CS 151 Artificial Intelligence
Syllabus – Fall 2014

Course Overview

In this course, you will be introduced to various topics in the broad field of Artificial Intelligence (AI). While it is not possible to introduce you to all subfields of AI in one semester, you will be exposed to the following topics: search, probabilistic models in AI, supervised learning techniques, clustering, philosophical and ethical issues in AI, and various applications of AI (e.g. speech recognition). In addition to a firm understanding of these topics, I hope that you also leave this class with an awareness of the state of research in this field, as well as the current challenges. The prerequisite for this course is CS 52.

Course Details

Instructor: Prof. America Chambers (achambers@cs.pomona.edu, Edmunds 230, x70969)

Office Hours: MW 2:30pm – 4:00pm, F 10:00am – 11:30am (or by appointment)

Course Time and Place: MW 1:15 pm – 2:30 pm in Edmunds 101

Course mentors: Andy Russell and Sara Jundt (mentor hours TBD)

Course webpage: www.cs.pomona.edu/classes/cs151

Course communication: This course uses Piazza extensively for course communication, e.g. all announcements will be posted on Piazza. As such, please make sure to accept the Piazza invitation for the course.

Textbook: Russell, Stuart and Norvig, Peter. (2010) Artificial Intelligence: A Modern Approach (Third Edition). New Jersey, Prentice Hall. *This book is a required text.*

Computer Systems: To get a DCI account, go to http://www.dci.pomona.edu and click on "Request an account." After submitting the request, you must visit the system administrator in Edmunds 219 for your account information.

Course Breakdown

Grading: Grades in the course are based on four components:

Assignments	50%
Tests	20% (10% each)
Final Project	25%
Class Attendance	5%

Note that class attendance is required and will be reflected in your grade. Your work in this course will fall into several major areas:

Readings: Readings are taken from the textbook as well as other sources (as provided). The readings for each class are posted on the "Assignments page". The textbook is quite clear and I strongly recommend

that you develop the habit of reading it.

Assignments: There are 6 homework assignments in this class. Each assignment will be a mix of programming and written questions. Most programming questions will ask you to implement an algorithm (using Python) that we have discussed in class and apply it to the game of Pac-man. All assignments will be posted on the "Assignments page" on the course webpage.

Tests: There will be two in-class tests tentatively scheduled for October 15th and November 26th. These dates are subject to change. The tests will be more than a quiz but less than a midterm or final exam. More details will be given later.

Final Project: During the last month of the semester, you will complete a final project (either in groups or individually). The final project is an opportunity for you to get hands-on experience with a topic of your choosing. The final projects are presented during our scheduled final exam time which is on Thursday December 18th at 2:00pm (as noted in Pomona's final exam schedule). *Attendance for all final presentations is required so please make sure to buy your airplane tickets no earlier than this date and time.*

Late Policy

Assignments are due at the date and time specified. Assignments will be penalized by 15% for each day they are late up to three days after the submission date. The only exceptions are for serious illness or similar emergencies. In either case, you'll be asked to provide a note from the Dean's office.

For the programming assignments, the code you submit must compile and run without errors. No partial credit will be given for a submission that does not compile!

Academic Honesty

The academic honesty policy for this class is covered in the CS department's Collaboration and Academic Honesty Policy which can be found at **http://www.cs.pomona.edu/academichonesty**. You are responsible for reading and understanding this policy! If you have any questions about what is appropriate collaboration, come see me.

To summarize, any work you submit must represent only your own work unless the instructor explicitly specifies otherwise. In particular, you should not read or copy another student's code or solutions, exchange computer files, use solutions or code found via the internet, hand in work done by (or in collaboration with) someone else under your own name, or provide your code or solutions to anyone else until after the assignment due date. Identical, or nearly identical, submissions will be considered conclusive evidence of plagiarism. Exceptions include any code that is provided to you by the professor or code from the textbook. Additionally, the student mentors may help you with your code and written questions.

Failure to abide by these rules is considered plagiarism. Violations are easy to identify and will be dealt with promptly. The first offense typically results in failure in the course. A second offense is automatically referred to the College's Board of Academic Discipline. See the Academic Honesty Policy in the Student Handbook for further information. *Please do not put us, yourself, your parents, or anyone else in this unpleasant situation!*

Academic Accommodations

If you believe you need academic accommodations due to a disability, please contact Dean Collins-Eaglin at jan.collins-eaglin@pomona.edu as soon as possible!