

**CS 480/580 – Introduction to Artificial Intelligence — Teletechnet Course  
Course Outline  
Fall 2009**

**Instructor:** Ravi Mukkamala  
**Office:** E&CS 3317  
**Phone:** (757) 683-3901  
**e-mail:** mukka@cs.odu.edu  
**Home-page:** <http://www.cs.odu.edu/mukka>  
**Course Hours:** 4:20-7:00pm Thursday  
**Office Hours:** 1-2 PM Tuesday, Thursday  
5:00-6:00 PM Monday  
(or by appointment)

**Prerequisites:** CS361

**Texts:**

- Prolog Programming in Depth, Nute and Vellino, Prentice Hall, ISBN 0-13-138645-X
- Essence of Artificial Intelligence, A. Cawsey, Prentice Hall, ISBN 0-13-571779-5
- In addition, you will be provided with other material as necessary.

**1. Course Objectives**

The main objective of this course is to introduce the students to several techniques that artificial intelligence offers towards problem solving. In particular, the course discusses the methods for knowledge representation, different search techniques for problem solving, expert systems, machine learning techniques, natural language processing, robotics, and vision. Prolog will be introduced as a means to solve most of these problems.

**2. Grading Criteria**

Your grade will be based on the following:

Examination I	150 points	October 3 (8:30-11:30 am)
Examination II	150 points	November 14 (8:30-11:30 am)
Project	100 points	Due December 3 (Thursday)
Assignments	100 points	5 Homework assignments
<b>Total</b>	<b>500 points</b>	

The final grade will be based on the following distribution. It is tentative in the sense that it is the **minimum grade** that you can expect for the obtained percentage. Depending on the performance of other students as well as other considerations such as the difficulty of the examinations or assignments, the grading criteria may be modified.

Percentage Range	Letter Grade
95-100	A
90-94	A-
87-89	B+
84-86	B
80-83	B-
76-79	C+
72-75	C
69-71	C-
62-68	D+
58-61	D
55-57	D-
0-54	F

### 3. Make-up Tests and Late Assignments

You are expected to submit all assignments on the due date. **You cannot be assigned a grade unless you submit the project.**

For late assignments, 10% is deducted for each day late for the first week after an assignment is due. Each assignment is due at the end of the day of the date indicated. For computing a lateness penalty, the weekend counts as one day (from 5 p.m. Friday until 5 p.m. Monday). An assignment submitted beyond a week will not be accepted. If you cannot attend an examination at its scheduled time, you should contact me prior to the examination.

### 4. Academic Honesty

Everything turned in for grading in this course must be your own work. The instructor reserves the right to question a student orally or in writing and to use his evaluation of the student's understanding of the assignment and of the submitted solution as evidence of cheating. Violations will be reported to the Honor Council for consideration for punitive action.

By CS Dept. policy, students found to be in violation of this rule will, at the very least, receive a failing grade in the course and may be subject to stiffer penalties.

### 5. Honor Code

All students are expected to abide by the ODU Honor Code. This means that *all* exams and assignments are to be the exclusive work of the student. An honor pledge will be required on *all* work which is to be graded.

### 6. Project

The term project will require a significant amount of programming and several written reports. Descriptions of the term project will be distributed at the beginning of the semester. It will be graded using the following percentages:

Design	10%
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Program structure	15%
Project Reports	15%
Correctness	60%

For all project components, the student can receive assistance from individuals other than the instructor **only** to ascertain the **cause** of errors. Thus you can get help if you need it to figure out why something doesn't work. You just can't get help from anyone, other than the instructor, to figure out how to make something work. All solutions turned in for credit are to be your individual work and should demonstrate your problem solving skills, not someone else's.

#### 7. Tentative Lecture and Homework Schedule

<b>Day</b>	<b>Topics covered</b>	<b>Assignments</b>
September 3	Knowledge Representation interf.-1	
September 10	Knowledge Representation interf.-2	HW#1 assigned
September 17	AI and Search Techniques-1	HW#1 due
September 24	AI and Search Techniques-2	HW#2 assigned
October 1	Expert systems-1	HW#2 due
<b>October 3</b>		<b>Exam I (Covers Ch. )</b>
October 8	Expert systems-2	HW#3 assigned
October 15	Machine Learning-1	HW#3 due
October 22	Machine Learning-2	HW#4 assigned
October 29	Natural Language Processing	HW#4 due
November 5	Robotics and Vision	HW#5 assigned
November 12	Revisit AI	HW#5 due
November 14		<b>Exam II (Covers Ch. 11-18)</b>