

CSI 460 — Artificial Intelligence

Instructor: Dr. Shaun D. Ramsey

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Office Hours: MTW 11:30-12:20

Class meetings: Dunning Decker-N103 TR 10:00-11:15

Text: *Artificial Intelligence: A Modern Approach*, by Stuart Russell and Peter Norvig

Overview: The purpose of this course is to gain an understanding of the fundamentals of artificial intelligence. A broad field that delves into many areas in computer science, this course is designed to explore foundations in state space searching as it pertains to intelligence and rational agents.

Topics: Problem solving through the use of state-space search is explored. This includes methods involving heuristics, constraints, and adversaries. Other topics include planning, uncertain knowledge, probabilistic reasoning, and learning.

Advising: AI requires a large bit of reasoning with trees and complex data structures (state-space and searching). A strong foundation in CSI 202 (data structures) is necessary to do well in this course. Knowledge in algorithm analysis is also required.

Grading: Your grade consists of two exams, one final and assignments. You must pass each to pass the course. Each exam is worth 20% of your final grade. The final exam is worth 20%. Assignments comprise the last 40% of your grade in this course.

Assignments: Assignments largely consist of programs completed outside of class, but may include other assigned tasks inside and outside of class. For example, oral presentations during class and specific written assignments outside of class. For programming assignments, credit is given only for programs which compile without errors, execute properly, and are not late. Late homework will receive a grade of 0, but will be collected for mark-up. Assignments are due at the beginning of class on the assigned due date. Programming assignments are time stamped by the server we will be using, so be sure not to alter your program after the hand-in time.

Exams: The exams will be held on October 20 and November 30. An absence on the day of an exam will result in a grade of a 0. Except in cases of extreme emergency, exams must be taken on the day the exam is administered. Before a make-up test is scheduled, documentation of the extreme emergency must be given. Make-up exams for tests missed due to an extreme emergency will be arranged for a time that is mutually convenient for the student and Dr. Ramsey.

Attendance: Attendance will be taken at the beginning of every class. After two weeks of missed absences you fail the course. You fail the course on your fifth absence in a TTh course and on your seventh absence in a MWF course. There is no distinction between excused and unexcused absences. I will likely email you if you miss a class, but it is ultimately your duty to keep track of your absences. Note that missing a class may also result in missed classwork. It is your responsibility to obtain assigned homework, announcements and class notes from your fellow students. It is important that you attend every class. As a matter of courtesy, students are expected to inform Dr. Ramsey of the reason for any absence.

Academic Honesty: You are always subject to the Honor Code of Washington College. You may discuss concepts with others, but work is to be done on your own (unless otherwise designated). If you are unsure if something is considered *cheating*, simply ask. As always, if you have questions, feel free to email or stop by my office.

Accommodations: If you have a special accommodation/need that has been reported to the college, please let me know discretely during the first week, so that I can work to meet your accommodation.

Suggestions: To become a good programmer and problem solver, you must work on many problems. If you need help, please see me, peers or the math center for assistance. Don't forget your book! There are many resources, so there is no excuse for not using them.