

CMPSC 310
Artificial Intelligence
Fall 2018
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Exam 1 - Review Sheet

The first exam will be during the class session on Thursday, September 27, starting at 11:00 am. The exam will be available and should be taken online.

The exam will be open book and notes, including your class notes, my class notes and hand outs, but you can not use anything that has been printed from the Web or access anything through the Web during the exam, other than the Google link and the GitHub repository.

Content Covered

This exam covers material primarily found in FCA Chapters 1.1-1.5, 2.1-2.2, 3.1-3.6, 8.1-8.4 and the assigned articles, and the information on OpenCV available through slides and programs. The slides should be a good study guide for the material that you are responsible for. In the addition to the content covered in the slides, you should also be comfortable using the tools explored in class and/or lab1 1-3.

Exam Format

The exam will consist of ten questions consisting of a mixture of the following types of questions:

- Multiple choice
- Short answer (provide 2-3 sentence explanation or definition of terms/concepts)
- Problem solving (given a stated problem, find a solution (for example, trace through an algorithm by hand and produce an answer))
- Program analysis (given a program/model, run it and obtain an output to answer the question)

Material (aka Things to Know)

- What is AI? Connections to other disciplines and philosophical implications behind AI.
- What is an agent? A rational agent?
- Different types of agents.
- Types of environments.
- PEAS.
- Search algorithms (different categories of search algorithms, specific algorithms discussed in class - what they do).
- Agent-based simulation. How to run models in Netlogo and make changes to the interface.
- Probability terminology and basic probability problems.
- Overview of Computer Vision.
- OpenCV: basic image operations.