

Computer Networks

Syllabus Number

3B108

Basic Major Subjects

Elective Requisites 2
credit

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1. Course Description

It is important to have a knowledge of present computer networks including internet. Because it is becoming one of the basic need in our today's life styles. This lecture is intended to lean the basic concept, fundamental design and operation system of computer networks.

We learn about:

1. Internet technology

The feature of Internet, Data communications technology.

2. Network security

How to protect and manage the network.

3. Wireless and mobile computing

Wireless and mobile network communication system such as smart-phone and PHS.

This class is related to DP4C, DP4M

2. Course Objectives

Students are expected to understand

1. Architecture and technologies in computer networks and the Internet.

2. Security technologies related to network information systems.

3. The practical technologies of wireless communication systems and information networks.

4. Structure of the WEB system.

3. Grading Policy

Students will be evaluated based on the following rate: a mid-term examination 25%, worksheets 10%, a term-end examination 40%, and subjects 20%. Learners who received evaluation over the total of 60% will pass this course.

4. Textbook and Reference

Textbook

井口 信和著 ネットワーク 目には見えないしくみを構成する

森北出版

5. Requirements(Assignments)

This class is a required subject of JABEE program. This class is related to learning attainment target 4-4.

6. Note

7. Schedule

- [1] Introduction
- [2] OSI reference model・TCP/IP
- [3] Physical Layer 1
- [4] Physical Layer 2
- [5] Data Link Layer
- [6] Network Layer 1
- [7] Network Layer 2
- [8] mid-term examination
- [9] Routing
- [10] Transport Layer
- [11] Application Layer (Application Protocol)
- [12] Application Layer (e-mail ・Security)
- [13] Wireless and mobile network
- [14] Network Command
- [15] term-end examination ・summary