

Syllabus

*Instructor: Prof. Eric Fosler-Lussier**Survey of Artificial Intelligence I: Basic Techniques***Time/Place:** MWF 8:30 – 9:18AM, UH 082**Instructor:** Prof. Eric Fosler-Lussier**Office:** 585 Dreese Labs, 292-4890, fosler@cis.ohio-state.edu**Office Hours:** Tu 11-12, W 9:30-10:30**Grader:** Tianfang Xu, xut@cis.ohio-state.edu**Course Website:** <http://www.cis.ohio-state.edu/~fosler/courses/cis630/sp04>**Course Newsgroup:** cis.course.cis630**Course Description:**

A survey of the basic concepts and techniques of problem solving paradigms and knowledge representation schemes in Artificial Intelligence (AI).

Course Objectives:

Upon satisfactory completion of the course, the student will:

- Master basic search techniques for problem solving, including systematic blind searches, heuristically guided searches, and optimal searches
- Be familiar with game-tree search methods and the requirements for expert-level game play
- Be familiar with logic and proof as a basis for knowledge representation and automated reasoning
- Be familiar with semantic nets and frame systems as knowledge-representation formalisms
- Be exposed to problems in common sense reasoning and language understanding
- Be exposed to integrated AI architectures as a platform for building AI systems
- Be exposed to machine learning techniques and the kinds of problem they solve

Prerequisites: CSE 222 and Math 366**Required Texts:** Stuart Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach*, 2nd edition, 2003, Prentice Hall (Green Cover)

In order to make our classroom time more meaningful, you are expected to read the required readings beforehand.

Policy on Academic Misconduct: As with any class at this university, you are required to follow the Ohio State “Code of Student Conduct.” If you are unfamiliar with this policy, you should read it at <http://oaa.osu.edu/coam/code.html>. In particular, you should note that you are not allowed to, among other things, (a) knowingly provide or receive information during exams, (b) knowingly provide or receive assistance on homeworks unless I say it’s OK, and (c) submit plagiarized (copied but unacknowledged) work for credit. If any violation occurs, *I am required* to report the violation to the Council on Academic Misconduct.

Announcements: Announcements will be made via the course website. I will also monitor discussions on the cis.course.cis630 newsgroup and answer as appropriate, but I see this more as a forum for you all to discuss topics from class.

Coordination with 12:30 PM section: The lectures for this section and the Dr. Byron's 12:30 PM section will be coordinated. The homeworks for each section will be the same, and we will be using the same grader. The exams, however, will be necessarily different.

Grading Plan: The following are the *approximate* weights for each of the work components of the course. Final grades will be determined from the distributions of weighted scores.

Exams: (55% total) Preliminary Exams I & II: 15% each, Final Exam: 25%

Excuse from scheduled exams will not be accepted without substantial documentation.

Preliminary exams will cover topics outlined in the class calendar (on the website); the final exam will be comprehensive.

Preliminary Exam I: Friday, 23 April 8:30 AM – 9:18 AM

Preliminary Exam II: Friday, 14 May 8:30 AM – 9:18 AM

Comprehensive Final Exam: Monday, 7 June 7:30 AM – 9:18 AM

Homeworks: $5 \times 8\% = 40\%$

There will be six homework assignments, some written and some programming. The grade from the lowest homework assignment will be dropped; this means that you can miss one homework assignment with impunity. Homeworks are due at 11:59:59 PM on the day that they are due. *Late homeworks will not be accepted.*

Class participation/minute quizzes: 5%

Participation is an important part of your educational experience in this class, so 5% of your grade will be determined by your participation. Corollary: if I don't know who you are, I won't be able to give you full credit! Also, I plan to have a few "minute quizzes" to make sure that you're keeping up with the readings. This will help quieter folks to redeem yourselves in this category. Make sure to have a blank piece of paper handy each class just in case I call a quiz.