Linguistics 599 Computational Linguistics

Instructor: Sean McLennan **Time:** TR 14:00~16:45

E-mail: smclenna@ucalgary.ca **Place:** SS018 (TRI-Lab) Section 1

Phone (403)210-5931

Office SS816

Office Hours: by appointment

Course Description

Computational Linguistics is a diverse and growing field with broad technological and research applications. This introductory course will sample topics in Computational Linguistics, with a focus on the development of practical skills. Over the duration of the course, students will be encouraged to develop a deeper understanding of subject matter that interests them through the design of a final project appropriate to their background and skill-level.

Course Materials

Jurafsky, Daniel, and James H. Martin. 2009. *Speech and Language Processing*, 2/E. Prentice Hall. ISBN 0131873210.

Schedule

Date Topic

May 14 Introduction to Computational Linguistics

May 19 Speech Recognition

May 21 Speech Synthesis

May 26 Speech Synthesis

May 28 Computational Morphology

June 2 Computational Morphology

June 4 Corpus Analysis

June 9 Corpus Analysis

June 11 Corpus Analysis

June 16 Computational Syntax

June 18 Computational Syntax

June 23 Machine Translation

June 25 Project Presentations

Evaluation

Assignments TBA 30% Project Proposal June 9th 20% Project Presentation June 25th 10% Final Project June 25th 40%

Prerequisites

Two of: LING 301, LING 303, LING 341, CPSC 219

OR

Permission of the instructor

Because of the mixed-disciplinary nature of this course, a background in only one of Linguistics or Computer Science is required. Familiarity with concepts in the alternative discipline is advantageous; however, the course is designed to accommodate a variety of backgrounds. Students who have any concerns or questions are encouraged to contact the instructor.

Grading Scheme

A+: 95-100 C+: 65-69 A: 90-94 C: 60-64 A-: 85-89 C-: 55-59 B+: 80-84 D+: 52-54 B: 75-79 D: 50-51 B-: 70-74 F: 0-49

Late Assignments

There will be no opportunity to make-up missed in-class assignments; the lowest in-class assignment mark will be dropped in the final calculation so as not to unduly penalize those students with 'extenuating circumstances' (birth, death, illness of you or a close family member). Other late assignments will not be accepted unless documentation confirming 'extenuating circumstances' is provided to the instructor. If students are aware ahead of time a potential conflict, they are encouraged to consult the instructor as soon as possible. The earlier a conflict is identified, the more likely an accommodation can be made.

Academic Misconduct

Students should be familiar with the sections of the University of Calgary calendar which describe the available punishments (F grades, probation, expulsion, etc.) for committing academic misconduct such as cheating or plagiarizing.

Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course, when, in fact, it is not. Most commonly plagiarism exists when:

- a. the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test).
- b. parts of the work are taken from another source without reference to the original author,
- c. the whole work (e.g., an essay) is copied from another source, and/or
- d. a student submits or presents work in one course which has also been submitted in another course (although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved.

While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Some course assignments call for students to work in groups. Unless noted otherwise in writing, students must write up their own answers for submission of the assignment. Failure to do so constitutes plagiarism.

Plagiarism is an extremely serious academic offence. Possible penalties for plagiarism include: failing the assignment, failing the course, disciplinary probation, suspension, or expulsion.

Any student who voluntarily and consciously aids another student in the commission of academic misconduct (e.g., plagiarism, or cheating) is also guilty of academic misconduct.

Disability Resource Centre

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.