CSC/CPE 464 Introduction to Computer Networks

1. CSC/CPE 464 Introduction to Computer Networks

2. **credit units** 4  **contact hours** 6

3. **Course Coordinator**: Hugh Smith


5. a. **Course Description**: Computer network architectures; communications protocol standards; services provided by the network; historical and current examples presented. 3 lectures, 1 laboratory. Crosslisted as CPE/CSC 464.

   b. **Prerequisite**: CSC/CPE 357. Recommended: STAT 312 or STAT 321 or STAT 350.

   c. **Required/Elective/Selective Elective for CPE, CSC, EE, SE**

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6. a. **Course Goals/Outcomes**

   The student will be able to:
   - The history of communication technology;
   - The correct meaning of key terms;
   - A conceptual understanding of protocols and network architectures;
   - How to characterize and analyze communication system performance;
   - The typical hardware and software architectures for networks;
   - How to apply the theoretical concepts covered in lecture through programming assignments

   b. **How Student Outcomes addressed**

   (“B” = Basic level, “I” = Intermediate level, “A” = Advanced level)

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7. **Major Topics Covered**: (number of lecture hours each)
   - Introduction and History of Communications Technology (1)
   - OSI Reference Model (2)
   - Physical Layer (2)
- Data Link Layer (2)
- Network Layer (4)
- Transport Layer (2)
- TCP/IP and the Internet (6)
- Routing (4)
- Network Management (2)
- Local Area Networks (2)
- Laboratory time (30)