DEPARTMENT OF COMPUTER SCIENCE The UNIVERSITY of WESTERN ONTARIO

CS 9860

Advanced Machine Learning

COURSE SUMMARY

The course will provide a comprehensive introduction to machine learning, one of the most active and important areas in AI (Artificial Intelligence). Various learning paradigms, methodologies and theories will be covered. The main focus will be on inductive learning from examples.

Some knowledge of knowledge representation, logic, reasoning, and probability theory would be helpful in taking this course.

COURSE WEB SITE: www.csd.uwo.ca/faculty/ling/cs860. Check often.

TEXTBOOK: Machine Learning, by Tom Mitchell, McGraw Hill. 1997.

In addition, research papers and online materials will be distributed and used in the lecture. See Course Website for details.

EVALUATIONS:

Students are expected to actively participate in the class discussion during lecture time. Therefore, reading and reviewing materials assigned ahead of the lecture is crucial for the classroom discussion. 30% of the total mark will be given based on class participations.

An in-class midterm testing the materials covered will be held at about 2/3 of the term (before project presentation starts). The midterm will be 30%.

Students are also expected to read selected papers on certain research topics of their interests, and make a presentation in the class. They will then submit a paper (10 to 20 pages) based on their research at the end of the term (40%).

INSTRUCTOR

Prof Charles Ling; cling@csd.uwo.ca (best way to contact him)