



**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

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**Professor's Contact Information**

**Office Phone** 972 883 2479  
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**Email Address** [cobb@utdallas.edu](mailto:cobb@utdallas.edu)  
**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**  
**Email Address**  
**Office Hours**

**General Course Information**

<b>Pre-requisites, Co-requisites, &amp; other restrictions</b>	Prerequisite: CS/SE 3345 or equivalent
<b>Course Description</b>	<p><b>CS 4390 Computer Networks</b> (<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>
<b>Learning Outcomes</b>	<p><b>ABET learning objectives</b></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>

<b>Required Texts &amp; Materials</b>	<i>Computer Networks: a systems approach</i> by Larry Peterson and Bruce Davie (Morgan Kaufmann Publishers <a href="http://www.mkp.com">http://www.mkp.com</a> ).
<b>Suggested Texts, Readings, &amp; Materials</b>	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

<b>Grading (credit) Criteria</b>	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.
<b>Make-up Exams</b>	Only by consent of instructor under severe reasons.
<b>Extra Credit</b>	None
<b>Late Work</b>	Only by consent of instructor under severe reasons.
<b>Special Assignments</b>	None
<b>Class Attendance</b>	I do not check for class attendance, but given the difficulty of the topics it is obviously necessary.
<b>Classroom Citizenship</b>	Please participate and ask questions during class. It tends to slow down the pace and make the lectures more enjoyable !!

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

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