


國立東華大學
教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	計算機概論AA		學年/學期 Academic Year/Semester	104/1
課程名稱(英文) Course Name in English	Introduction to Computer Science			
科目代碼 Course Code	CSIE1020AA	系級 Department & Year	學一	開課單位 Course-Offering Department
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)	3.0/3.0	
授課教師 Instructor	/黃振榮			
先修課程 Prerequisite				
課程描述 Course Description				
對於電腦科學各重要領域做通盤性的介紹，教師講授、討論為主，並輔以作業與考試。				
課程目標 Course Objectives				
介紹計算機科學與工程的入門知識，使初步接觸此學門的本科系學生對於各重要領域能有一通盤性的瞭解，課程尤強調學生的程式設計能力與計算機網路的使用，以奠定日後修習各類課程的基礎。				
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
A	資訊專業終身學習能力Ability of lifetime learning in information profession			●
B	實驗驗證資訊科學能力Ability of validate experimental result validation in information science field			○
C	資訊工具整合運用能力Ability of integrated applications of information technology			●
D	資訊系統應用設計開發能力Ability of information application system design and development			●
E	團隊合作溝通協調能力Ability of teamwork, communication, and coordination			●
F	資通訊科技問題解決能力Ability of problem solving regarding information and communication technology			○
G	瞭解資訊科技多元影響能力Ability to understand information technology's multiple influences			●
H	肩負資訊人社會責任能力Ability of bearing the social responsibilities being among information professionals			○
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	N/A			
2	Binary Values and Number Systems			
3	Data Representation			

4	Gates and Circuits	
5	Computing Components	
6	Low-Level Programming Languages and Pseudocode	
7	Problem Solving and Algorithm	
8	Abstract Data Types and Subprograms	
9	期中考試週 Midterm Exam	
10	File Systems and Directories	
11	Information Systems	
12	Artificial Intelligence	
13	Object-Oriented Design and High-Level Programming Languages	
14	Operating Systems	
15	Networks	
16	The World Wide Web	
17	Computer Security	
18	期末考試週 Final Exa	

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 Miscellaneous:

學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance	15%		✓						
期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam	40%	✓							
作業成績 Homework and/or Assignments	15%		✓						
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.)

Computer Science Illuminated, Sixth Edition, Nell Dale and John Lewis, ISBN-13:9781284055917 Jones & Bartlett Learning, 2016

課程教材網址（教師個人網址請列在本校內之網址）
Teaching Aids & Teacher's Website (Personal website can be listed here.)

其他補充說明 (Supplemental instructions)