University of Illinois at Chicago  
Spring 2016  
CS 411 — Artificial Intelligence I  
Course Syllabus  

Room: BH209  
Time: MWF 10:00 – 10:50  
URL: via Blackboard / Piazza  

Staff  

Instructor: Xinhua Zhang  
Office: 1237 SEO  
Phone: 312.413.2416  
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Office Hours: TBA (most likely MW afternoon)  

Teaching Assistant: TBA  
TA’s email: TBA  
TA’s Office Hrs: TBA  

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 (Required)  


Prerequisites  

CS 251
Notes

- I use email and Blackboard a lot to communicate with the whole class. Please check your email frequently, especially around deadlines (homework and exams).

- The web page on Blackboard will contain all materials relevant to the class, syllabus, assignments, lecture notes etc. You can also see your own grades.

Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction, Intelligent Agents</td>
<td>Ch. 1-2</td>
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<tr>
<td>(Jan 18)</td>
<td><strong>Martin Luther King, Jr., Day. No classes</strong></td>
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<td>Week 2-3</td>
<td>Problem Solving: Search</td>
<td>Ch. 3-4</td>
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<td>Week 4-5</td>
<td>Problem Solving: Game Playing, Constraint Satisfaction</td>
<td>Ch. 5-6</td>
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<td>Week 6-7</td>
<td>Logic and inference</td>
<td>Ch. 7-9</td>
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<td>Week 8</td>
<td>Planning</td>
<td>Ch. 10</td>
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<td>Week 9-11</td>
<td>Probabilistic reasoning</td>
<td>Ch. 13-17</td>
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<td>Week 12-13</td>
<td>Machine Learning</td>
<td>Ch. 18-21</td>
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<td>Week 14-15</td>
<td>Current applications, Catch up, etc...</td>
<td>Ch. 22-23</td>
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Some sessions are for recitation, depending on the progress.

Midterm and final exams

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<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>Friday of Week 6</td>
<td><strong>Midterm 1</strong> (Ch. 1-6)</td>
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<tr>
<td>Monday of Week 10</td>
<td><strong>Midterm 2</strong> (Ch. 7-10)</td>
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<td>Finals week (Week 16)</td>
<td>Final exam</td>
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Grading Criteria

You will be graded out of 100 points total.

- **3 Assignments** (30 points total): Each assignment will be worth 10 points.
  Assignments will be a mix of pen-and-pencil and programming/implementation.
  For some assignments, we will use the code repository available on the book web site http://aima.cs.berkeley.edu/code.html.
  Homework will have to be submitted via Blackboard.
  More details will be available later.

- **3 Exams**: 2 midterms (20 points each), 1 final (30 points).
  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, i.e., 42 points out of the exams.

General Policies on homework and exams

1. Late homework 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: **Three weeks**! No grading questions or complaints — no matter how justified — will be listened to three 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. **Homework:** 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:** almost 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 F?

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 F 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.

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 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 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.