

University of Illinois at Chicago  
Fall 2005

## **CS 411 — Artificial Intelligence I**

### **Course Syllabus**

**Room:** LC A5

**Time:** MWF 1:00 – 1:50

**URL:** via blackboard, cs411f05

### **Staff**

**Instructor:** Barbara Di Eugenio

**Office:** 916 SEO

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**Office Hours:** W 3:00-4:30

**Teaching Assistant:** Xin Lu

**TA's email:** xlu4@uic.edu

**TA's Office Hrs:** TR 2-3pm, SEO 938

### **Course Objectives**

The aim of this course is to introduce students to the field of Artificial Intelligence (AI). Specifically, the course will provide the theoretical foundations that underlie AI, and practice in building components of rational agents.

### **Textbooks**

1. Required: Stuart J. Russell and Peter Norvig. Artificial Intelligence — A Modern Approach. Second Edition. Prentice Hall, 2003.

A general reference: Stuart C. Shapiro. Encyclopedia of Artificial Intelligence — Second Edition, John Wiley and Sons, 1992.

### **Prerequisites**

CS 202

## Notes

- I use email and the web site a lot to communicate with the whole class. Please check your email frequently, especially around deadlines (homeworks and exams). You should use the web page message board to post any questions of general interest, such as clarification on the homework etc. I won't answer general questions by email but on the board.
- The web page will contain all materials relevant to the class, syllabus, assignments, lecture notes etc. You can also see you own grades.

## Tentative Schedule

Dates	Topic	Readings
Week 1	Introduction, Intelligent Agents	Ch. 1-2
Week 2-3	Problem Solving: Search	Ch. 3-4
Week 4	Problem Solving: Game Playing	Ch. 6
Week 5-8	Knowledge Representation	Ch. 7-10
Week 9-10	Machine Learning	Ch. 18, 20
Week 11-12	Planning	Ch.11-12
Week 13	Probabilistic Reasoning	Ch. 13-14
Week 14-15	Other Topics, Invited Lectures, etc ...	

## Important Dates: Exams

Date	Event
9/30 (Fr)	<b>Midterm 1</b>
11/2 (Wed)	<b>Midterm 2</b>
Finals week (12/5-9)	<b>Final</b>

## Grading Criteria

- **3-4 Homework Assignments** (30-32% total): Each homework will be worth between 8 and 10% of the grade.

Homeworks will be mainly implementation oriented. Homeworks will have to be handed in via the facility available under the web page. More details will be available later.

- **3 Exams:** 2 midterms (19-20% each), 1 final (30%).
  1. The two midterms will be given during class time; consequently, **no make-ups** will be given.
  2. Exams will be closed-book.
  3. The final is cumulative, with more emphasis on the last part of the class.

**Important Note:** To pass the class you must get at least 60% of the total available points for the three exams.

Letter grades will be decided **only at the end**. However, the following guidelines will be adhered to:

Overall Score (undergraduate)	Overall Score (graduate)	Letter grade
88%	92%	A
78%	82%	B
68%	72%	C

## General Policies on homeworks and exams

1. Late homeworks will not be accepted in any case, unless there is a **documented** personal emergency. Arrangements must be made with the instructor as soon as possible after the emergency arises, preferably before the homework due date.  
**Advice:** If for whatever reason you don't manage to finish an assignment, hand in what you have. Partial credit may be given at the grader's discretion.
2. Statute of Limitations: **Two weeks!** No grading questions or complaints — **no matter how justified** — will be listened to two weeks after the item in question has been returned.

## Policy on Academic Integrity

**Academic dishonesty will not be tolerated.** Please see the CS department policy below on the topic; this policy specifies penalties for violations.

What is academic dishonesty? To hand in any work which is not 100% the student's creation, unless you are explicitly allowed to do so. Thus:

1. **Exams.** All work on all exams must be individually performed.
2. **Homeworks:** no student may give any other student any portion of their solutions or code, through any means. Students are not allowed to help each other debug the code, or to show each other any portions of code or homework.

**Important Note:** every semester somebody is caught red-handed and as a consequence fails the class. Isn't it better to get a B or a C than an E?

### **CS department policy on academic dishonesty**

The CS Department will not tolerate cheating by its students. The MINIMUM penalty for any student found cheating will be to receive an E for the course and to have the event recorded in a department and/or College record. The maximum penalty will be expulsion from the University.

We intend to devote more effort than in the past to detecting and punishing cheating. Cheating includes all the following, though this is not a complete list:

- Copying or any other form of getting or giving assistance from another student during any test, quiz, exam, midterm, etc.
- Plagiarism—turning in writing that is copied from some other source.
- Obtaining solutions to homework by posting to the Internet for assistance, purchasing assistance, obtaining copies of solutions manuals for instructors, and obtaining copies of previous year's homework solutions.
- Computer programs: Any time you look at another student's code, it is cheating. (Exception: If you are EXPLICITLY told that you may do so by the instructor, for instance, in working on a large group project in the 400-level software engineering course.)

For computer programs, if for some reason we cannot determine who copied from whom, we may, at our discretion, give failing grades to both students.

It is the responsibility of all engineering and computer science professionals to safeguard their company's "trade secrets." An employee who allows trade secrets to be obtained by competitors will almost certainly be fired. So, YOU are responsible for making sure that your Unix directories have permissions set so that only you can read your files, for being sure to log out at the end of working in the computer lab, etc.