

University of Denver
COMP 3501 / COMP 4704-4

Introduction to Artificial Intelligence
Spring, 2014

Professor: Dr. Nathan Sturtevant
Aspen Hall 200a
sturtevant@cs.du.edu
OH: TBA

Course Web Page: <http://web.cs.du.edu/~sturtevant/ai-f14.html>

Lecture Room & Time: Olin Hall 103
MW 12:00pm-1:50pm

Course Description: Fundamental concepts of artificial intelligence covering general problem-solving techniques, logic, search, probabilistic reasoning, and learning.

Course Prerequisites: MATH 2200; COMP 2370

Required Textbook:

Artificial Intelligence: A Modern Approach (*Third Edition*)
Stuart Russell and Peter Norvig

Grade Evaluation (CMPUT 3501):

COURSEWORK	WEIGHTING	DUE DATES
Short Questions	15%	Before each lecture
Midterm	32.5%	April 23
Final	32.5%	June 2
Homework (4)	20%	

Grade Evaluation (CMPUT 4704):

COURSEWORK	WEIGHTING	DUE DATES
Short Questions	15%	Before each lecture
Midterm	25%	April 23
Final	25%	June 2
Homework (4)	20%	
Course Project	15%	

Course marks will be determined on a mixture of a curve and absolute scale.

EXAMS: Electronic equipment (such as a calculator, MP3 player, or cell phone) is not to be brought to the exam.

CELL PHONES: Cell phones are to be turned off during lectures and are not to be brought to exams.

LAPTOP COMPUTERS: Laptops can be brought to lecture for the purpose of taking notes. They should not be used for other purposes during lecture. If the use of a laptop during lecture becomes disruptive, you may be requested to discontinue its usage.

RELIGIOUS ACCOMMODATION: University policy grants students excused absences from class or other organized activities or observance of religious holy days, unless the accommodation would create an undue hardship. Faculty are asked to be responsive to requests when students contact them in advance to request such an excused absence. Students are responsible for completing assignments given during their absence, but should be given an opportunity to make up work missed because of religious observance.

Once a student has registered for a class, the student is expected to examine the course syllabus for potential conflicts with holy days and to notify the instructor by the end of the first week of classes of any conflicts that may require an absence (including any required additional preparation/travel time). The student is also expected to remind the faculty member in advance of the missed class, and to make arrangements in advance (with the faculty member) to make up any missed work or in-class material within a reasonable amount of time.

DISABILITIES / MEDICAL CONDITIONS: Students who have disabilities or medical conditions and who want to request accommodations should contact the Disability Services Program (DSP); 303.871.2372/ 2278; 1999 E. Evans Ave.; 4th floor of Ruffatto Hall. Information is also available online at www.du.edu/disability/dsp; see Handbook for Students with Disabilities.

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Tentative Course Schedule
(Midterm / HW dates are fixed)

Class	Dates	Topic	Reading
1	March 24	Introduction	Ch 1-2
2	March 26	Search Strategies	Ch 3
3	March 31	Local Search & Variations	Ch 4
4	April 2	Adversarial Search / Game Playing	Ch 5
5	April 7	Constraint Satisfaction Problems	Ch 6
		HW #1 Assigned	
6	April 9	Propositional Logic	Ch 7
7	April 14	First-Order Logic	Ch 8
8	April 16	First-Order Logic	Ch 9
9	April 21	Logical Inference	Ch 10
		HW #1 Due / #2 Assigned	
10	April 23	Midterm	
11	April 28	Classical (Generalized) Planning	Ch 10
12	April 30	Probability	Ch 13
13	May 5	Probabilistic Reasoning	Ch 14
		HW #2 Due / #3 Assigned	
14	May 7	Probabilistic Inference	Ch 14
15	May 12	Supervised Learning	Ch 18
16	May 14	Supervised Learning	Ch 28
17	May 19	Reinforcement Learning	Ch 21
		HW #3 Due / #4 Assigned	
18	May 21	Robotics	Ch 25
	May 26	(Holiday)	
19	May 28	Wrap-Up	
		HW #4 Due	
	June 2	Final Exam	