

**CSC 391/790 AG**  
**High-Speed Networks**  
T Th 9:30 - 10:45am Spring 2009

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**Instructor**

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**Course**

**Text:**  
High-Speed Networks and Internets, Stallings

**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.

**Grading:**

2 Tests .....	30%
Lab assignments .....	25%
Homework and quizzes .....	10%
Final exam .....	35%

**Attendance:** Regular attendance of class and lab is expected.

**Tests, Quizzes, and the Final Exam:** Two 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**.

**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.

**Laboratory and Programming Assignments:** Laboratory assignments will be done in West 22. Assignments will measure the performance of high speed networks via actual implementation and simulation. Some labs will be scheduled during lecture. Students must bring their text, lab assignment, and any assigned pre-lab to lab.

**CSC 391/790 Difference:** The undergraduate (CSC 391) and graduate (CSC 790) courses will have different tests, homeworks, reading assignments, and projects.

**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.

**Disabilities and special accommodations:** If you have a disability that may require an accommodation for taking this course, then please contact the Learning Assistance Center (758-5929) within the first two weeks of the semester.

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**Lecture  
Schedule**

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

<b>Date</b>	<b>Lecture</b>	<b>Text</b>
1/15	Introduction and OSI review	1
1/20	OSI review	1, 2
1/22	TCP/IP review	2
1/27	High speed network issues	4
1/29	High-speed LAN	6
2/3	Gigabit Ethernet and RPR	
2/5	High-speed Internet	5
2/10	High speed TCP and UDP	12
2/12	High speed TCP and UDP	12
2/17	<b>Test 1 (last day to drop course 2/18)</b>	
2/19	Circuit switched networks	6
2/24	High speed TCP and UDP	6
2/26	ATM	5
3/3	ATM	5
3/5	ATM	5
3/17	Data center networking	
3/19	Data center networking	
3/24	Processor networking	
3/26	Performance estimation	7
3/31	Probability review	7
4/2	Queueing analysis	8
4/7	Queueing analysis	8
4/9	Queueing analysis	8
4/14	<b>Test 2</b>	
4/16	Self-similar traffic	9
4/21	Network simulation and modeling	
4/23	Network simulation and modeling	
4/28	Network simulation and modeling	
5/1	Final exam 9:00am	