Catalog Description

This course is an introductory course on computer networks. Using the Internet as a vehicle, this course introduces the underlying concepts and principles of modern computer networks, with emphasis on protocols, architectures, and implementation issues. Prerequisites: Statistics.

Textbook and References


Topics Covered

- Computer Networks and the Internet 5 lectures
- Application Layer 6 lectures
- Transport Layer 6 lectures
- Network Layer 6 lectures
- Link Layer and Local Area Networks 3 lectures

Class Schedule

- Eight week term

Major Projects

- Course includes a socket programming assignment.

Course Outcomes

Upon the successful completion of this course, a student should understand the application, transport, network, link, and physical layers of a computer network.

- Students learn the client/server model, socket programming, and popular Internet application-layer protocols such as HTTP, FTP, SMTP, and DNS.
- Students learn the principles of reliable data transfer and the two transport-layer protocols TCP and UDP.
- Students learn the principles of datagram and virtual circuit packet networks, routing algorithms, IPv4, and IPv6.
- Students learn the principles of different types of multiple access protocols, Ethernet, and switches.

MSE Program Requirements Fulfilled by this Class

- Computer Applications
CSCE 4753 – COMPUTER NETWORKS (3) – Distance Learning

General Information
- Instructor website: http://www.NetGeekDr.com
- Class website: http://learn.uark.edu
- Email distribution list: To be announced.
- Instructor: Dale R. Thompson, Ph.D., P.E.
  - Office hours: http://www.NetGeekDr.com/calendar
  - Office: JBHT 521
  - Phone: 479-575-5090
  - Email:

Grading
Course grades will be determined by these weights:

- Homework: 10%
- Quizzes: 40%
- Exam 1: 25%
- Final: 25%

The final class grade will be assigned according to the 10-point scale shown below. The grades may or may not be curved.

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<tr>
<th>Grade</th>
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<tr>
<td>A</td>
<td>90 – 100%</td>
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<td>B</td>
<td>80 – 89.9%</td>
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<td>C</td>
<td>70 – 79.9%</td>
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<td>D</td>
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<td>F</td>
<td>&lt; 60%</td>
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Homework
All assignments will be given with a strict deadline, and students are required to submit their assignments on or before the deadline. Late submissions will not be accepted. In case of extenuating circumstances, students are advised to contact the professor as soon as practical. You are encouraged to discuss the course and the assignments with each other; however, your exams and homework should be your own work.

Academic Dishonesty Policy
As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.

Each University of Arkansas student is required to be familiar with and abide by the University’s ‘Academic Integrity Policy’ which may be found at http://provost.uark.edu/. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.