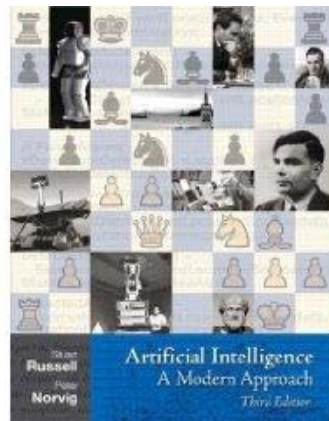


Description: Artificial Intelligence (AI) is an important topic in computer science that has many diversified applications. It addresses one of the ultimate puzzles human are trying to solve – How is it possible for a slow, tiny brain, whether biological or electronic, to perceive, understand, predict, and manipulate a world far larger and more complicated than itself? And, how do we go about creating a machine (or computer) with those properties? To this end, researchers in the AI field have been trying to understand how seeing, learning, remembering, and reasoning could, or should be done. This course introduces students to the basic concepts and techniques in artificial intelligence.

Pre-requisites: CS-GY 2134 or CS-GY 5403 (Data Structures) or equivalent, and proficiency in a high-level programming language such as Python, C/C++, or Java.

Week <i>(Approximate)</i>	Topics <i>(Tentative)</i>
1	Introduction Intelligent agents
2-5	Solving problems by searching (State space search)
5-6	Adversarial search (Game trees)
6-7	Constraint satisfaction problems
8	Exam 1
9-10	Logical agents
11-12	First-order logic
12-13	Inference in first order logic
14	Machine learning
15	Exam II (during final exam week)

Required Text Book: S. Russell and P. Norvig, *Artificial Intelligence: A Modern Approach*, Prentice Hall, 3rd edition.



(Please turn over →)

Instructor: Professor Edward K. Wong
Office: Room 10.045, 10th floor, 2 Metrotech Center
Office Hours: Tues 2:15–3:00 pm. Thurs ~~3:30–5:00 pm~~ 3:00 – 4:30 pm. Other times:
You are welcome to drop by anytime I am in the office or you can make an appointment
ahead of time.
Office Phone: (646) 997-3523
E-mail: ewong@nyu.edu

Course load: There will be about six to seven handwritten (or typed) homework assignments, plus two AI programming projects. I will assign the projects and you are to do the projects by yourself. You can use high-level programming languages such as C++, Python or Java to do the project. A 15-minute demo of your project to the instructor or TAs may be required. You are expected to work on your own homework and projects (including programming.) You can discuss with your classmates on how to do the homework and projects but everyone is expected to turn in their own work.

The preferred way to hand in homework is by submitting a hardcopy the day it is due in class. If you cannot come to class, you can put a hardcopy in my mail box, located in the CSE department office in Room 10.016 of 2 MTC, or you can upload an electronic copy to NYU Classes. Late homework (up to 7 days late) and projects will be accepted but will be subject to 2% grade penalty (of the total points of the assignment) each day it is late (weekends included). Solutions to homework are posted approximately one week after the homework is due.

Exams: There will be two exams. The second exam will be held during the final exam week and will only include topics that were not covered in the first exam. The exams will be closed-note and closed-book. For the exams, you will need a basic scientific calculator.

Grade distribution:

Homework	~ 12%
Projects	~ 18%
Exam I:	~ 35%
Exam II:	~ 35%

A weighted course average will be computed and used in the determination of your final grade.

Policy on Academic Dishonesty: The School of Engineering encourages academic excellence in an environment that promotes honesty, integrity, and fairness. Please see the School's policy on academic dishonesty in the Student Code of Conduct: <https://engineering.nyu.edu/sites/default/files/2018-06/code-conduct2-2-16.pdf>

Moses Center Statement of Disability: If you are a student with disability and is requesting accommodations, please contact the NYU Moses Center for Students with Disabilities (CSD) at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at <http://www.nyu.edu/students/communities-and-groups/students-with-disabilities>.