Proposal

Course Name: Fundamentals of Artificial Intelligence
Proposer’s Name: Alan Smaill
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Course Year: 5

Names of any courses that this new course replaces:
None

Course Outline

Course Level: 11
Course Points: 20
Subject area: Informatics

Programme Collections:

Teaching / Assessment

Number of Lectures: 22
Number of Tutorials or Lab Sessions: 9
Identified Pre-requisite Courses: None
Identified Co-requisite Courses: None
Identified Prohibited Combinations: Inf 2d

Assessment Weightings:
- Written Examination: 70%
- Assessed Coursework: 30%
- Oral Presentations: 0%

Description of Nature of Assessment:
3 assessed courseworks, 2 involving implementing/running software to solve given problems, and 1 an essay requiring comparative understanding of subfields of the area.

Course Details

Brief Course Description:
The course will largely follow the text book by Russell and Norvig. It will ensure overall coverage of the field, in particular of the merits and weaknesses of the different approaches taken at different times and in different fields. So main subdivisions are: problem solving, knowledge, reasoning, planning; uncertainty and probability; learning; communication, perception, action.

Detailed list of Learning Objectives:
1: demonstrate a critical understanding of the principal theories, principles and concepts 2: choose and apply appropriate techniques to solve problems in the field, and justify the approach taken. 3: critically...
review, consolidate and suggest extensions to practices and thinking in the field

Syllabus Information:
http://aima.cs.berkeley.edu/contents.html

Recommended Reading List:
Russell & Norvig, AI: a modern approach (3rd edition 2016)

Any additional case for support information:
The course aims to provide a broad overview of AI at MSc level, complementing existing strengths and filling some gaps in our current offering at this level. In addition topics such as explainable AI, prospects & risks of AI. We have many students on the MSc AI degree who may consider taking such a course, it may be suitable for some interested primarily in ML looking for complementary material. Suggest this as a second semester course.