FALL 2007: Natural Language Processing (LNGN445)

3 credits
180 Dickson Hall
Thursday, 4:00-6:30PM
Instructor: Anna Feldman

Course description: Most human knowledge and most human communication are represented and expressed using language. Language technologies permit computers to process human language automatically; handheld computers support predictive text and handwriting recognition; web search engines give access to information locked up in unstructured text. By providing more natural human-machine interfaces, and more sophisticated access to stored information, language processing has come to play a central role in the multilingual information society.

This course will provide a comprehensive introduction to the field of natural language processing (NLP), covering the major techniques and theories.

Audience: This course is intended for people in the language sciences and the information sciences who want to learn how to write programs that analyze written language. Depending on which background you come from, and your motivation for being interested in NLP, you will gain different kinds of skills and knowledge from this course.

You will learn:

- how simple programs can help linguists manipulate and analyze language data, and how to write these programs;
- key concepts from linguistic description and analysis;
- how linguistic knowledge is used in important language technology components;
- knowledge of the principal data structures and algorithms used in NLP, and skills in algorithmic problem solving, data modeling, and data management;
- understanding of the standard corpora and their use in formal evaluation;
- the organization of the field of NLP;
- skills in Python programming for NLP

For further information, please, contact Anna Feldman at x7500 or feldmana@mail.montclair.edu.