

King Saud University
College of Engineering
Elect. Eng. Dept.

EE629-Selected Topics In Communication
2nd Semester 1425-1426

Instructors: Dr. Ibrahim Elshafiey
Office 2C115 - Phone 467-6751

Lectures Schedule: Monday 5:00 – 8: 00 pm

Text Book:

Max Ming-Kang Liu, Principles and Applications of Optical Communication, Irwin, Chicago, 1996.

References:

Gerd Keiser, *Optical Fiber Communications*, 3rd ed., McGraw-Hill, Boston, 2000.
S.O. Kasap, *Optoelectronics and Photonics Principles and Practices*, Prentice Hall, New Jersey, 2001.

Course Content:

- **Networking:**
 - Time-Domain Medium Access: Chapter 8
 - Wavelength-Domain Medium Access: Chapter 9
 - Photonic Switching: Chapter 11

- **Signal Processing:**
 - Coherent Detection: Chapter 15
 - Timing Recovery and Line Coding: Chapter 16
 - Optical Amplification: Chapter 16
 - Optical Fiber Soliton Transmission: Chapter 18
 - Optical Measurements

Grading: 10% Homework
10% 1st Class Project
10 % 2nd Class Project
15 % 1st Mid-Term Exam
15 % 2nd Mid-Term Exam
40 % Final Exam

Attendance:

Attendance is mandatory in lectures and tutorials. A student who misses more than 25% of classes will not be allowed to take the final exam.