EE 5379 --- Network Protocols  
*Spring 2016*

**Instructor:** Dr. Michael McGarry  
Office: ENG 340  
Telephone: 915-747-6955  
Email: mpmcgarry@utep.edu

**Texts:**  
  James Kurose and Keith Ross  
- *TCP/IP Sockets in C* (2nd Edition)  
  Michael Donahoo and Kenneth Calvert

**Course Description:** To understand communication network design principles.

**Prerequisites:** CS 2302 Data Structures or EE 2372 Software Design 1 (C or better)

**Class Hours:** Tuesdays and Thursdays 4:30PM to 6PM, NURS Rm. 216

**Office Hours:** Tuesdays and Thursdays 1:30PM to 3PM, ENG Rm. 340

**Course Outline:**
- **Week 1:** Introduction  
- **Week 2:** Network Performance Measures  
- **Week 3:** Network Protocol Layering  
- **Weeks 4-5:** Application Layer Design Principles: HTTP, DNS, and FTP  
- **Week 6:** Socket Programming  
- **Weeks 7-8:** Transport Layer Design Principles: TCP, and UDP  
- **Week 8:** **Midterm Exam**  
- **Weeks 9-10:** Congestion Control and TCP  
- **Weeks 10-11:** Network Layer Design Principles: IP, and Router Architecture  
- **Week 12:** Routing Algorithms: RIP, OSPF, and BGP  
- **Week 13:** Link Layer Design Principles: Error Detection/Correction, and Ethernet  
- **Week 14:** Media Access Control Protocols: Ethernet CSMA/CD  
- **Week 15:** Introduction to Multimedia Networking  
- **Week 15:** **Final Exam**

**Grading:**
- Homework/Quizzes 25%  
- Labs 25%  
- Midterm 25%  
- Final 25%
**Academic Dishonesty:**

As an entity of The University of Texas at El Paso, the Department of Electrical and Computer Engineering is committed to the development of its students and to the promotion of personal integrity and self responsibility. The assumption that a student’s work is a fair representation of the student’s ability to perform forms the basis for departmental and institutional quality. All students within the Department are expected to observe appropriate standards of conduct. Acts of scholastic dishonesty such as cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in the whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student, or the attempt to commit such acts will not be tolerated. Any case involving academic dishonesty will be referred to the Office of the Dean of Students. The Dean will assign a Student Judicial Affairs Coordinator who will investigate the charge and alert the student as to its disposition. Consequences of academic dishonesty may be as severe as dismissal from the University. See the Office of the Dean of Students’ homepage (Office of Student Life) at [http://studentaffairs.utep.edu/dos](http://studentaffairs.utep.edu/dos) for more information.

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass). CASS’ Staff are the only individuals who can validate and if need be, authorize accommodations for students with disabilities.