

# COMPUTER NETWORKS

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**Instructor:** Songrit Kitisriworapan  
**Email:** [songrit@npw.ac.th](mailto:songrit@npw.ac.th)

**Time:** Fri 09:00 – 12:00  
**Place:** Engineering Bld. EN1306

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## Course Pages:

1. <https://github.com/Lecture-CPE/316>

**Office Hours:** After class, or by appointment, or E-mail.

**Main References:**(recommended, not required)

- Peterson, Larry L., and Bruce S. Davie. *Computer networks: a systems approach*. Elsevier, 2012.
- Jim Kurose, Keith Ross, *Computer Networking: A Top Down Approach* , Pearson/Addison Wesley, 2016.

**Objectives:** This course is primarily designed for undergraduate students. Students become familiar with Data Communications and Network concepts and terminologies.

**Prerequisites:** -

## Grading Policy:

- **Option-1:** Attend-10%, HW-20%, Project-20%, Exam-20%, 30%
- **Option-2:** HWs- 20%, Project-20%, Exams - 20%, 40%

**Assignments submission :** <https://elab.npw.world>

## Important Dates:

Midterm ..... 11-17 Jan 2021  
Project Submission ..... Feb 2021  
Project Presentation ..... Feb, 2021  
Final Exam ..... 8-21 Mar 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.
- For soft-copy will be timed by the local time stamp.
- Late penalty after the due date
  - (a) late : 0 score, But discipline has point.

## 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:**

<b>Week</b>	<b>Description</b>
1	Course orientation
2	Electrical and Signal
3	Physical Layer
4	Digital/Analog Signal
5	Digital transmission and multiplexing
6	Data-Link Layer
7	Error detection and correction
8	<b>Midterm Exam</b>
9	Project presentation
10	Multiple Access
11	Network Layer
12	IP Protocol and Addresses
13	Routing protocol
14	Transmission Layer : TCP/UDP
15	Application Layer : HTTP/TLS/SSH/MQTT
16	<b>Final Exam</b>