

---

## CSE 473 Introduction to Artificial Intelligence

---

### **Credits**

3.0 (3 hrs lecture)

### **Lead Instructor**

Luke Zettlemoyer

### **Textbook**

- *Artificial Intelligence*, Russell

### **Course Description**

Principal ideas and developments in artificial intelligence: Problem solving and search, game playing, knowledge representation and reasoning, uncertainty, machine learning, natural language processing. Not open for credit to students who have completed CSE 415.

### **Prerequisites**

CSE 326 or CSE 332; recommended: CSE 312; either STAT 390, or STAT 391.

### **CE Major Status**

Selected Elective

### **Course Objectives**

Mastery of the fundamental concepts and techniques of artificial intelligence.

### **ABET Outcomes**

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and

safety, manufacturability, and sustainability

(e) an ability to identify, formulate, and solve engineering problems

(i) a recognition of the need for, and an ability to engage in life-long learning

(j) knowledge of contemporary issues

(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

## **Course Topics**

- Problem solving and search
- Knowledge representation and reasoning
- Reasoning under uncertainty
- Machine learning
- Planning