CSCI 470 – Artificial Intelligence
Course Syllabus – Fall 2004

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Office Hours: Monday, Wednesday 2 – 5 p.m., and by appointment.

Course Description: A course introducing the principles of artificial intelligence, especially basic techniques for problem-solving and knowledge representation. Among topics covered are heuristic search, knowledge representation and ontologies, intelligent agents, neural networks, genetic algorithms, and discovery informatics. Additional topics may include Bayesian networks, natural language processing, machine learning, pattern matching and robotics. Artificial intelligence programming techniques will also be introduced.

Prerequisites: 320 and Mathematics 307 and/or permission by instructor.


References: Additional materials will be made available via handouts and the class webpage at http://www.cs.cofc.edu/~manaris/fall04/cs470.html.

Learning Goals: To gain fundamental knowledge on AI, including its definition(s), history, and main philosophical issues.
To understand knowledge representation schemes and related issues.
To understand the fundamental differences between symbolic, statistical, and connectionist approaches.
To gain experience in programming with a programming language used in AI applications.
To develop working knowledge, in terms of understanding the theory and being able to design/implement working applications, of one AI area.
To develop an understanding of AI’s impact on today’s society.

Grading: To receive a passing grade for the course, you must average a passing grade (70% or higher) on each of the following: assignments, tests, and final exam.

Scale: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: <60. The grades of B+, and C+ may be given at the professor's discretion.

Final Grade Computation: Assignments (4-7) 30%, Tests (2) 40%, Comprehensive Final Exam 25%, and Class Participation 5%.
Collaboration Policy: You must do your assignments alone. You are not allowed to discuss assignments and possible solutions with any person other than the instructor, lab instructor, and department-assigned tutors. You are not allowed to look at someone else’s solution (including code in books and the Internet) or show your solution to someone else other than the instructor. Any violation of the above rules is an honor offense. See The Honor System of the College of Charleston and the Student Code of Conduct (www.cofc.edu/student-life/handbook/), especially sections on Cheating, Plagiarism (pp. 10-11), and Computer Use (p. 13).

On assignments you will be asked to identify the person(s) you received help from, if any. In-class exercises, when identified as collaborative, are excluded from the above.

Course Policies:

- **Tests:** Attendance at tests is mandatory. Students must complete tests with no discussion or sharing of information with other students. Calculators, computers, cell phones, etc. may not be used during a test.

- **Classroom:**
  You are expected to attend all classes. Regardless of actual attendance, you are responsible for announcements made in class, assignment due dates, etc.
  You are expected to participate in class with questions and invited discussion. However, you should respect your classmates right to learn; see Student Handbook section on Classroom Code of Conduct (pp. 49-50).

- **Assignments:**
  Programming assignment grades will be based on design and style as well as correctness of result.
  **Blackout period:** Starting early is essential in program development. You may ask questions about an assignment up until 24-hours before it is due.
  Reading feedback is essential in learning. Upon return of graded work, you have one week to ask questions about your grade.
  Do not submit programs with syntax errors. They are not eligible for credit.

- **Submission Instructions:**
  Assignments submitted in a way that does not follow submission guidelines may not be graded at all.
  Assignments are to be submitted to the instructor on a floppy disk by the due date and time. If the instructor is unavailable, they may be turned in at the CSCI department office (Long 216).
  Your floppy disk should have a typed label with your name, course number, section number, and semester.
  Your program(s) should be placed at the top directory using the specified filename(s).
  Your floppy disk should be readable on MS Windows.

- **Late Policy:**
  You have four “late” days for the whole semester. You may use these days as you wish for assignment submission. If you use them up, no late assignments will be accepted.
  If you submit everything on time (use no late days), 2.5 bonus points will be added to your course grade.