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## ②图玄束至大學

# 教學計劃表 Syllabus

| 課程名稱(中文)<br>Course Name in Chinese | 計算機概論                            |                               |  |                                       | 學年/學期<br>Academic Year/Semester |  |  |  |
|------------------------------------|----------------------------------|-------------------------------|--|---------------------------------------|---------------------------------|--|--|--|
| 課程名稱(英文)<br>Course Name in English | Introduction to Computer Science |                               |  |                                       |                                 |  |  |  |
| 科目代碼<br>Course Code                | ACIM10010                        | 系級<br>Department 學一<br>& Year |  | 開課單位<br>Course-Offering<br>Department | 會計與資訊管理國際學士<br>班                |  |  |  |
| 修別<br>Type                         | 學程 Program                       | 學分數/時<br>Credit(s)/Hou        |  |                                       | 3.0/3.0                         |  |  |  |
| 授課教師<br>Instructor                 | /張烜瀚                             |                               |  |                                       |                                 |  |  |  |
| 先修課程<br>Prerequisite               |                                  |                               |  |                                       |                                 |  |  |  |

#### 課程描述 Course Description

This course is designed to provide students with the essential introductory concepts of computer science, aiming to equip them with the knowledge of applications relevant to business and management. Covering essential materials such as computer systems, the internet, number systems, and logic, the curriculum also introduces modern topics like the Internet of Things (IoT), machine learning, and artificial intelligence at an introductory level. Targeted at those with limited exposure to computer science, the course prepares students for globalized business and technology environments, focusing on leveraging computer science to enhance management strategies and operations. The course is also delivered in English.

#### 課程目標 Course Objectives

This course provides a comprehensive overview of fundamental topics in computer science. Students will gain basic knowledge about computers, data manipulation and abstraction, computer architecture and organization, software development, operating systems, databases, networks, multimedia, and artificial intelligence. By the end of the course, students will have a solid foundation and knowledge in computer science, making them well-prepared for further advanced studies in advanced fields.

|   | 系專業能力<br>Basic Learning Outcomes     | 課程目標與系專業能<br>力相關性<br>Correlation between<br>Course Objectives<br>and Dept.'s<br>Education<br>Objectives |
|---|--------------------------------------|---|
| A | 兼具會計資訊理論與實務操作及專業知識,具備跨領域解決問題能力       | •   |
| В | 具有良好之會計資訊理論基礎與分析能力,具備相關領域升學或就業之知識與能力 | •   |
| С | 具備以資訊技術協助企業運作與商業管理之知識與應用能力           | •   |
| D | 具有會計資訊、風險控管、電腦審計與稅務整合能力              | 0   |
| Е | 具備超然獨立並嚴格遵守會計資訊專業倫理的道德勇氣             | 0   |
| F | 具備團隊合作、國際視野、創造性思考及良好的外語能力            | •   |

圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated

#### 授課進度表 Teaching Schedule & Content

| 週次Week | 內容 Subject/Topics | 備註Remarks |
|--------|-------------------|-----------|
| 1      | Orientation       |           |

| 2                                | Computer Systems   |            |  |  |  |  |
|----------------------------------|--|------------|--|--|--|--|
| 3                                | Number Systems 1   |            |  |  |  |  |
| 4                                | Number Systems 2   |            |  |  |  |  |
| 5                                | Data Operations and Storage 1                                  |            |  |  |  |  |
| 6                                | Data Operations and Storage 2                                  |            |  |  |  |  |
| 7                                | Computer Networks  |            |  |  |  |  |
| 8                                | Algorithms   |            |  |  |  |  |
| 9                                | 期中考試週 Midterm Exam   |            |  |  |  |  |
| 10                               | Data Structure   |            |  |  |  |  |
| 11                               | Introduction to Database Management                            |            |  |  |  |  |
| 12                               | Introduction to Cybersecurity                                  |            |  |  |  |  |
| 13                               | Introduction to Internet-of-Things                             |            |  |  |  |  |
| 14                               | Introduction to Artificial Intelligence                        |            |  |  |  |  |
| 15                               | Introduction to Machine Learning                               |            |  |  |  |  |
| 16                               | Introduction to Data Science and Data Mining                   |            |  |  |  |  |
| 17                               | Social Media and Digital Marketing                             |            |  |  |  |  |
| 18                               | 期末考試週 Final Exam   |            |  |  |  |  |
|                                  | 教 學 策 略 Teaching Strategies                                    |            |  |  |  |  |
| ✓ 課堂講                            | 授 Lecture 分組討論Group Discussion 參觀實習                            | Field Trip |  |  |  |  |
| ✓ 其他Mis                          | scellaneous: 運用kahoot!即時反饋系統輔助課堂講授                             |            |  |  |  |  |
|                                  | 教學創新自評 Teaching Self-Evaluation                                |            |  |  |  |  |
| 創新教學(                            | Innovative Teaching)   |            |  |  |  |  |
| 問題導                              | 向學習(PBL)                             解決導向學                     | 型習(SBL)    |  |  |  |  |
| 翻轉教                              | 室 Flipped Classroom  |            |  |  |  |  |
| 社會責任(                            | Social Responsibility)   |            |  |  |  |  |
|                                  |  |            |  |  |  |  |
| 跨域合作(Transdisciplinary Projects) |  |            |  |  |  |  |
|                                  | 學Transdisciplinary Teaching     跨院系教學Inter-collegiate Teaching |            |  |  |  |  |
| 業師合:                             | 授 Courses Co-taught with Industry Practitioners                |            |  |  |  |  |
| 其它 othe                          | r:   |            |  |  |  |  |

| 學期成績計算及多元評量方式 Grading & Assessments                      |                    |          |          |          |          |          |          |          |    |
|--|--------------------|----------|----------|----------|----------|----------|----------|----------|----|
| 配分項目   | 多元評量方式 Assessments |          |          |          |          |          |          |          |    |
| Items  | 配分比例<br>Percentage | 測驗<br>會考 | 實作<br>觀察 | 口頭<br>發表 | 專題<br>研究 | 創作<br>展演 | 卷宗<br>評量 | 證照<br>檢定 | 其他 |
| 平時成績(含出缺席)<br>General Performance<br>(Attendance Record) | 20%                |          | <b>~</b> |          |          |          |          |          |    |
| 期中考成績 Midterm Exam                                       | 30%                | <b>~</b> |          |          |          |          |          |          |    |
| 期末考成績 Final Exam   | 30%                |          |          |          | <b>~</b> |          |          |          |    |
| 作業成績 Homework and/or<br>Assignments                      | 20%                |          | <b>~</b> |          |          |          |          |          |    |
| 其他 Miscellaneous   |                    |          |          |          |          |          |          |          |    |

評量方式補充說明

Grading & Assessments Supplemental instructions

### 教科書與參考書目(書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

其他補充說明(Supplemental instructions)