

國立屏東大學 111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。

班別：智慧機器人學系一年甲班(CBD110)

課程學分數：3.00(3.00小時)

授課老師：楊柏遠(705211)

必選修：必

開課序號	1311
科目名稱	計算機概論(CGC1101)
科目英文名稱	Introduction to Computer Science
授課語言	英語/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 basic concepts and developments in computing systems and computer science, covering information, hardware, programming, operating systems, applications, and communications.
每週課程內容及教學方法	Chapter 1: The Big Picture Chapter 2: Binary Values and Number Systems Chapter 3: Data Representation Chapter 4: Gates and Circuits Chapter 5: Computing Components Chapter 6: Low-Level Programming Languages and Pseudocode Chapter 7: Problem Solving and Algorithm Design Chapter 8: Abstract Data Types and Algorithms Chapter 9: Object-Oriented Design and High-Level Programming Languages Chapter 10: Operating Systems Chapter 11: File Systems and Directories Chapter 12: Information Systems Chapter 13: Artificial Intelligence Chapter 14: Simulation, Graphics, Gaming and Other Applications Chapter 15: Networks Chapter 16: The World Wide Web Chapter 17: Computer Security Chapter 18: Limitations of Computing  Note: The schedule is subject to change.
核心能力	1. 基礎理論與應用實務之專業能力 60% 2. 團隊合作精神及自我挑戰的能力 20% 3. 獨立思考與創新能力 20% 4. 人文素養與國際視野能力 0%
預期學習成果	1. To understand all layers of the computing system. 2. To understand the development history of computer software and hardware. 3. To understand the fundamental theories of computer software and hardware.

與預期學習成果 搭配的多元評量	<ol style="list-style-type: none"> <li>1. Midterm exam 35%</li> <li>2. Final exam 35%</li> <li>3. Quiz, Assignments and Class participation 30%</li> </ol>
主要讀本	<p>Computer Science Illuminated, 7/e, Jones and Bartlett  ISBN: 1284155617  ISBN-13: 9781284155617</p>
參考書目	
其他事項	<ol style="list-style-type: none"> <li>1. The textbook we used is protected by copyright and intellectual property rights.</li> <li>2. To improve students engagement, this class will use YouTube videos or popular movies to let students learn the knowledge so that students can train their English listening at the same time.</li> <li>3. Please join the Line community,  <a href="https://line.me/ti/g2/5qIPsajSKsXs6VXp_svg6G444jYZqIxERXi7Gw?utm_source=invitation&amp;utm_medium=link_copy&amp;utm_campaign=default">https://line.me/ti/g2/5qIPsajSKsXs6VXp_svg6G444jYZqIxERXi7Gw?utm_source=invitation&amp;utm_medium=link_copy&amp;utm_campaign=default</a></li> </ol>