
CSC 430 Artificial Intelligence
(3 contact hours – 0 lab hours - 3 credits)
Syllabus

General Information

<i>Instructor</i>	
<i>Office</i>	
<i>phone</i>	
<i>Class Time & Location</i>	
<i>Office Hours</i>	
<i>Teaching Assistant</i>	

Course Description

Survey of artificial intelligence techniques. Topics include search, logic, knowledge representation, reasoning with uncertainty, learning, and other AI techniques.

Course Prerequisites

- CSC 313

Course Category

Required

Course Outcomes

At the completion of this course, students will be able to:

1. use and implement various AI search algorithms (e.g., uninformed, informed, heuristic). [SO#1, SO#2]
2. apply the fundamentals of knowledge representation, inference and theorem proving. [SO#1]
3. reason in the presence of incomplete and/or uncertain information. [SO#1]
4. choose and implement appropriate learning algorithms for a given problem. [SO#1, SO#2]

Required Textbook

- S. Russell and P. Norvig. *Artificial Intelligence: A Modern Approach*, 4th edition, Pearson, 2021. [ISBN: 978-1292401133](#).

Supplementary Textbook

- R. Neapolitan and X. Jiang. *Artificial Intelligence with an Introduction to Machine Learning*, 2nd edition, CRC Press, 2018. [ISBN: 978-1138502383](#).
- W. Ertel. *Introduction to Artificial Intelligence*, 3rd edition, Springer, 2024. [ISBN: 978-3-658-43101-3](#).

Tentative Schedule

Week	Topic	Material (chapters and/or other material)
1-4	Search	
5-8	Logic	
9-12	Parsing	
13-15	Learning	

Grading Scheme

Grade Category	Weight
Project	25%
Assignments	15%
Quizzes	10%
Midterm Exam	20%
Final exam	30%

Inclusion (OSC Accommodation)

I wish to fully include persons with disabilities in this course. Please let me know if you need any special accommodations in the curriculum, instruction, or assessments of this course to enable you to fully participate. I will maintain confidentiality of the information you share with me. If you have a disability that impacts your classroom performance and wish to request an accommodation, contact the One-Stop Student Services Center (OSC) at N3-101. The OSC requires up-to-date documentation regarding your disability to enable them to comply with your request. Admission of OSC is voluntary and will be handled in a confidential manner. GUST does not discriminate against people with disabilities.