COMP 5600, Artificial Intelligence

Credit hours: 3 lecture
Contact hours: 3 lecture

Catalog Description: Introduction to intelligent agents, search knowledge representation and reasoning, machine learning.

Prerequisites: COMP 3270 or departmental approval
Corequisites: None

Selected Elective Course (CSCI, SWEN, WIRS)

Instructor or Course Coordinator: Dr. Hari Narayanan

Required Textbook
Stuart Russell and Peter Norvig, Artificial Intelligence: A Modern Approach, 2010

Course Outcomes
The student will be able to
• design subsymbolic AI techniques for solving optimization and machine learning problems.

Topics Covered
• Introduction (1.5 hours)
• Intelligent Agent (1.5 hours)
• Searching (6 hours)
• Game Playing (4.5 hours)
• Logic Agent (1.5 hours)
• Genetic Algorithms (3 hours)
• First Order Logic (4.5 hours)
• Planning (1.5 hours)
• Probability (3 hours)
• Bayesian Networks (3 hours)
• Decision Trees (3 hours)

Course Requirements
• Homework assignments (20%)
• Midterm exam (25%)
• Final exam (25%)
• Project (30%)

Syllabus prepared: Spring 2016