#### Washington State University School of Electrical Engineering and Computer Science Fall 2009

## CptS 440 / CptS 540: Artificial Intelligence

Course Syllabus

**Professor:** Diane Cook Office: 121 EME

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Office Hours: Tuesday and Thursday, 10:30 - 11:30

Teaching Assistant: Jack Chen

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Office: EME 206

Office Hours: Monday, 2:30-4:30, or by appointment

#### Class Lectures:

Sloan 5

Tuesday, Thursday 9:10 - 10:25

## Introduction

In this class we will provide an introduction to the field of Artificial Intelligence. We will cover a number of AI ideas and techniques, as well as give you a brief introduction to symbolic computing.

This class is intended to teach you the philosophies and techniques of Artificial Intelligence, including intelligent agents, search, games, knowledge representation, logical reasoning and theorem proving, uncertainty reasoning, machine learning, computer vision, and a brief introduction to computing using the Prolog language. You are expected to have completed a course in Data Structures, and to be comfortable with algorithm design and programming.

# **Books and Notes**

The textbook for this course is Artificial Intelligence: A Modern Approach, by Russell and Norvig, second edition. There are also good references for Prolog, including Prolog Programming for Artificial Intelligence, The Art of Prolog, and Programming Prolog.

There are many excellent books which can provide extra insight for the subjects taught in this class. A few I recommend are Artificial Intelligence: A New Synthesis by Nilsson, Essentials of Artificial Intelligence by Ginsberg, Artificial Intelligence by Winston, The Elements of Artificial Intelligence by Tanimoto, Artificial Intelligence by Rich and Knight, Artificial Intelligence Programming by Norvig, and Introduction to Artificial Intelligence by Charniak and McDermott.

### Grades

The grade distribution for this class is shown below. With the first homework you will be asked to provide a pseudonym consisting of six letters and/or digits. This pseudonym can be used throughout the semester to verify your scores and compare your performance with the class grade distribution.

Graduate Students	
Homework	30%
Exam 1	20%
Exam 2	20%
Final Exam	20%
Presentation	10%
Undergraduate Students	
Homework	35%
Exam 1	20%
Exam 2	20%
Final Exam	25%

The schedule with due dates for homework assignments can be found on the class home page at www.eecs.wsu.edu/~cook/ai. Assigned readings are from the course textbook and should be completed by the dates listed on the schedule. You are responsible for all materials presented in the web lecture notes and in the assigned textbook readings.

All work in this class must be done individually. If you use material found on the web, reference any and all material you use. Anyone cheating on work in this class will receive a failing grade for the work and will be subject to the university's academic dishonesty policy. Cheating involves giving assistance or receiving assistance on work assigned in this class. If you have any questions regarding an assignment or a quiz, see the instructor or teaching assistant. The WSU statement on academic integrity can be found at http://www.eecs.wsu.edu/~schneidj/Misc/academic-integrity.html.

There will be two exams throughout the semester. These are closed-book, closed-note exams and will cover material through the class period before the exam.

Graduate students will also be required to prepare a 20 minute presentation on a current AI topic in class. These presentations will be given throughout the semester. Details can be found on the class home page.

All homework assignments should be sent by electronic mail to the TA. The assignments will be graded by the TA and the grades will be sent to you by electronic mail. Homework assignments are due by the beginning of class on the due date. *No late assignments will be accepted.* 

If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first week of the semester, to make sure you are appropriately accommodated.