

CS 404: Artificial Intelligence

Fall 2009

Lectures: Monday 12:40–14:30 (FASS G022), Wednesday 11:40–12:30 (FASS G022)

Instructor: Esra Erdem (Wednesday 15:40–16:30, FENS G053)

TAs: Firat Hamit Tahaoglu (Tuesday 12:40–13:30), Tansel Uras (Thursday 12:40–13:30)

Recitations: Tuesday 18:40–19:30 (FENS L065), Thursday 18:40–19:30 (FENS G032)

Course description. This course provides an introduction to Artificial Intelligence (AI). In this course we will study a number of theories, mathematical formalisms, and algorithms, that capture some of the core elements of computational intelligence. We will cover some of the following topics: search, logical representations and reasoning, automated planning, representing and reasoning with uncertainty, decision making under uncertainty, and learning.

Course objective. To give an understanding of some of the fundamental ideas in AI.

Prerequisites. An introductory course to computing (like CS201) and a course on data structures and algorithms (like CS202).

Recommended textbook. *Artificial Intelligence: A Modern Approach* by Stuart Russell and Peter Norvig. 2nd Edition. (<http://aima.cs.berkeley.edu/> .)

Assignments. There will be four to six assignments, each involving a programming component and/or a written component (typeset using Latex).

Quizzes. Quizzes will be given almost every week during lectures or recitations.

Exams. There will be three exams. In these exams you will be responsible for the material covered in lectures, recitations, and assignments.

Grading (tentative). Grades will be determined by the assignments (30%), the quizzes (10%), and the exams (60%).