

CSE 3521 - Intro to Artificial Intelligence (Autumn 2017)

Location: Fontana Lab 142

Time: Wednesday/Friday 9:35am - 10:55am

Instructor: Denis Newman-Griffis, Dreese 580

Office Hours: Mo 3:30 - 4:30 PM, We 1:00 - 2:00 PM, and by appointment

Suggested Textbook: Russell and Norvig, *Artificial Intelligence: A Modern Approach*, Third Edition, Prentice Hall.

Course Summary: A survey of basic concepts and techniques for problem solving and knowledge representation paradigms in AI.

Learning Objectives: Assuming you pay attention and do the work, by the end of the course, the student will have learned:

- Essential AI terminology
- Fundamentals of problem solving in AI
- Fundamentals of knowledge representation
- Fundamentals of machine learning

Grading Policy

Grades will be determined as follows:

Homework	35%
Participation	10%
Midterm	25%
Final	30%

Late submissions will be penalized 10% per day.

Homework assignments are intended to be completed individually. You are free to discuss potential approaches and troubleshoot with your classmates, but any work that you turn in must be yours alone (and you must be able to back it up).

Attendance is expected, and frankly you're going to have a hard time learning the material if you're not here. We will do group activities at various times in the class, and your participation points will depend on you being here to be involved.

Academic Misconduct

Short version: don't do it.

Long version: All work that you turn in must be your own. Feel free to discuss assignments with

your classmates, but don't copy their solutions, and don't copy wholesale from the Internet. During the midterm and final exam, there is zero tolerance for cheating (looking at others' work). Your solutions should not bear an uncanny resemblance to anyone else's answers or code. If I suspect that you have violated this policy, I will report it to the Committee on Academic Misconduct for investigation.

Disability Statement: Any student who feels they may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. You should also contact the Office for Disability Services at 614-292-3307 or in 098 Baker Hall to coordinate reasonable accommodations for documented disabilities.

Tentative Course Schedule:

Week 1	Introduction and Intelligence
Week 2	Uninformed/Informed Search
Week 3	Adversarial search and Logic
Week 4	First-order logic
Week 5	Planning and Expert Systems
Week 6	Multi-Agent Systems
Weeks 7-8	Probability
Week 9	Bayesian Models
Week 10	Machine learning
Week 11	Reinforcement learning
Week 12	Neural Networks
Week 13	Applications: speech, language, vision
Week 14	Philosophy and Ethics

Important Dates:

Add/Drop Deadline	9/5
Midterm	10/6 (in class)
Course Final	12/14 (8-9:45am)