COMP 5320, Design and Analysis of Computer Networks

Credit hours: 3 lecture
Contact hours: 3 lecture

Catalog Description: Computer networks design, including multiplexing, switching, routing, internetworking, transport protocols, congestion control, and performance evaluation.

Prerequisites: COMP 4320 or departmental approval
Corequisites: None

Required Course (WIRS) Selected Elective Course (CSCI, SWEN)

Instructor or Course Coordinator: Dr. Saad Biaz

Required Textbook
Andrew Tanenbaum and David Weatherall, Computer Networks, 2011

Course Outcomes
The student will be able to
• gain a deeper and more detailed understanding of computer networking topics covered in COMP 4320.
• apply network performance analysis techniques.
• understand of switching, packet scheduling, and queue management.

Topics Covered
• Introduction computer network design and analysis (1 hour)
• Error control (9 hours)
• Medium access control (9 hours)
• Routing (6 hours)
• Switching (4 hours)
• Packet scheduling (4 hours)
• Queue management (4 hours)
• Congestion control (6 hours)
• Exams (2 hours)

Course Requirements
• Homework Assignments (40%)
• Exams (60%)

Syllabus prepared: Spring 2016