



I. Introduction to the course



- **Online lessons:** 3 hours every Friday morning
- **Classroom exercise sessions:** 2 hours on Friday afternoons, **always in room 20.S.1** (ex EL.0)
 - odd weeks (1, 3, ...): students with odd person number
 - even weeks (2, 4, ...): students with even person number

No exception to the odd/even rule! (for the sake of contact tracing)

Section A-L (Amigoni)		Section M-Z (Colombetti)	
Team AL-1 odd person number	Team AL-2 even person number	Team MZ-1 odd person number	Team MZ-2 even person number
08:15	Online lesson (common to all teams)		
09:15			
10:15			
11:15			
12:15			
13:15		Classroom session odd weeks	Classroom session even weeks
14:15			
15:15	Classroom session odd weeks	Classroom session even weeks	
16:15			



- Every student will be offered a total of 48 hours of lessons and exercises, of which 75% will be online (36 hours of lessons) and 25% in classroom (12 hours of exercises)
- Actual dates of lessons and exercises (odd weeks on pale blue, even weeks on white):

Week	Date	Lesson	Exercise sessions
1	18.09	online for all	AL-1 / MZ-1
2	25.09	online for all	AL-2 / MZ-2
3	09.10	online for all	AL-1 / MZ-1
4	16.10	online for all	AL-2 / MZ-2
5	23.10	online for all	AL-1 / MZ-1
6	30.10	online for all	AL-2 / MZ-2
7	13.11	online for all	AL-1 / MZ-1
8	20.11	online for all	AL-2 / MZ-2
9	27.11	online for all	AL-1 / MZ-1
10	04.12	online for all	AL-2 / MZ-2
11	11.12	online for all	AL-1 / MZ-1
12	18.12	online for all	AL-2 / MZ-2



■ Changes during the semester are possible! (exercises on planning still to be accomodated)

W.	Subject of lesson	Lecturer	Subject of exercise session	Lecturer (team)
1	Introduction to AI Intelligent agents	Colombetti	Introduction to Artificial Intelligence, discussion	Amigoni (AL-1) Colombetti (MZ-1)
2	Problem-solving agents Searching for solutions of a problem	Amigoni	Introduction to Artificial Intelligence, discussion	Amigoni (AL-2) Colombetti (MZ-2)
3	Uninformed search strategies	Amigoni	Exercises on uninformed search strategies	Restelli (AL-1) Restelli (MZ-1)
4	Informed search strategies	Amigoni	Exercises on uninformed search strategies	Restelli (AL-2) Restelli (MZ-2)
5	Adversarial search (games)	Amigoni	Exercises on informed search strategies	Restelli (AL-1) Restelli (MZ-1)
6	Constraint satisfaction problems	Amigoni	Exercises on informed search strategies	Restelli (AL-2) Restelli (MZ-2)
7	Logical agents	Colombetti	Exercises on adversarial search	Restelli (AL-1) Restelli (MZ-1)
8	Inference procedures for propositional logic	Colombetti	Exercises on adversarial search	Restelli (AL-2) Restelli (MZ-2)
9	Historical and philosophical aspects of AI	Schiaffonati	Exercises on constraint satisfaction problems	Amigoni (AL-1) Colombetti (MZ-1)
10	Planning: basic concepts	Colombetti	Exercises on constraint satisfaction problems	Amigoni (AL-2) Colombetti (MZ-2)
11	Planning: search, SATPlan	Colombetti	Exercises on inference procedures for propositional logic and planning	Amigoni (AL-1) Colombetti (MZ-1)
12	Recap, conclusion, and discussion	Amigoni Colombetti	Exercises on inference procedures for propositional logic and planning	Amigoni (AL-2) Colombetti (MZ-2)



- To attend an online lesson or an exercise session from remote, all students will have to **access the personal room of the relevant lecturer**. More precisely, after checking the timetable use the following links to access the right room:
 - F. Amigoni: <https://politecnicomilano.webex.com/meet/francesco.amigoni>
 - M. Colombetti: <https://politecnicomilano.webex.com/meet/marco.colombetti>
 - M. Restelli: <https://politecnicomilano.webex.com/meet/marcello.restelli>
 - V. Schiaffonati: <https://politecnicomilano.webex.com/meet/viola.schiaffonati>
- During the classroom exercise sessions it will be difficult for the lecturer to follow the chat. Students attending from remote are therefore invited to **ask questions in voice**, as if they were physically present.
- To interact with a lecturer outside the lessons and exercise sessions please send an email message from your PoliMi address.
- Do read your mail and consult Beep frequently!



- The PowerPoint slides of lessons will be made available on Beep
- In general, classroom session will be carried out using the blackboard
- The recordings of all lessons and exercise sessions will be stored in the lecturers' personal rooms and the links to the videos will be published on Beep
- Recommended textbook (referred to as **RN** in the rest of this course):

Stuart Russell, Peter Norvig (2010). *Artificial Intelligence: A modern approach*, 3rd edition, Prentice-Hall/Pearson

The book consists of more than 1,100 pages, about 300 of which will be covered in the course

The textbook is essential, because the slides and additional materials published on Beep will not cover everything

- Additional materials and links to further resources will be uploaded to Beep
- The final exam will consist of a written test (on campus or online, depending on the situation) with conceptual questions and exercises

Examples of past exams will be made available in due time



- This course offers an introduction to what is usually called “Classical AI” or “Symbolic AI”
- Several more specialised or advanced courses related to AI are available at PoliMi, in particular:
 - Knowledge Engineering
 - Soft Computing
 - Machine Learning
 - Autonomous Agents and Multiagent Systems
 - Artificial Neural Networks and Deep Learning
 - Data Mining and Text Mining
 - Economics and Computation
 - Natural Language Processing
 - Intelligent Data Applications
 - Robotics
 - Robotics and Design
 - Image Analysis and Computer Vision
 - Philosophical Issues of Computer Science
 - Computer Ethics