

# 國立彰化師範大學資訊工程學系九十八學年度第一學期

## 網路程式設計(Network Programming)課程大綱

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Lecture:  
Classroom: 32310; Class Hours: 9:05~12:00 (Wed.)

Office Hours:  
Tue. : 14:00~16:00; Thu. : 9:00~11:00

Objective:  
This course will provides practical guidance on the essential aspects of network programming with Java, including the concepts of Web, files, streams, threads, the use of varied sockets, non-blocking I/O, URLConnections, protocol handlers, content handlers and Remote method invocation. The aim is to enable students to pick up these vital skill and be capable of writing varied network programs with Java.

Material:  
1. Elliotte R. Harold, “*Java Network Programming*”, 3<sup>rd</sup> Edition, O’Reilly, 2004.  
2. H. M. Deitel and P. J. Deitel, “*Java How to Program*”, 8<sup>th</sup> Edition, Prentice Hall, 2009.  
3. Jan Graba, “*An Introduction to network programming with Java*”, 2<sup>nd</sup> Edition, Springer, 2006.

Website :  
<http://www.csie.ncue.edu.tw/~ycchan/np2009f/>

Course Outline :

1. Why Networked Java
2. Basic Network Concepts
3. Basic Web Concepts
4. Introduction to Java Programming
5. Streams
6. Threads

7. Looking Up Internet Addresses
8. Sockets for Clients
9. Sockets for Servers
10. Secure Sockets
11. Non-Blocking I/O
12. UDP Datagrams and Sockets
13. Multicast Sockets
14. Remote Method Invocation
15. URLs and URIs
16. HTML in Swing
17. URLConnections
18. Protocol Handlers
19. Content Handlers

**Grading Policy:**

1. Quiz: 5 % (10/14)
2. Midterm: 25% (11/11)
3. Final: 30% (1/13)
4. Homework: 40%
5. Class Participation: 5~10% (bonus)