

CSci 5512: Syllabus

Room:

Mechanical Engineering Building, Room 212

Time:

Tuesday and Thursday, 11:15 - 12:30

Instructor:

[Dr. Maria Gini](mailto:gini@cs.umn.edu) (gini@cs.umn.edu)

office hours Tu and Th 3:30 - 4:30 or by appointment in EE/CSci 5-213, phone (612) 625-5582

Address: 4-192 EE/CSci Building, 200 Union St. SE, Minneapolis, MN 55455

TA:

Simon Shim (shim@cs.umn.edu)

office hours: Monday 4:00-5:00, Wed 3:00 - 4:00 in EE/CSci 2-209, phone (612) 626-7512

Textbook:

Stuart Russell and Peter Norvig "Artificial Intelligence. A modern approach" Prentice-Hall, 1995. (Chapters 11-23).

For more information about the book and its programs look at [the Web page for the textbook](#).

Prerequisites:

Knowledge of Artificial Intelligence I (search, knowledge representation, predicate calculus and resolution).

Course Objectives:

To provide in depth study of advanced topics in Artificial Intelligence, such as learning, neural networks, natural language understanding, planning, and reasoning with uncertainty. Use of techniques from Artificial Intelligence for intelligent agents.

Course Requirements:

- four written homeworks (20% of the final grade)
- a project (30% of the final grade). The project is an individual or group project on a topic of your own choice related to the class. The project will have an experimental component (write your own program or install some public domain software and use it to solve a problem of your interest) and a literature search component. More details and suggestions will be distributed later. Ideas for projects from last year can be found [here \(text\)](#)
- one in class midquarter exam (25% of the final grade)
- one take-home final exam (25% of the final grade)

Policy on Exams and Grading:

All graded work must represent individual effort. Collaboration on homework or exams is cheating and grounds for failing the course. Grading will be done on a relative curve.

Exams are open books and notes.

Policy on Homeworks:

Homeworks are due in class. **Late Homeworks** will lose 10% of the maximum total points for every weekday late. Late homeworks must be submitted no later than one week after they are due. Keys will be distributed in class the week after the homework is due.

Late Projects can be submitted any time before the last day of class. Late projects will lose 10% of the maximum total points for every weekday late (up to a maximum of 50%).

Off-campus Students: Please submit all homework through the UNITE Office, 114 Lind Hall, 207 Church St. S.E., Minneapolis, MN 55455-0134. Phone: 612-624-2332. Please write the Course number on all submitted materials.

Class mailing list, and WWW page:

Please use the program `classmail` on the `itlabs.umn.edu` machines to add your e-mail address to the class mailing list. If you prefer, just send e-mail to gini@cs.umn.edu with your e-mail address.

Week Chapters Topics

Assignments due

Jan 2 11-12 Planning.

Jan 9	12-13		
Jan 16	18	Learning	Homework 1
Jan 23	19	Neural Networks	
Jan 30	20-21	Learning	Homework 2
Feb 1		Midquarter Exam	
Feb 6	22	Communication	
Feb 13	23	Communication	First Part of Project
Feb 20	14	Uncertainty	Homework 3
Feb 27	15	Probabilistic Reasoning	Second Part of Project
Mar 5	16	Utility Theory	Homework 4
Mar 15		TakeHome Final Exam due	

Class material

- the written homeworks ([html](#))
- the paper D. Weld, "An introduction to least commitment planning", AI Magazine, Winter 1994, pp 27-61 is available here ([postscript - 50 pages](#)). If you prefer, you can borrow a copy of it from me.

Posted: 2 January 1996