Instructor: Anca Ralescu  
Contact information: e-mail: Anca.Ralescu@uc.edu   
Office hours: by appointment, online  
Teaching Assistant: Madhav Lolla  
Goals: Introduction to the field of Artificial Intelligence - principles, and algorithms.   
Course Materials  
·      Significant portions of the text S. Russell, P. Norvig: Artificial Intelligence - A Modern Approach (AIMA). Pearson, Fourth Edition (2020).   
·      Other materials, as needed, also provided by the instructor.

**1.**    **Introduction, Intelligent Agents**  
**2.     Problem Solving**  
a.     Search  
b.     Search in Complex Environments  
c.     Adversarial Search and Games  
d.     Constraint Satisfaction Problems  
**3.     Knowledge, reasoning, and planning**  
a.     Logical Agents – propositional logic  
b.     First Order Logic (FOL)  
c.     Inference in FOL  
d.     Automated Planning  
**4.     Uncertain knowledge and reasoning**  
a.     Quantifying Uncertainty  
b.     Probabilistic reasoning  
c.     Making simple decisions  
d.     Making complex decisions  
e.     Multiagent decision making  
The following topics will also be covered if time permits  
5.     Machine Learning: Learning from Examples