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| |  | | --- | | **Course Information** |  |  |  | | --- | --- | | Course title | Introduction to Computer Networks | | Semester | 107-2 | | Designated for | COLLEGE OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE  DEPARTMENT OF ELECTRICAL ENGINEERING | | Instructor | [WAN-JIUN LIAO](https://nol2.aca.ntu.edu.tw/nol/coursesearch/teacher.php?op=s2&td=901125) | | Curriculum Number | EE4020 | | Curriculum Identity Number | 901 31110 | | Credits | 3.0 | | **Course Syllabus** | | | **Please respect the intellectual property rights of others and do not copy any of the course information without permission** | | | Course Description | 1. Introduction to Computer Network 2. Transport Layer: flow control and congestion control; TCP/UDP 3. Network Layer: routing and IP 2. Data Link Layer and Medium Access Control (MAC) 4. Recent Advances in Computer Networking | | Course Objective | 這門課主要是設計給電機資訊領域大學部學生有關電腦網路之基礎課程，課程內容主要將著重在通訊網路發展趨勢分析及背後原理、通訊協定的設計、及簡單的網路效能分析及模擬。涵蓋的主題將包括通訊網路媒體存取層(Medium Access Control, MAC Layer)、網路層(Network Layer)、及傳輸層(Transport Layer)。透過這門課，學生將學習到通訊網路核心技術及未來發展所需掌握的關鍵技術，也為大學部「網路與多媒體實驗」課程及無線網路課程，提供必備的基礎。 | | Office Hours | Appointment required. | | References | 參考書目： 1. Andrew S.Tanenbaum“Computer Networks” seventh Edition 2017, Pearson. 2. Larry L. Peterson and Bruce S. Davie, "Computer Networks: A System Apraoch," Morgan Kaufmann Publishers, Fifth Edition, 2012 | | Designated reading | Computer Networking: A Top-Down Approach, Seven Edition, Jaames F. Kurose, Keith W. Rose, Pearson 2017 |  |  | | --- | | **Progress** |  |  |  |  | | --- | --- | --- | | Week | Date | Topic | | 第2週 | 2/28 | No class | | 第3週 | 3/07 | Chapter 1: Computer Networks and the Internet | | 第4週 | 3/14 | Chapter 1: Computer Networks and the Internet (cont) | | 第5週 | 3/21 | Chapter 2: Application Layer | | 第6週 | 3/28 | Chapter 3: Transport Layer | | 第7週 | 4/04 | No class | | 第8週 | 4/11 | Chapter 3: Transport Layer (cont) | | 第9週 | 4/18 | Chapter 3: Transport Layer (cont) | | 第10週 | 4/25 | Chapter 4: Network Layer: Data Plane | | 第11週 | 5/02 | Chapter 4: Network Layer: Data Plane (cont) Chapter 5: Network Layer: Control Plane | | 第12週 | 5/09 | Chapter 5: Network Layer: Control Plane | | 第13週 | 5/16 | Final Project: TA hours | | 第14週 | 5/23 | Final Exam | | 第15週 | 5/30 | Chapter 6: Link Layer | | 第16週 | 6/06 | Chapter 6: Link Layer (cont) | | 第17週 | 6/13 | Final Project Presentation (all day) | |

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