

Syllabus for APC 400 Applied Communication Networks

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

This course covers fundamental concepts in the design, configuration, and problem solving of computer networks. Topics include: TCP/IP and OSI architecture, application layer (Web, FTP, remote connection, email, client and server interaction), transport layer (TCP/UDP), network layer (IP), data link and physical layers.

Prerequisite(s)

APC 350: Programming II

Course Outcomes

Upon completing this course, you will be able to do the following:

- Explain OSI architecture.
- Explain the layered structure of TCP/IP protocol.
- Describe common network application protocols including email, telnet, ftp, and http.
- Explain routing and network layer protocols.
- Describe the data link layer including error detection and correction, multiple access protocols, MAC addressing, Ethernet, link layer switches, and PPP.
- Describe the physical layer.

Course Requirements/Components

- Programming Assignments
- Quizzes
- Written Assignments
- Exams
- Final Exam

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Evaluation Methods	Percentage of final grade
Programming Assignments	35%
Quizzes and Written Assignments	25%
2 Exams	20%
Final Exam	20%