

CSC 343/643 A
Internet Protocols
T Th 1:30 - 2:45pm Spring 2005

Instructor

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Course

Text:

Computer Networks: Fourth Edition, Tanenbaum
Pocket Socket Guide: C Version, Donahoo and Calvert (*recommended, if you can find it...*)

Articles:

In addition to the required text book, students will read selected articles concerning computer networks. Materials will be available on the web or in the library. Students will be responsible for obtaining all assigned readings.

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Grading:

3 Tests	35%
Programs and labs	25%
Homework and quizzes	10%
Final exam	30%

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Prerequisites: CSC 241, C programming, Unix.

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Attendance: Regular attendance of class and lab is expected.

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Tests, Quizzes, and the Final Exam: Three tests will be administered during class. The tests will cover the material from the assigned readings, lectures, and lab. All tests and exams will be closed book. Make-up tests will be administered only for **University excused absences**.

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Homework: Homework will be assigned at least once a week. Homework will always be due before class the following lecture. **No** late homework will be accepted.

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Programming and Lab Assignments: Programming assignments will be done in West 246, while laboratory assignments will be done in West 22 (network laboratory). **Labs are scheduled during lecture** on the dates given in the lecture schedule (verso). Currently 4 labs are scheduled and make-up labs are **not** possible. Students must bring their text, lab assignment, and any assigned pre-lab to lab.

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CSC 343/643 Difference: The undergraduate (CSC 343) and graduate (CSC 643) courses will have different tests, homeworks, reading assignments, and projects.

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Academic Integrity: All tests, programs, and homework must be done independently by each student. Copying of partial or complete work will not be tolerated and will be referred to the University Judicial System. Do not throw away or recycle any notes until the end of the semester. Should a question of authorship arise you will be expected to produce hand-written and printed documents that trace the development of your work.

**Lecture
Schedule**

The following is the tentative lecture schedule for this course. Dates and topics may change during the semester!

Date	Lecture	Text
1/10	Course overview	
1/12	Communication models and architectures	T1
1/17	Analog and digital signals	T2.1 - T2.4
1/19	Interfaces and data link layer	T3.1
1/24	Data link framing and error	T3.2 - T3.3
1/26	Data link line control and performance	T3.4 - T3.5
1/31	Multiplexing	T2.4.4, T4.1
2/2	LAN and MAC	T4.1 - T4.2
2/7	IEEE 802.x	T4.3, T4.5
2/9	Test 1	
2/14	★ Lab 1: Data link (last day to drop course 2/15)	
2/16	Bridges	T4.4
2/21	Network layer, routing	T5.1 - T5.2
2/23	Congestion control	T5.3
2/28	Internetworking	T5.4
3/2	IP	T5.5
3/14	Test 2	
3/16	IP routing	
3/21	★ Lab 2: Linux routers	
3/23	Transport layer, UDP	T6.1 - T6.4, T6.6
3/28	TCP, socket programming	T6.4, D1 - D3
3/30	Socket programming	D4 - D5
4/4	Multimedia and QoS	T7.7
4/6	★ Lab 3: Internet QoS	
4/11	Test 3	
4/13	Application layer	T7.2 - T7.6
4/18	Network security	T7.1
4/20	Misc networking topics	
4/25	★ Lab 4: Firewalls	
5/2	Final exam 2:00pm	
Legend: T <i>x.x</i> = Tanenbaum text, D <i>x.x</i> = Donahoo text		