



教學計劃表 Syllabus

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| 課程名稱(中文) Course Name in Chinese | 無線網際網路 | | 學年/學期 Academic Year/Semester | 113/1 |
| 課程名稱(英文) Course Name in English | Wireless Internet | | | |
| 科目代碼 Course Code | CSIEM0160 | 系級 Department & Year | 碩士 | 開課單位 Course-Offering Department |
| 修別 Type | 選修 Elective | 學分數/時間 Credit(s)/Hour(s) | 3.0/3.0 | |
| 授課教師 Instructor | /陳旻秀 | | | |
| 先修課程 Prerequisite | | | | |
| 課程描述 Course Description | | | | |
| <p>The goal of the course is to let you understand 無線網路發展現況 未來網路發展趨勢 新的研究議題介紹 Architecture of wireless mobile network Future of wireless mobile network Research issue</p> | | | | |
| 課程目標 Course Objectives | | | | |
| <p>探討無線網際網路之架構與通訊方式，深入介紹IEEE802系列的無線網路系統，從通訊協定與服務開發的角度學習相關知識。 The goal of the course is to let you understand the architecture and the communication technologies of wireless mobile network. The detail of the IEEE802.11, such as protocols architecture and service development, will be studied in the courses.</p> | | | | |
| 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 | 統合資工知識技術之能力Ability to integrate knowledge and technologies of computer science and information engineering. | | | ● |
| B | 設計技術理論驗證實驗之能力Ability to design and conduct science experiments and to validate hypotheses. | | | ● |
| C | 資訊軟硬體設計開發之能力Ability to design and develop computer software and hardware. | | | ● |
| D | 團隊專案開發之能力Ability to design and develop team projects. | | | ○ |
| E | 批判性思考與創新研發之能力。Ability of analytical thinking, creative research planning, and innovative development. | | | ● |
| 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 | Introduction of this course | | | |
| 2 | Review the computer network | | | |

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|----|-----------------------------|--|
| 3 | Review the computer network | |
| 4 | Review the network layer | |
| 5 | Review the network layer | |
| 6 | Concept of Wireless Network | |
| 7 | Concept of Wireless Network | |
| 8 | Concept of Wireless Network | |
| 9 | 期中考試週 Midterm Exam | |
| 10 | WLAN | |
| 11 | WLAN | |
| 12 | WLAN | |
| 13 | Mobility Management | |
| 14 | Mobility Management | |
| 15 | WWAN and 3G | |
| 16 | WWAN and 3G | |
| 17 | WWAN and 3G | |
| 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 Miscellaneous:

教學創新自評 Teaching Self-Evaluation

創新教學(Innovative Teaching)

- 問題導向學習(PBL)
 團體合作學習(TBL)
 解決導向學習(SBL)
 翻轉教室 Flipped Classroom
 磨課師 Moocs

社會責任(Social Responsibility)

- 在地實踐 Community Practice
 產學合作 Industry-Academia Cooperation

跨域合作(Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
 跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

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 | | | | | | | | | |
| 期中考成績 Midterm Exam | 50% | ✓ | | | | | | | |
| 期末考成績 Final Exam | 50% | ✓ | | | | | | | |
| 作業成績 Homework and/or Assignments | | | | | | | | | |
| 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.)

None

Reference :

Dave Wisely, Philip Eardley and Louise Burness, IP for 3G, Networking Technologies for Mobile Communications, John Wiley & Sons, 2002.

Lawrence Harte, Richard Levine and Roman Kikta, 3G Wireless Demystified, Mc Graw Hill, 2002.

Y-Bing Lin and Imrich Chlamtac, Wireless and Mobile Network Architectures, Wiley Computer Publishing, 2001.

Harri Holma and Antti Toskala, WCDMA for UMTS Radio Access for Third Generation Mobile Communication, John Wiley & Sons, 2003.

相關論文 Related Papers

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.)

<http://www.elearn.ndhu.edu.tw/>

其他補充說明 (Supplemental instructions)