



Course CS/CE/TE 4390
Professor Dr. Jorge A. Cobb
Term Fall 2016
Meetings T and Th 7:00 pm to 8:15 pm in FO 2.404

Professor's Contact Information

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Office Hours T and Th 4:00 - 5:30 pm
Other Information Course materials available on elearning.utdallas.edu

TA's Contact Information

Name To be determined
Office Location
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Office Hours

General Course Information

Pre-requisites, Co-requisites, & other restrictions	Prerequisite: CS/SE 3345 or equivalent
Course Description	<p>CS 4390 Computer Networks (<i>3 semester hours</i>) The design and analysis of computer networks. Topics include: the ISO reference model, transmission media, medium-access protocols, LANs, data link protocols, routing, congestion control, internetworking, and connection management.</p> <p>I.e., by the time you get out of this course you should basically know how data is transferred across a network.</p>
Learning Outcomes	<p>ABET learning objectives</p> <p>Ability to understand the need for and structure of the OSI, TCP/IP network models</p> <p>Ability to design and evaluate methods for the framing messages in transmission media</p> <p>Ability to analyze and evaluate different error detection schemes</p> <p>Ability to understand and evaluate stop-and-wait, sliding window protocols</p> <p>Ability to understand and evaluate multiple-access protocols</p> <p>Ability to design and evaluate routing protocols</p> <p>Ability to design and evaluate flow control and congestion control protocols</p> <p>Ability to understand the issues in internetwork design</p> <p>Ability to understand the various Internet protocols (TCP/IP)</p> <p>Ability to write networking protocols</p>

Required Texts & Materials	<i>Computer Networks: a systems approach</i> by Larry Peterson and Bruce Davie (Morgan Kaufmann Publishers http://www.mkp.com).
Suggested Texts, Readings, & Materials	none

Assignments & Academic Calendar

[Topics, Reading Assignments, Due Dates, Exam Dates]

We will cover selected subsections of the following chapters of the textbook:

- 1 Foundations
- 2 Direct Link Networks (Getting Connected)
- 3 and 4 Internetworking and advanced internetworking
- 5 End-to-End Protocols
- 6 Congestion Control and Resource Allocation

First homework and first exam will occur about 1/3 of the semester, similarly, the second homework and exam will occur after 2/3 of the semester

Exam dates will be announced 1 ½ weeks in advance.

The final exam is given during the 3 hour slot indicated in the final exam schedule of the university. Please do not make travel reservations to leave town on a date earlier than this date

Course Policies

Grading (credit) Criteria	Exams: two "midterm" exams each counting 20% to your grade, a final exam counting 25% of your grade, i.e., exams altogether count for 65% of your grade. Two homeworks and one programming assignment. HW's are 10 % each and the programming project is 15%, for a total of 35% Homeworks and programming project are INDIVIDUAL WORK only. Cases of suspected cheating will be sent to the Judicial Affairs office.
Make-up Exams	Only by consent of instructor under severe reasons.
Extra Credit	None
Late Work	Only by consent of instructor under severe reasons.
Special Assignments	None
Class Attendance	I do not check for class attendance, but given the difficulty of the topics it is obviously necessary.
Classroom Citizenship	Please participate and ask questions during class. It tends to slow down the pace and make the lectures more enjoyable !!

Misc. but important	<ul style="list-style-type: none"> • Please bring your photo ID to each exam • NO RESTROOM BREAKS DURING EXAMS: I don't take a restroom break, so neither do you! • Please in all your answers in your exams at least give a brief one or two sentence explanation of your answer. A “yes” or “no” answer is not allowed. • The final exam is given during the 3 hour slot indicated in the final exam schedule of the university. Please do not make travel reservations to leave town on a date earlier than this date.
UT Dallas Syllabus Policies and Procedures	<p><i>The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.</i></p> <p><i>Please go to http://go.utdallas.edu/syllabus-policies for these policies.</i></p>

These descriptions and timelines are subject to change at the discretion of the Professor.