642088 Event Risk Management 2 E

The purpose of this course is to promote students in handling activities of all sizes, can have a systematic thinking and preventive measures, reduce the risk posed by various activities held to ensure the safety of sports consumers.

642089 活動規劃管理與設計 2 選

本課程之目的在介紹各種不同生命週期休閒活動需求輔以活動規劃原則，並教導學生具備針對不同族群休閒活動規劃與設計之實務能力。

642089 Program planning Management and Design 2 E

The object of this course introduces the requirements of every kind of activity and program principles to offer students with ability of recreational program and design to different needs.

642090 進階海洋運動 2 選

本課程希望延伸多樣化海洋運動能力，透過專業輔導，取得相關浮潛、潛水、海洋獨木舟、風浪板與帆船之專業指導證照；強化與提升學生海洋運動產業就業能力。

642090 Advanced Marine Sports 2 E

The purpose of this course is hope that the diversified capabilities of marine sports will be extended. Professional guidance will be obtained through professional guidance on relevant professional snorkeling, diving, marine canoeing, windsurfing boards and sailboats, and enhancing and enhancing the employability of marine sports industry students.

642091 運動創新創業 2 選

本課程主要目的是希望學生透過整合既有外部資源，結合所學專業能力與自我特質，透過系統性推理開創產業發展新思維。

642091 Sport industry innovation and entrepreneurship 2 E

The main purpose of this course is to enable students to create new thinking on industrial development through systematic reasoning by integrating existing external resources, combining their professional abilities and self-traits.

642092 銀髮族體適能保健與實務 2 選

本課程之主要目的是在讓學生了解老化對老人身心所產生影響，對於老人休閒活動安排、指導與管理時應注意的事項，進而時老人能在充分的準備下獲得保健的運動休閒技能。

642092 Elderly Physical Fitness and Health Promotion 2 E

The purpose of this course to teach students to realize the effects of ageing to the old, know the principles of recreational activities, guidance, management in order to help the old to obtain recreational sports skills under well prepared coaching.