

CS3610, Artificial Intelligence Final Exam

Instructions:

- This exam is being given as a “take-home” (outside of class) exam. You may work on your responses at your convenience any time between the receipt of this exam and the start of the final exam period.
- If this exam were given as an “in class” exam you would have a time limit of ~110 minutes to answer the question(s). I will, ask that you honor the general length of that timeframe with this exam and spend approximately two hours working on this exam.
- You should **word process and print** your responses.
- You should submit a paper copy of your responses during the final exam period which begins at 10:00 PM on Monday, December 10th. Your response must be received by 11:50 A.M.
- This exam is open book, open notes, and open Internet. You may refer to any “published” source(s) of your choosing. However, use of any source for anything more than “reference” must be **clearly** documented in your answer.
- You **are not** allowed to discuss the exam with your classmates until you have submitted your exam.

The Exam

Let’s revisit the very FIRST thing I asked you to discuss in this course. For HW0 I asked you respond to the question “How do you define artificial intelligence?” This was an opinion piece at the start of the semester. It is still an opinion question, but I think I can have higher expectations for the type of answer(s) that you provide in your final exam response.

For your final “exam” I would like you to write a new answer to this question by answering the following questions

1. Provide a new, *general* answer to the question “How do you define artificial intelligence”
2. How good was your answer to this same question when asked on HW 0? What did you say that was a good answer? What would you change? (If you do not have a copy of your HW0 please contact me and I can send it to you - assuming that you submitted it electronically as requested back in August).
3. We studied four main units this semester – search, knowledge/reasoning, planning, and learning. Select two of these units, and specifically discuss how topics in these units fit into and affect your answer to question 1.
4. Of all the AI issues that we discussed this semester which do you feel is still the most difficult to solve/perfect? Why?
5. Of all the AI issues that we discussed this semester which one, once solved/perfected, will advance the field the most? Why?

In the past, some students have looked at this as an opinion piece and have underestimated my expectations. I have actually received as little as one page of answers for this whole final exam!

Your answers should accurately *summarize a semester’s worth of learning*. Each question is worth 20 points with roughly 80% of those points being for content, while the remaining 20% will be assigned based on the overall clarity/writing quality of your answer(s).