

## CSC 244/444, Fall 2011: Lecture Schedule (Topics are approximate)

Dates	Events	Assign.	Due	Back	Text B&L	Suppl. R&N	Topics
Sept. 1					LKS+TA		Intro., & Lisp
Sept. 6					ch. 1	§8.1	Role of logic in AI
Sept. 8		Lisp0			ch. 2	§8.2-4	Rep.'g knowledge in FOL
Sept. 13		Proj.			ch. 2		Semantics of FOL (2 lec.)
Sept. 15			Lisp0		ch. 3	§7.3-4	Validity & entailment
Sept. 20		As. 1/Lisp1			G&N: 3	§7.5, 9.1	Proofs, soundness, completeness
Sept. 22				Lisp0	Notes	§9.2	Natural deduction
Sept. 27			As. 1		ch. 4	§9.5	Resolution
Sept. 29			Lisp1		G&N: 4	§9.5	Resolution
Oct. 4		As. 2/Lisp2		As. 1	G&N: 4	p. 300	Resolution & deductive Q-A
Oct. 6					Notes	p. 303-4	Paramodulation
Oct. 11	Break						
Oct. 13			As. 2	Lisp1	ch. 5	p. 304-6	Resolution strategies
Oct. 18		As. 3			Notes		Specialist inference,
					p. 77-83	§7.6	SAT-solving
Oct. 20				As. 2	ch. 7		Production systems
Oct. 25		Lisp3	Lisp2		ch. 8	§10.6	Frames
Oct. 27					ch. 11.2	§10.7	NMR, CWA
Nov. 1			As. 3	Lisp2	ch. 11.2, notes	§10.7	more CWA, COMP
Nov. 3					ch. 11.4	§6.6	Default logic
Nov. 8			Lisp3	As. 3	ch. 12	§14.1-4	Bayes' rule, etc.
Nov. 10	Test 1						
Nov. 15					Charniak	§15.1-3	Bayes nets
Nov. 17		As. 4/Lisp4	abstr.	Test/Lisp3	Notes		Markov logic
Nov. 22					ch. 14	§7.6	States, change, frame problem
Nov. 24	Thanks						
Nov. 29			As. 4		ch. 14		Sol'ns to frame problem
Dec. 1		As.5			ch. 14	§11.1-2	Deductive planning
Dec. 6			Proj.	As. 4	ch. 15	ch. 11	STRIPS & $\Delta$ -tables
Dec. 8			As. 5		Notes	ch. 11	ABSTRIPS, POP, SATPLAN, etc.
Dec. 9			Lisp4				
Dec. 13	Test 2						

**Course web pages:** <http://www.cs.rochester.edu/u/{schubert/444,daphnel/cs444}>

**Text (required for grads):** [B&L] Brachman & Levesque, *Knowledge Representation and Reasoning*

**Old text (still useful reference):** [G&N] Genesereth & Nilsson, *Logical Foundations of Artificial Intelligence*

**Supplementary reading:** [R&N] Russell & Norvig, *Artificial Intelligence*; For LISP, see course web pages

**Tests (noncumulative, closed-book, 1 $\frac{1}{4}$  hrs):** Midterm Nov. 10, Final Dec. 13

**Approximate weights:**

	grads	undergrads
5 assignments	20±3%	30±3%
Lisp problems	15±3%	18±3%
Midterm test	18±3%	22±3%
Final test	25±3%	30±3%
Essay/project	22±3%	

**Instructor office hours:** Len Schubert (CSB 733), 5:00-6:30 Tues./Thurs.

**TA:** Daphne Liu (email: daphne (no gap) l at cs etc.), office hours (CSB 630, TBA) (Fri. 10-12 a.m.??)