

COMP3270 Introduction to Artificial Intelligence

2026-27, Semester 1 | 6 credits | Class A

[Moodle: COMP3270A](#)

[Official course page](#)

Platforms: Ed for course discussion; Moodle for materials, announcements, and assessment information.

Course Focus

COMP3270 studies how intelligent agents represent problems, choose actions, and reason with uncertain or incomplete information. Topics include search and constraint satisfaction, adversarial search, sequential decision making, reinforcement learning, probabilistic reasoning, and symbolic logic.

The emphasis is on principles and algorithms that you will analyse and implement. The course includes reinforcement learning and probabilistic models, but it is not a broad survey of modern machine learning or deep learning.

Teaching Team

Name	Role	Contact
Dr. Dirk SCHNIEDERS	Instructor; course coordinator	ds@dirk.hk
ZHOU Jingqi	Teaching assistant	u3011211@connect.hku.hk
WANG Junshi	Teaching assistant	wjshku@connect.hku.hk
YU Dongjie	Teaching assistant	djyu@connect.hku.hk

Post general questions on Ed so that answers are available to the class. Use email for personal or confidential matters. Consultation is available by appointment.

Preparation and Workload

Prerequisite: COMP2118, COMP2119, COMP2502, or FITE2000.

Mutually exclusive with: ELEC4544 and IIMT3688.

You should be comfortable with Python 3, basic data structures—especially dictionaries, queues, heaps, trees, and graphs—and time and space complexity. Probability will be reviewed before the probabilistic models.

This is a six-credit course. Plan for approximately 150 hours of total work, including classes, reading, programming assignments, revision, and assessment.

What You Will Practise

The course is designed to help you:

- formulate AI problems using states, actions, goals, utilities, probabilities, and logical representations;
- implement and test core search, decision-making, learning, and inference algorithms in Python;
- compare methods in terms of correctness, efficiency, assumptions, and suitability for a problem; and
- explain how evidence, uncertainty, rewards, and knowledge influence an intelligent agent's decisions.

Teaching Schedule

Topics may move slightly with class progress. The dates and room below follow the current timetable; Moodle announcements take precedence if the University changes a meeting.

The weekly meetings combine lectures, worked examples, and in-class exercises.

Week	Monday, 12:00-12:50 KK202	Thursday, 17:00-18:50 KK202	Main focus
1	-	3 Sep	C0 Introduction
2	7 Sep	10 Sep	C1 Search
3	14 Sep	17 Sep	C1 Search
4	21 Sep	24 Sep	C1 Search (Mon); C2 MDPs (Thu)
5	28 Sep	1 Oct: No class	C2 MDPs
6	5 Oct	8 Oct: Quiz 1	C3 Reinforcement Learning (Mon); Quiz 1 (Thu)
7	12 Oct: No class	15 Oct: No class	No class
8	19 Oct: No class	22 Oct	C3 Reinforcement Learning
9	26 Oct	29 Oct	C3 Reinforcement Learning; C4 Markov Models
10	2 Nov	5 Nov	C5 Hidden Markov Models
11	9 Nov	12 Nov	C6 Bayesian Networks
12	16 Nov	19 Nov	C7 Logic
13	23 Nov	26 Nov: Quiz 2	C7 Logic (Mon); Quiz 2 (Thu)
14	30 Nov	-	Buffer

Assessment

The course consists of three individual programming assignments, two in-class quizzes, and a final examination.

Component	Weight	Format
Programming assignments	30%	Three individual Python assignments, each worth 10%
Quiz 1	10%	In-class written quiz
Quiz 2	10%	In-class written quiz
Final examination	50%	Details to be announced
Total	100%	

Each assignment brief specifies its scope, submission requirements, permitted collaboration, and rules for generative-AI use. The planned dates are listed below. Published assessment instructions and Moodle times are authoritative.

Assessment Dates

All times are Hong Kong time. Result dates are planned and may change.

Assignments

Component	Release	Submission deadline	Result	Grading TA
Assignment 1	14 Sep	2 Oct, 23:59	12 Oct	Jingqi
Assignment 2	9 Oct	8 Nov, 23:59	18 Nov	Junshi
Assignment 3	9 Nov	20 Nov, 23:59	30 Nov	Dongjie

Quizzes

Component	Date	Result	Grading TA
Quiz 1	8 Oct	22 Oct	Jingqi
Quiz 2	26 Nov	4 Dec	Junshi

Key Dates

Date	Event
1 Sep 2026, 10:00 to 15 Sep 2026, 16:00	Add/drop period
1 Oct 2026	National Day public holiday; no Thursday class
12 to 17 Oct 2026	University reading week; no classes
19 Oct 2026	Day following Chung Yeung Festival public holiday; no Monday class
30 Nov 2026	Final class and last day of teaching
1 to 5 Dec 2026	Revision period
7 to 23 Dec 2026	Assessment period; the Examinations Office announces the final examination date

Course Materials and Reading

Slides, assignment briefs, announcements, and any supporting code are released through Moodle. Use course materials for your own study and research; do not redistribute them outside the course.

The principal reference is *Artificial Intelligence: A Modern Approach*, 4th edition, by Stuart Russell and Peter Norvig. Additional sources are identified with the relevant material.

Submission, Integrity, and Absence

- **Late submission.** Late submissions are not accepted unless an approved University or Faculty procedure applies. Contact the course coordinator promptly when illness or another serious event affects assessment.
- **Academic integrity.** Individual work must be original. Follow the collaboration and generative-AI rules stated in each assessment brief; acknowledge permitted sources and assistance. Offering work for copying is also an academic-integrity matter.
- **Valid submission.** The latest valid submission before the deadline is graded. Failure to submit receives zero marks.
- **Adverse weather.** Follow University suspension and adverse-weather announcements. Instructions for any affected class or assessment will be posted on Moodle.
- **Accommodations.** Request accessibility or other accommodations through the official University process and notify the course coordinator early.

Published assessment instructions take precedence where they are more specific.