

南台科技大學 103 學年度第 1 學期課程資訊

課程名稱	Unix Script 程式設計實務
課程編碼	30D19801
系所代碼	03
開課班級	四技晶片二甲
開課教師	楊榮林
學分	2.0
時數	3
上課節次地點	一 6 7 8 教室 P203
必選修	選修
課程概述	Course content covers UNIX shell as a programming language, emphasizes on a mix of lectures and hands-on labs, and provides a firm and practical knowledge of creating UNIX shell scripts. Upon completion, students will be able to start using Unix shell and to create and execute shell scripts. This course will cover commonly used Unix/Linux commands, Csh/Tcsh/Bash script languages, Sed, Awk, and Expect. In order to complete this course successfully, students should be prepared to spend a minimum of five hours per week on the computer in addition to regular class attendance and active in-class participation. After each lecture, students will be assigned homework assignment based on the lecture material
課程目標	The goals of this class are to enable students to: ² Learn what kinds of problems are suited to shell scripts ² Review the most commonly used Unix commands that are useful in shell scripts. ² Write simple shell scripts using the Csh/Tcsh and Bash shells ² Utilize powerful Unix tools like Sed/Awk and Expect in shell scripts
課程大綱	1.介紹 Unix/Linux ² Unix 系列的作業系統簡介 ² Unix/Linux 常見命令及檔案處理 ² Unix/Linux 的主要特色及概要 2.Unix/Linux 的命令和工具 ² 常見的命令使用教學 ² 檔案與目錄的安全性 ² Linux 搜尋工具 ² 文件編輯工具 ² 工作排程 ² 系統管理命令 ² 程序管理命令 3.Bourne-Again shell (bash) ² Bash shell 的特色 ²

	<p>Bash 環境設定檔² Bash shell 變數² 算術運算² 迴圈結構² 條件結構² Shell 的函式² Bash shell 內建命令² 命令列選項</p> <p>4.C-Shell² C-Shell 特色 ² C-Shell 環境設定檔² C-Shell 特殊字元² C-Shell 系統變數² 輸入/輸出導向² 管線² 算術,迴圈和條件結構² 執行程管理² Shell 命令列選項</p> <p>5.文件處理功能² 正規表示法² Sed 串流編輯² Awk 文字處理語言 6.Unix 自動化和測試工具² Tcl² Expect</p> <p>7.期末專案</p>
英文大綱	<p>1. Introduction to Unix/Linux² Introduction to the Unix-like operating system² Unix/Linux file management and common utilities² Major Unix/Linux features and structural overview</p> <p>2. Unix/Linux commands/tools² Directory and file commands² File and directory security² Linux search tools² Text editors² Scheduling jobs² Linux administrator commands² Processor management commands</p> <p>3. Bourne-Again shell (bash)² Features of Bash shell² Bash startup files ²</p>

	<p>Bash shell variables ²</p> <p>Arithmetic operations²</p> <p>Looping constructs for iterative action ²</p> <p>Conditional constructs for conditional execution ²</p> <p>Shell functions ²</p> <p style="padding-left: 40px;">Bash shell built-in commands²</p> <p>Command Line Options</p> <p>4. C-Shell (csh/tcsh)²</p> <p>Features of C shell²</p> <p>C shell startup files ²</p> <p>Special characters in C Shell²</p> <p>Built-in shell variables²</p> <p>Input / Output redirection²</p> <p>Pipes²</p> <p>Arithmetic, looping, and conditional constructs²</p> <p>Job control²</p> <p>Shell script arguments</p> <p>5. Text-processing utilities²</p> <p>Regular expressions²</p> <p>Sed stream editor ²</p> <p>Awk text-processing language</p> <p>6. Unix automation and testing tool²</p> <p>Tcl²</p> <p>Expect</p> <p>7. Final project (system administration or creative projects using Bash/Csh/Tcsh wiht Sed/Awk and/or Expect)</p>
教學方式	
評量方法	
指定用書	
參考書籍	
先修科目	“Unix/Linux Operating System” with passed grade or a working knowledge of at least one modern computer operating system
教學資源	
注意事項	
全程外語授課	0
授課語言 1	華語
授課語言 2	
輔導考照 1	
輔導考照 2	

