

Course Rubric CMSC 409

Course Title **Artificial Intelligence**

Syllabus

Catalog listing: CMSC 409
Course Level: Undergraduate
Prerequisites: CMSC 401 and 403 and MATH 310
Instructor: Milos Manic, Ph.D.

Office: ERB 2328
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Classroom: W103
Class website: Canvas

Office Hours: Thursdays, 10:45am-12:45pm (unless agreed differently)

1.0 – Overview (Catalog Course Description):

Covers problem spaces, problem-solving methods, game playing, knowledge representatives, expert systems, natural language understanding (**From** <https://pubapps.vcu.edu/vcucourses/?m=detail&s=CMSC&c=409&t=201510>)

2.0 – Course Structure:

Lecture hours/week – 3
Lab hours/week – 0

3.0 – Course Goals

Upon successful completion of this course, the student will be able to apply various AI techniques to real world problems.

4.0 – ABET Criteria Addressed:

6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

5.0 – Major Topics Covered:

- Intro, definitions, history, ethics and difficult questions of future AI
- Artificial vs. biological intelligence
- Problem solving by AI, learning, decision making, prediction
- Knowledge, reasoning, representation
- Learning (agents, neural/machine, from examples, Q, reinforcement)
- Communicating, perceiving, reasoning (text, vision, perception, robotics)

6.0 – Textbook(s):

Stuart Russell and Peter Norvig, Artificial Intelligence: A Modern Approach, Prentice Hall, 2010.

7.0 – Class Schedule:

- Lecture: T R, 09:30am-10:45am, Zoom

8.0 – Evaluation:

General Instructions:

- A (90 - 100) %
- B (80 - 89) %
- C (70 - 79) %
- D (60 - 69) %
- F (0 -59) %

Grading:

| Category | % weight |
|---|----------|
| Projects | 45 |
| Projects presentations and class activity | 10 |
| Final examination | 45 |

Additional syllabus details available on Blackboard.
