Course form to fill in (2022-2023)

Course title:

Introduction to Artificial Intelligence

Staff responsible for the course:

Kim Binsted

Lecturers:

First Name + Name
Kim Binsted

1) COURSE PRESENTATION

Aims:

Draw up a list of competencies and/or skills that the student should have acquired or improved at the end of the course.
You must fill in the field under the format "the student should be able to…" using action verbs such as define, realise, control… (This description should not take more than ten lines)

At the end of the course, the student should be able to:
- understand the historical, cultural and philosophical underpinnings of AI
- describe the wide range of goals and approaches that define the field of AI, and their strengths and weaknesses
- understand and describe in detail the sub-fields of AI, including planning, machine learning, robotics, natural language processing and autonomous agents
- given a real-world problem, suggest AI approaches that might be appropriate for addressing that problem
- read and think critically about current AI research and development

Prerequisites:

You must not write courses' codes or names, but identify the preliminary skills as the knowledge or the know-how needed to efficiently follow this course.
Write it out in terms of knowledge and methodologies required to follow this course (this would help students from direct entry to position themselves). (This description should not take more than five lines)

- familiarity with predicate logic (also known as predicate calculus, first order logic, or quantificational logic)
-ability to follow an argument that uses calculus and related concepts

Course contents:

Here, an abstract of the course can be given or the different chapters of the course can be simply written down.
(The description should not take more than ten lines)

• History and philosophy of AI
• Symbolic AI: Search, heuristics, logic and planning
• Sub-symbolic AI: Machine learning, evolutionary computation
• Application areas: natural language processing, robotics, data mining, etc.
• What AI can and cannot do now, and a look towards the future

2) WORKING LOAD

Here, you should allocate the effective working load of the course, including an estimation of the personal work required from the student.

TABLE 1

Course's types	Number of hours	Notes
Effective presence		
- *Magistral Course*	8	
- *Interactive Course*		+ 2h of corporate sessions
- *Tutorials*		
- *Coaching*		
- *PBL Course*		
Training from a distance		
- *Video-conferences*		
- *Webinars*		
Self-learning		
- *Books 'readings*		
- *E-learning*		
- *Research*		
Outdoors-training		
- *In firms*		
- *Internship*		
Personal work		
- *Group Projects*		
- *Individual Projects*	2	
- *Personal work*	2	
Total working time for the student	***14***	

3) EDUCATIONAL METHODS

Tick here the different educational methods used:

☐ Coaching
☒ Case Study
☐ E-Learning and/or Self-learning
☒ Interactive courses
☒ Presentations
☐ Projects
☐ Research
☐ Seminars
☐ Tutorials
☐ Visits

4) ASSESSMENT

Sum up briefly the course assessment's mechanism (two or three lines) in order to introduce the assessment's table that you have to complete below (table n°2).
You must also define clearly how feedback will be given to students (in accordance with the feedback policy).

Each of the four days will have an associated assignment, each taking about one hour to complete. A typical assignment would be to interact with a relevant AI tool or application, and to write up the results in a way that demonstrates understanding.

List the assessment for each modality.

TABLE 2

Modality	Type of control	Length (h)	Number	Weighting (%)
Continuous assessment	Continuous assessment			
	Mid-term exam			
	Participation			
	Oral presentation			
	MCQ			
Final exam	Oral final exam			
	Written final exam			
Others	Case study			
	Group Project			
	Individual Project			
	Written assignment	1	4	100 (Kim BINSTED)
	Exercises			
Total				**100%**

5) RECOMMENDED READING

Name of books (indicate only three or four must-read references) / Name of reviews:

Reference book (appellation reserved for books selected by the School and necessarily bought by all the students):

Class books :

Reviews :

Internet Resources:
Please indicate here if you use the school intranet site to put on-line documents and/or if you advise the visit of web sites to students.

Name of the Website	URL