

**EHB415E Data Communication**  
**EEB 5202 Monday 13:30-16:30**  
**Selçuk Paker**

**Course Description**

Communication Fundamentals  
Transmission  
WAN, LAN, IP  
Wireless Networks  
Internetworking  
Data Communication Network Applications

Data transmission media. Baseband data transmission. Modems for data transmission. Interfaces and protocols. xDSL access technologies. Data networks and architectures. Internet, TCP/IP. OSI reference model and protocols. Packet switching systems. Local Area Networks (LAN's). Wireless data communication applications. Broadband networks. Data communication quality: security, reliability, availability and maintainability.

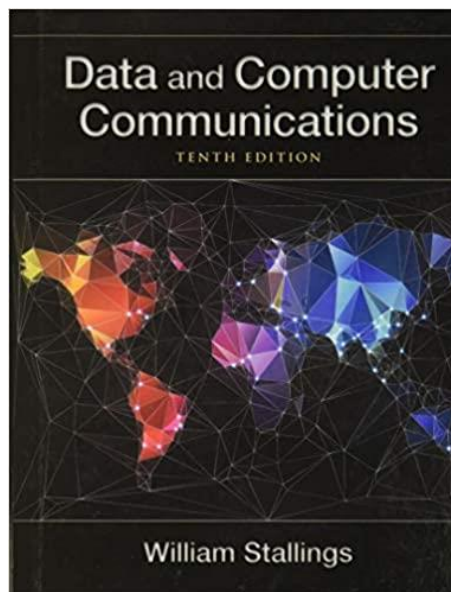
Students who complete the course will be able to:

- I. Learn fundamentals of data communication,
- II. Be familiar with current topics in data communication,
- III. Analyze data communication systems,
- IV. Develop data communication systems,
- V. Learn the design principles of new systems,

Examine infrastructures of data communication networks

**Books**

STALLING W., "Data and Computer Communications",



## Grading

Midterm exam            %30            (14 November 2021 week, before the break)

Short exams            %20            (Not decided)  
Maybe used mikrodalga.org

Homework or Project   %20            (4x5p short HW)

Final exam            %30            (Problem)

Final exam attendance rule            min XX/50

## Term Project or Homework

HW0: How the assisted GPS collect necessary data?    TEST

HW1: Why was the IRIDIUM project would be successful!    Subjects and dates will decide later !!!

HW2: Why the 3G mobile system sunset so early?

HW3: Pros and Cons of cable (all type of) networks?

HW4: Imagine a future communication technology?

- One-page PDF report, No equation, No figure, No color, No table, No references
- file name should be "ehb415e\_10827\_hwx\_StudentNumber\_NameSurname.PDF" format with English ascii characters
- The first line of homework should be  
EHB415E\_10827 HWX StudentNumber NameSurname Date  
Homework should be written with 11 or 12 pt size and one of Calibri/Arial/TimesNewRoman fonts and 1.5 line spacing, A4 size and normal margins, Justify
- Late HomeWorks are not graded and accepted, copy and paste are not graded,
- HomeWorks will collected at <https://www.turnitin.com/> site Class ID: 32014792 Enrolment Key: 10827