

CIS 32 – Introduction to Artificial Intelligence – Spring 2007

Administrivia

Instructor: Chipp Jansen

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Office: 4412 Ingersoll (Educational Robotics Lab, next door)

Hours: Mondays AND Thursdays 2:00 pm to 3:pm

Virtual: AIM username: `chippbot`

Virtual Hours: Tuesdays 9pm to 11pm

Course Page: <http://www.sci.brooklyn.cuny.edu/~chipp/cis32/>

Lectures: Mondays and Thursdays, 10:50 pm to 12:05 pm, in room 4411 N

Computers: It will be helpful if you have access to a computer and the internet for this class. If you have a laptop, it will be helpful during labs (though it is not required and we can lend you a laptop for the lab).

Readings (Recommended, but not required):

Primary:

Artificial Intelligence: A Modern Approach (2nd edition)

by Stuart Russell and Peter Norvig, published by: Prentice Hall (2003)

Related:

Artificial Intelligence: A New Synthesis

by Nils J. Nilsson, published by: Morgan Kaufmann (1998)

An Introduction to Multiagent Systems

by Michael Wooldridge, published by: John Wiley & Sons (2002)

Other readings will include papers available on-line as per lecture.

Prerequisites:

Computer and Information Science (CIS) 22.

Grade Assessment:

30 points = 4 homework assignments (6-7 pts each)

30 points = 2 projects (15 points each)

40 points = 2 exams (20 pts each)

100 points total

Course Scope

- Introduction and History of Artificial Intelligence
- Autonomous Intelligent Agents
- Problem solving Agents, Search, Heuristic methods
- Introduction to Robotics
- Neural Networks, Evolutionary Computation, Artificial Life
- State space Learning, Game Playing, Knowledge Representation, Uncertainty
- Propositional Logic, Predicate Logic, Logic-based Agents
- Planning, Partial-order planning, Decision-theoretic planning