Professor: David M. Chelberg  
Office: Stocker 322B  
Phone: (740) 593-1251  
Office Hours: Tues., Thr. 9:00am-10:30am and by email appointment  
Electronic Mail: chelberg@ohio.edu  
Class Homepage: http://oucsace.cs.ohiou.edu/~chelberg/classes/680/680.html  
Class Number: 2287  
Objectives: To become adept at using and analyzing artificial intelligence techniques to solve problems.  
Prereq: No formal prerequisite, but a good background in algorithms and data structures is expected.  
Course Outline: The course emphasizes the importance of fundamental concepts in AI, and the formal mathematical theory underlying AI techniques. Topics include:  
- Definitions of AI  
- Search  
- Heuristic Search  
- Game Playing  
- Knowledge and Reasoning  
- Theorem Proving Systems  
- Logical Reasoning Systems  
- Planning  
- Advanced Topics  
Expectations: Students are expected to spend at least four hours outside of class per class session, including working exercises in the book, and programming homework problems. Artificial intelligence techniques can best be learned by doing! In this class students are expected to write many programs in order to gain proficiency. All programs for this course must be written in C++ or Lisp or Prolog and compile and run on prime. You are free to develop your code wherever you wish, but YOU must ensure it will compile and run under the UNIX operating system on prime. All code must be written in accordance with the style guidelines that are posted off the course www home page (see guidelines for CS3610).  
Exam schedule: Midterm Exam March 17, 2020. Pop quizzes may be given on any given day when no other exams are scheduled.  
Grading policy: Your grade will be based on a composite score computed according to the following approximate breakdown: 10% for quizzes, 30% for homework assignments, 30% for the midterm,
and 30% for the final project. For homework assignments, some or all of the problems turned in may be selected for grading. The reason for homework is for you to learn the material.

**Attendance policy:** Students are strongly encouraged to attend all classes, but attendance is not required. Students miss classes at their own risk. There will be no make-up quizzes; students missing class on the day of a quiz will be given a zero. For excused absences the average of the student's other quizzes will be substituted. Students are required to attend class during the midterm and final exam unless prior arrangements have been made.

**Academic dishonesty:** Students are expected to turn in only their own work with proper documentation. Anything else may result in an F for the exam, project or program, an F for the course, or even dismissal from the University.

To obtain a class handout after the lecture in which that handout was distributed, drop by during office hours, or look on-line in the course account on prime.

Any challenge to grading must be submitted in writing within one week of the assignment/test being passed back to the student. Be sure to clearly explain the reason you believe you deserve any extra points.

If, because of some exceptional circumstance, you cannot attend a test, contact Prof. Chelberg before the fact, not after, to discuss your options. Homework is due by the start of class. No late homework will be accepted. Homework is to be an individual exercise, discussing general concepts with other students is encouraged. However, comparing answers, or *working in groups is not allowed*. You may consult books, journals, and notes in order to do your homework, but *you must credit any source* you use. You will not lose credit if you credit the source, but you may if you do not! As a general rule, be clear and rigorous in all of your work. Solutions that are unclear or difficult to read will lose points.

Tests will be closed book, closed note.

Legal:

The lectures, classroom activities, and all materials associated with this class and developed by the instructor are copyrighted in the name of David M. Chelberg on this date January 14, 2020.

Any student who suspects s/he may need an accommodation based on the impact of a disability should contact the class instructor privately to discuss the student’s specific needs and provide written documentation from the Office of Student Accessibility Services. If the student is not yet registered as a student with a disability, s/he should contact the Office of Student Accessibility Services.