Foundations of Distributed Computing

CS625 — *Syllabus*
Spring 2006 — *17 January, 2006*
Prof. Rebecca N. Wright

Location, etc:

Place:	219 Lieb
Time:	5:00pm–7:30pm Tuesdays
Professor:	Rebecca Wright, `rwright@cs.stevens.edu`
Office Hours:	*By appointment only—e-mail me*, 216 Lieb

Textbook:

Nancy Lynch, *Distributed Algorithms*, 1st Edition, Morgan Kaufmann Publishers, 1996.

Syllabus:

January 17	Introduction, Synchronous networks: Leader Election **Reading: ch. 1–3**
January 24	Synchronous networks: Distributed Consensus **Reading: ch. 6**
January 31	HOMEWORK 1 DUE Synchronous networks: Distributed Consensus, ctd.
February 7	Asynchronous shared memory model: Mutual Exclusion **Reading: ch. 8–10**
February 14	HOMEWORK 2 DUE Asynchronous shared memory model: Resource Allocation (The Dining Philosopher's Problem) **Reading: ch. 11**
February 21	*Monday schedule: No class*
February 28	MIDTERM EXAM (Closed book)
March 7	Asynchronous shared memory model: Distributed Consensus **Reading: ch. 12**
March 14	*Spring Break: No class*

March 21	Asynchronous shared memory model: Distributed Consensus, ctd.
March 28	HOMEWORK 3 DUE Asynchronous shared memory model: Atomic Objects **Reading: ch. 13**
April 4	Asynchronous shared memory model: Atomic Objects, cont'd
April 11	HOMEWORK 4 DUE Asynchronous computing: Shared memory vs. networks **Reading: ch. 14, 17**
April 18	Asynchronous networks with process failures **Reading: ch. 21 (Sections 21.1–21.3 only).**
April 25	HOMEWORK 5 DUE Additional topics if time permits **Reading: TBD**
May 2	FINAL EXAM (Open book)

Grading:

Homework Assignments	40%	(lowest score dropped)
Midterm Exam	25%	
Final Exam	25%	
Class Participation	10%	

Late policy:

Assignments are due at the *start* of class on their due dates. Late assignments will not be accepted. All exceptions must be cleared in advance.