CSE 511A: Introduction to Artificial Intelligence
Spring 2018

Mondays and Wednesdays 2:30pm – 4:00pm
Lab Sciences 250
`http://www.cse.wustl.edu/~wyeoh/courses/cse511a`

Instructor Information:

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Office Hours: Mondays 4:00pm – 5:00pm and by appointment

Course Description:

The discipline of artificial intelligence (AI) is concerned with building systems that think and act like humans or rationally on some absolute scale. This course is an introduction to the field, with special emphasis on sound modern methods. The topics may include knowledge representation, problem solving via search, game playing, logical and probabilistic reasoning, planning, machine learning (decision trees, neural nets, reinforcement learning, and genetic algorithms) and machine vision. Programming exercises will concretize the key methods. The course targets graduate students and advanced undergraduates. Evaluation is based on programming assignments, quizzes, a midterm exam, and a final exam.

Prerequisites:

If you are unsure about any of these, please speak to the instructor.

- CSE 132, CSE 240, and CSE 347, or permission of the instructor.
- Knowledge of Python. This will be *critical* to complete the programming assignments.
- Basic knowledge of statistics, probability theory, and first-order logic.

Required Textbook:

The course textbook is *Artificial Intelligence, A Modern Approach* (3rd edition) by Russell and Norvig and published by Prentice Hall (ISBN: 0136042597). We will not cover all of the chapters and, from time to time, cover topics not contained in the book.

Assignments:

The assignments for this course are a progression of Python programming assignments related to the classic game Pac-Man. The assignments will be automatically graded, and a dynamic scoreboard will (anonymously) show your standing on each assignment compared with your peers. Information related to interacting with the autograder can be found on the course website.

Late Policy: Late submissions of assignments will be penalized 25% for each day late.

Collaboration Policy: Students may work on the assignments in pairs if they prefer. When doing so, this should be indicated via the `partners.txt` file in the students' Subversion repository.

Exams:

There will be one midterm exam and one final exam. The midterm exam will be on February 28 and the final exam will be on May 7. The final exam will be a comprehensive exam. There will be no make-up exams unless there is a very good *documented* reason to have it.

Evaluation:

Programming Assignments: 45%
Quizzes: 15%
Midterm Exam: 20%
Final Exam (Comprehensive): 20%

Grading Scale:

The intended grading scale is as follows. The instructor reserves the right to adjust the grading scale.

A±:	$\geq 90\%$
B±:	$\geq 80\%$
C±:	$\geq 70\%$
D±:	$\geq 60\%$
F :	$< 60\%$

Announcements:

All announcements related to the class will be made either in lecture or by email to the students' wustl.edu email accounts. We will assume that any announcements made is known to everyone in class within 24 hours of it being announced. Students are expected to be responsible for all announcements made.

We will use Piazza for all questions and discussions related to the class. Please post questions on Piazza – they will reach the instructors and all the TAs, and you will get a quicker response. Individual emails will be met with a response to post the question on Piazza. A link to the Piazza site will be on the course website.

Academic Misconduct:

Students should familiarize themselves with the university's Academic Integrity Policy. *Any* violation of this policy (e.g., plagiarism, cheating, fabrication or falsification, etc.) will result in the student receiving a grade of "F" in this course. More information is available here: `https://studentconduct.wustl.edu/academic-integrity/`.