

COMP 341 (01) YAPAY ZEKAYA GİRİŞ

Güz 2024

SNA A22 - Tuesday, Thursday 13:00-14:10

1. Course Information

Instructor: Baris Akgün, BAAKGUN@ku.edu.tr

KU Credits: 3.00 **ECTS Credits:** 6.00

Prerequisite(s): Prerequisite: ENGR 200 or 201 or MATH 201 or 211 or MATH 202

Class Location & Meeting

Times:

PS (Yes/No):

DS (Yes/No):

Lab (Yes/No):

No

Language of Instruction: English
Office Hours: TBA

2. Course Description

Introduction to artificial intelligence concepts; agent based thinking; uninformed and informed search; constraint satisfaction; knowledge representation; logic; introduction to machine learning and its relation to artificial intelligence; representing uncertainty; markov decision processes; examples from vision, robotics, language and games.

3. Course Overview

An undergraduate course to introduce the foundations of modern artificial intelligence, geared towards building systems and agents that can reason, learn, and adapt to solve problems. Students will be exposed to search, constraint satisfaction, logic, uncertainty, machine learning and Markov decision processes with examples from vision, robotics, language, and games.

4. Course Learning Outcomes (CLOs):

CLO#	Upon successful completion of this course, students will be able to
1	Understand basic principles of agent-based AI and computational decision making.
2	Analyze a problem, use the right representation, formulation, and the method to solve it.
3	Know about models and their use in solving AI methods.
4	Know the basic concepts of Machine Learning (ML) and how it relates to AI.
5	Understand sources of uncertainty, representing uncertainty and decision making under uncertainty.

5. Assessment Methods

Method Description Weight %

Homework	Programming and written exercises	20.00
Midterm Exam	Best two out of three exams	40.00
Final Exam	Comprehensive written exam	40.00
	Total:	100.00

6. Instructional Material and Learning Resources

• Artificial Intelligence: A Modern Approach, Edition: 4 (ISBN: 978-1292401133)

Author: Peter Norvig and Stuart J. R **Publisher:** Pearson (Year: 2021)

Material Type: Textbook
Material Status: Required

Additional Notes: 3rd edition is also fine

• Active Use of Course Page on Blackboard: https://ku.blackboard.com/

• KOLT Tutoring: No Service Available

7. Course Schedule

Meeting Times	Subject

8. Student Code of Conduct and Academic Grievance Procedure

Student Code of Conduct

Statement on Academic Honesty with Emphasis on Plagiarism

Academic Grievance Procedure

9. Course Policies

See the syllabus pdf for details

10. Other