Module Specification

Readings in Artificial Intelligence

Version: 2023-24, v2.0, 17 Mar 2023

Contents

Part 1: Information

Module title: Readings in Artificial Intelligence

Module code: UFCFYK-15-3

Level: Level 6

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Delivery locations: Not in use for Modules

Field: Computer Science and Creative Technologies

Module type: Module

Pre-requisites: BioComputation 2023-24

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: This module will introduce students to a thematic selection of recent research articles pertaining to intelligent systems, more particularly artificial intelligence, allowing them to précis the material sufficiently well to form the basis of

a personal perspective on the issues raised. The module will be based around selected articles from current research in intelligent systems and may be determined by staff interests. In any one year, selected articles might come from any of the following: Biological and Social Paradigms; Genetics Algorithms; Philosophy of AI; Intelligent Agents; Knowledge and Reasoning; Natural Language Processing; Neural Networks; Collective Intelligence.

On completion of the module the student should be well placed to continue their studies through the assimilation of published research papers

Outline syllabus: Cogent integrated argument will be encouraged rather than the assertion of particular content or thoughtless regurgitation of authoritative views. Quality will be judged to have a coherent theme; justified conclusions, and consideration shown of both position and contra-position. Furthermore, personal judgement and argument will have been substantiated by citing supporting evidence.

Part 3: Teaching and learning methods

Teaching and learning methods: The module is delivered through a mix of lectures, seminars, and conferencing. A lecture session will be made available such that researchers and students can present material to the whole group if appropriate. Seminar sessions will be available through which the tutor may deliver material but their primary purpose is for students' group work. Students will be typically expected to present their work visually and verbally, and participate in reviews, presentations and conferences which may involve any part of the cohort, and soliciting the views of others on their own understandings.

The cooperation and involvement of a number of researchers will be sought and hopefully they can provide a lecture and associated research paper to seed the activities. There will have to be some flexibility in the approach as the number of willing researchers will vary from year to year. As such the module leader will ensure that an equivalent activity occurs which may or may not involve the module leader presenting material and/or some other equivalence.

Essentially students will be developing strategies for dealing with unfamiliar and difficult reading material and testing their understanding, credibly, through other students and academics.

The module will start with an awareness of professional literature, whereby candidate research papers will be found; including some from local researchers.

The selected papers will be addressed by a prescribed series of activities that may include a lecture by the paper's author.

An exam question related to the paper will then be created by the module leader, and the students in that particular group will work towards addressing the issues around it.

The module leader will ensure that the final paper is equally balanced such that all students have had a similar learning experience and opportunities

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Show detailed knowledge and clear understanding of two recent research articles on selected themes in artificial intelligence, and identify distinct facets and perspectives of a complex and multi-disciplinary area of research.

MO2 Develop argument and counterargument, clearly, with logical conclusions with no extraneous points, with critical evaluation and analysis of such arguments.

MO3 Establish that all crucial research, cited as supporting evidence has been considered, evaluating this research and if appropriate synthesizing anew

MO4 Show that all/any personal judgment is substantiated, evaluating them in the context of present trends and developments

MO5 Develop a coherent theme with integrated material and a sense of completeness.

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/index.html

Part 4: Assessment

Assessment strategy: The summative assessment for this module is a three hour exam, whereby the student will be presented with open questions in the sense that they are known to the students and have been established by the tutor during the year. Of these questions two of them will be particularly familiar to any one student as they will have been studying the related research during the year.

Formative assessment will be a continuous activity whereby students will, within constraints set by the tutor, select articles from recent journals. Within small groups they will locate, copy, read, and précis the article in preparation for student led discussions building a corporate body of opinion, using a conferencing system, with the tutor ensuring essential omission does not occur. Within conference discussions students will develop their own arguments and perspectives on a particular topic. The nature of the material is, of necessity, difficult, ambiguous, and often incites polarised positions amongst experts with much of the work unfinished or unproven.

The tasks and associated exam questions will be, for the most part, deliberately broad to allow students to express their personal perspectives on the issues discussed within their conference groups. The conference task is to prepare notes and argument for an open exam question.

Assessment components:

Examination (First Sit)

Description: Examination (3 hours)
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Examination (Resit)
Description: Examination (3 hours)
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Computer Science [Sep][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [May][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [Jan][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science {Foundation} [Sep][FT][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20