Course Description

This course introduces a variety of AI topics, including search, reasoning and applications. It introduces principles of AI techniques and prepares students for practicing these techniques in Python.

Prerequisite

COSC 3020 or approval of the instructor. Sufficient programming skills in Python to implement basic algorithms from scratch and implement sophisticated algorithms using libraries are expected. Working knowledge on probability and linear algebra are expected in certain topics, but we will briefly review these subjects so that students with sufficient mathematical maturity can fully participate.

Grading

- Overall Grading Policy
  - COSC4555: Assignment 60%, Midterm 15%, Final 25%, Project 10% bonus
  - COSC5555: Assignment 50%, Midterm 10%, Final 20%, Project 20%

- Project Grading Policy
  - Proposal, 20%
  - Presentation, 20%
  - Report, 40%
  - Consistency between proposal and report, 20%

Reference

- Additional reading materials will be available if appropriate.
Assignment Policy

- Students should hand in their own assignments. It is acceptable for students to collaborate in completing assignments, but participants should clarify with whom and on which problem they collaborated. Participants should also be ready to justify their own understandings on the submitted solutions.

- Some assigned problems may be similar to those in online materials. It is acceptable for students to borrow ideas from these materials, but practitioners should clarify the reference and be ready to justify their own understandings of the submitted solutions.

- Late assignment submission is acceptable. Each student has 4 late days without penalty throughout the semester; after that, 10% credit of the submitted assignment will be taken off after every 24 hours.

Attendance

Attendance is not mandatory.

Auditing

Students are allowed to audit upon the approval of the instructor.