Advanced Computer Networks

1 Dec 2020

Instructor:	Songrit Kitisriworapan	**Time:**	Wed 13:00 – 16:00
Email:	songrit@npu.ac.th	**Place:**	EN1303 (Network Lab)

Course Pages:

1. https://github.com/Lecture-CPE/423

Office Hours: After class, or by appointment, or E-mail (songrit@npu.ac.th).

Main References:(recommended, not required)

Practice Tests (https://www.udemy.com/course/certified-kubernetes-administrator-with-practice-tests/)

Objectives: This course is primarily designed for undergraduate students. Students become familiar with computer network performance evaluation, network modeling, performance analysis.

Prerequisites: Computer Networks (316)

Grading Policy:

- **Option-0** Class attend(10%), Assignments (10%), Project Midterm (25%), Present , Project Final (35%).

Important Dates:

Project Midterm (25%) ..... Jan, 2021
Project Final (35%) ..... March, 2021

Course Policy:

- Grading A, B+, B, C+, C, D+, D, F($< 50\%$)
- All hard-copy assignments must be handed in at the beginning of the class ($>$ 15 min. is considered late).
- For soft-copy will be timed by the local time stamp.
- Late penalty after the due date

Class Policy:

- Regular attendance is essential and expected.

Academic Honesty: Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation.

Tentative Course Outline:

Week	Description
1	Course orientation Basics of computer network
2	Computer Servers and components
3	Linux Operating System
4	Linux administrators
5	DHCP Servers
6	DNS Servers
7	MQTT Servers
8	**Midterm Exam**
9	Introduction to containers
10	Docker command
11	Build docker images
12	Container orchestration / Kubernetes
13	Kubernetes management
14	Introduction to DevOps
15	Deployment GitOps
16	Project presentation (programming)
17	**Final Exam**