

**Natural Language Processing Course
Tentative Schedule of Class Sessions 2010
(revised 4/05/10)**

Date Topics and Assignments

- 1/19 Course Overview and Introduction to NLP
Readings: Chapter 1 J&M either edition, Chapter 0 NLTK book.
- 1/26 Corpus Linguistics, N-gram Analysis
Readings: Sections 4.1 – 4.7 J&M, 2nd ed., Ch. 6 J&M, 1st ed.
- 2/02 Morphology
Readings: Ch. 2, J&M either ed.
Recommended Reading: Church and Hanks paper
- 2/09 Regular Expressions and Finite State Automata
Readings: Ch. 3, J&M either ed.
Assign Homework 1: Mutual Information
Recommended Reading: Church and Hanks paper
- 2/16 Part-of-speech Tagging
Readings: Ch. 5 J&M 2nd ed., or Ch. 8 J&M 1st ed.
Optional reading: Eric Brill, Transformation-Based Error-Driven Learning.
- 2/23 Context Free Grammars
Readings: Ch. 12 J&M 2nd ed., or Ch. 9 J&M 1st ed.
- 3/02 Parsing, Statistical Parsing, Dependency Parsing
Readings: Ch. 13 J&M 2nd ed., or Ch. 10 J&M 1st ed.
Optional reading: Joakim Nivre, Deterministic Dependency Parsing of English Text.
Homework 1 Due.
- 3/09 Semantic Representations, Lexical Semantics, WordNet
Readings: Ch. 17 J&M 2nd ed., or Ch. 14 J&M 1st ed.
J&M 2nd ed. Sections 19.1-19.3 and 20-1 – 20-8,
or J&M 1st ed. 16.1 – 16.2 and 17.1-17.2
Assign Homework 2: Noun Chunking or Parse Tree processing
- 3/16 SPRING BREAK
- 3/23 Classification and Machine Learning, Word Sense Disambiguation
- 3/30 Case Grammar, Semantic Role Labeling
Readings: J&M 2nd ed. Sections 19.4 and 20.9

- 4/06 Discourse Linguistics, Anaphora & Coherence
Readings: Ch. 21 J&M 2nd ed., or Ch. 18 J&M 1st ed.
(Preliminary) Topics for NLP Applications
Homework 2 Due by end of day on 4/08.
- 4/13 Information Retrieval, Question Answering, Summarization
Reading: Ch. 23 J&M 2nd ed.
Choose presentation topics, Finalize topics and groups.
(4/15 – no class, available as group meeting time)
- 4/20 Information Extraction, Emotive Aspects of Language
Readings: Ch. 22 J&M 2nd ed
Assign Final Projects.
- 4/27 Pragmatics, Dialogue Theory,
Readings: Ch. 24.1-24.3 J&M 2nd ed., or Ch. ?? J&M 1st ed.
- 4/29 NLP Applications: Student Presentations
- 5/04 Tuesday is last class: More Student Presentations

(No Final Exam. Final Project Due date will be announced, possibly May 12 (last day of exams).)