

Syllabus for Artificial Intelligence

Spring 2019

Course Goals

Welcome to Artificial Intelligence! In this course, you will be introduced to various topics from the broad field of Artificial Intelligence (AI). While it is not possible to cover all subfields of AI in one semester, we will cover the following topics: search, adversarial games, constraint satisfaction, probabilistic models, machine learning (supervised and unsupervised), and ethical/philosophical issues in AI.

Administrative Details

Instructor: Professor Chambers (alchambers@pugetsound.edu, Thompson 405)

Office Hours: TBD

Other Availability: You're more than welcome to stop by if my door is open. I'm not available on Tuesdays and I don't respond to emails at night or on Saturdays.

Course Time and Place: MWF 10 – 10:50 pm in Thompson 197

Course webpage: <http://mathcs.pugetsound.edu/~alchambers/cs431>

Textbook: Stuart Russell and Peter Norvig. Artificial Intelligence: A Modern Approach. 3rd Edition. (Required)

Course Breakdown

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

40%	Assignments
30%	Reading Quizzes
20%	Final project
10%	Class attendance

Readings: Each week will have a corresponding reading assignment taken from the textbook. The readings can be found on the course webpage under “Lectures”. It is imperative that you do the reading for this course! Many confusions and difficulties can be resolved by doing the reading. In lieu of exams, there will be a Moodle quiz each week based upon the week's reading. Quizzes will be available on Mondays and close on Sundays. You can take the quiz at anytime throughout the week. Quizzes cannot be made up but the lowest quiz score will be dropped at the end of the semester.

Homework Assignments: There will be (approximately) 6 homework assignments in this course. All assignments are programming assignments using the Java programming language. You can work with a partner if you choose but it is not required. See below for the late policy.

Final Project: During the last month of the semester, you will complete a final project (in groups of 2-3). You will propose a project in the area of your choice related to something we covered in the course. After your proposal is approved, you will implement your solution, write a final paper in which you document your

solution and relate it to literature in that field, and finally present your work to the class. Final projects will be presented during our scheduled final exam time (which you can find on myPugetSound).

Class Attendance: The remaining 10% of your grade is based upon class attendance. I will take attendance on randomly chosen days throughout the semester.

Course Policies and Conduct

Late Policy

Late homework assignments will be penalized by $3^n\%$ for $n \leq 4$ where n is the number of days the assignment is submitted late. The only extensions¹ given are for unexpected medical or family emergencies. In the case of an emergency, I will ask you to talk with the Dean of Student's Office. This preserves your privacy and allows you to coordinate not just with me, but with all your professors.

In-Class Policies

Laptops and cell phones are not allowed in class. I have found that students with open laptops and cell phones are a distraction to themselves and others. Please leave your cell phone in your bag or pocket (or don't bring it). If you have an accommodation in which you require a laptop, please let me know.

Prepare yourself to be in class and attentive for the full 50 minutes. Students getting up and leaving in the middle of class are a distraction both to the other students who are trying to learn and to me as I endeavor to use those 50 minutes effectively. In particular, this means you should fill your water bottles and use the restroom before coming to class. If you do need to leave class, you do not need to ask permission – quietly get up and go.

Academic Honesty

For all assignments (written or programming), any work submitted must represent the work of you (and your partner if relevant) only. Accordingly, you should not copy another student's solution or allow your solution to be copied, use a solution from the internet or past students, exchange computer files, or pass out solutions (e.g. on the board or a paper). In general, you should not hand in work done by someone else under your own name(s). Most instances of academic dishonesty are clear cut and students know when they have violated the rules.

One confusing situation for students is knowing if it's okay to ask another student for help. Students may ask for help and give help for specific problems. When someone asks you for help, you should follow these rules:

- Never show another student your code. Instead, you should look at their code and only with the intention of helping. As a general rule, no student should look at another student's code for their own benefit.
- Similarly, never show or give another student your writeup. Instead, you should discuss the problem together and try to ask helpful questions and give useful advice.

Any help given must be limited to the immediate problem. Two students sitting side-by-side and working through an assignment step-by-step together will certainly produce work that will be considered illegal collaboration.

¹An extension is when a student is allowed to turn in an assignment after the due date with no penalty

Failure to abide by these rules is considered plagiarism. The first offense typically results in failure in the course. Please read the University of Puget Sound's Academic Integrity policy (<http://www.pugetsound.edu/student-life/personal-safety/student-handbook/academic-handbook/academic-integrity/>) for further information. (Note: This policy is an adaptation of the academic honesty policy used in the CS department at Pomona College).

———— Academic Accommodations —————

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Peggy Perno, Director of the Office of Accessibility and Accommodations, 105 Howarth, 253.879.3395. She will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

———— Classroom Emergency Response Guidelines —————

Please review university emergency preparedness, response procedures and a training video posted at www.pugetsound.edu/emergency/. There is a link on the university home page. Familiarize yourself with hall exit doors and the designated gathering area for your class and laboratory buildings.

If building evacuation becomes necessary (e.g. earthquake), meet your instructor at the designated gathering area so she/he can account for your presence. Then wait for further instructions. Do not return to the building or classroom until advised by a university emergency response representative.

If confronted by an act of violence, be prepared to make quick decisions to protect your safety. Flee the area by running away from the source of danger if you can safely do so. If this is not possible, shelter in place by securing classroom or lab doors and windows, closing blinds, and turning off room lights. Lie on the floor out of sight and away from windows and doors. Place cell phones or pagers on vibrate so that you can receive messages quietly. Wait for further instructions.