

國立屏東大學 112學年度第1學期 教學課程綱要

※為保護智慧財產權，請勿非法影印教科書。

課程學分數：3.00(3.00小時)

授課老師：李玉雯(300616)

必選修：必

開課序號	0534
科目名稱	資料庫原理與應用(AWCZ008)
科目英文名稱	Database System Designing and Implementation
授課語言	英語/國語/全外語授課
主要教學型態	課堂教學&小組討論
教學目標	This course introduces the fundamental concepts and applications of databases, allowing students to understand the role of databases in information systems and cultivate their abilities to utilize databases for developing information systems. The course content covers commonly used practical knowledge in databases, entity-relationship modeling, normalization, etc. Database design will be conducted through practical examples, and finally, through a database system project, students will have the opportunity to experience the development process of information systems and the application of databases, thereby equipping them with comprehensive database usage experience.
每週課程內容及教學方法	<p>Week 1 Database Concepts (Ch1 & Ch2)</p> <p>Week 2 The Relational Database Model (Ch3)</p> <p>Week 3 Entity Relationship (ER) Modeling (Ch4)</p> <p>Week 4 Advanced Data Modeling (Ch5)</p> <p>Week 5 Normalization of Database Tables I (Ch6)</p> <p>Week 6 National Day Holiday</p> <p>Week 7 Normalization of Database Tables II (Ch6)</p> <p>Week 8 Introduction to Structured Query Language (SQL) I (Ch7)</p> <p>Week 9 Introduction to Structured Query Language (SQL) II (Ch7)</p> <p>Week 10 Midterm</p> <p>Week 11 Overview of Microsoft Access Databases (Appendix M)</p> <p>Week 12 Design and Create Tables to Store Data (Appendix M)</p> <p>Week 13 Simplify Data Entry with Forms (Appendix M)</p> <p>Week 14 Obtain Valuable Information Using Queries (Appendix M)</p> <p>Week 15 Final Project Presentation</p> <p>Week 16 Final Project Presentation</p> <p>There are also 6 hours of asynchronous courses planned for flipped learning. Students are required to complete pre-learning activities on the e-class.</p>
核心能力	<p>1. 基礎資訊與管理能力 20%</p> <p>2. 應用系統開發能力 40%</p>

	<p>3. 系統分析與整合能力 0%</p> <p>4. 瞭解國內外資訊產業趨勢能力 20%</p> <p>5. 學用合一能力 0%</p> <p>6. 優良之溝通、表達、協調與團隊合作能力 10%</p> <p>7. 分析問題及運用資訊技術解決問題之能力 10%</p> <p>8. 資訊倫理及公民素養之能力 0%</p> <p>9. 終身學習能力 0%</p>
預期學習成果	Cultivate students ability in database design and the utilization of ACCESS for developing database information systems.
與預期學習成果搭配的多元評量	<p>Class Participation, Assignments, and In-Class Exercises: 40%</p> <p>Midterm Exam: 30%</p> <p>Final Project Report: 30%</p>
主要讀本	Database Systems Design, Implementation, and Management 14/E, Carlos Coronel and Steven Morris, CENGAGE, 2019 (高立圖書)
參考書目	<p>1. Database Systems Core Theory and Practice (資料庫的核心理論與實務), San-Yih Hwang, Future Career Publishing, 2023</p> <p>2. Database Systems: A Practical Approach to Design, Implementation, and Management 6th edition, Thomas Connolly and Carolyn Begg, Pearson, 2021</p> <p>3. Fundamentals of Database Systems, 7/E, Ramez Elmasri & Shamkant B. Navathe, Pearson, 2017</p> <p>4. Modern Database Management 13/e, Jeff Hoffer , Ramesh Venkataraman, & Heikki Top, Pearson, 2019</p>
其他事項	<p>1. The course content and assessment strategies will be adjusted based on the actual class situation.</p> <p>2. An in-class written examination will be conducted during the tenth week (11/7). Students who are absent from the examination without prior authorization will receive a score of zero and will not be granted a makeup opportunity. Any changes to the examination schedule will be announced in advance on the e-class platform. Please adhere to the timing specified in the announcement.</p> <p>3. During class, there will be practice activities, and practice assignments must be submitted during the class. They cannot be submitted late. Please do not be absent.</p>