Description: Intelligent Agent Technology

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-Nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC</td>
<td>3405</td>
<td>20429</td>
<td>1, 2003</td>
<td>ONC</td>
<td>1.00</td>
<td>WIBAY</td>
</tr>
</tbody>
</table>

Academic Group: FOSCI
Academic Org: FOS003
HECS Band: 2
ASCED Code: 020119

STAFFING
Examiner: Peter Cattell
Moderator: Penny Baillie

OTHER-REQUISITES
Recommended Pre-requisite: MAT1101

RATIONALE
Modern approaches to Artificial Intelligence include studies of intelligent agents. Artificial Intelligence now has found applications in many industrial, scientific and business areas. Knowledge of Artificial Intelligence is important to computer programmers and information scientists. Prolog is used in this course. Prolog not only assists students to become familiar with the style of AI languages but also allows them to develop practical application programs.

SYNOPSIS
This course covers the basics of Prolog programming including recursions, list processing, control, input/output and built-in predicates. Prolog is then used in typical artificial intelligence applications including intelligent agent technology, state space search and expert systems.

OBJECTIVES
On successful completion of this course students will be able to:

- demonstrate basic knowledge of Intelligent Agent Technology;
- write programs in Prolog;
- develop simple AI applications using Prolog.
TOPICS

Description Weighting (%)
1. Prolog Programming 40.00
2. Intelligent Agents 20.00
3. Intelligent Agent Systems 20.00
4. Knowledge-based Systems 15.00
5. AI Survey 5.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED:

Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at http://bookshop.usq.edu.au by entering the author or title of the text.


Introductory Book 2003, Course CSC3405 Intelligent Agent Technology, USQ Distance Education Centre, Toowoomba.


Selected Readings 2003, Course CSC3405 Intelligent Agent Technology, USQ Distance Education Centre, Toowoomba.

Study Book 2003, Course CSC3405 Intelligent Agent Technology, USQ Distance Education Centre, Toowoomba.

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.


STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>40</td>
</tr>
<tr>
<td>Examinations</td>
<td>3</td>
</tr>
<tr>
<td>Lectures</td>
<td>26</td>
</tr>
<tr>
<td>Private Study</td>
<td>69</td>
</tr>
<tr>
<td>Tutorial</td>
<td>26</td>
</tr>
</tbody>
</table>

ASSESSMENT DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks Out of</th>
<th>Wtg(%)</th>
<th>Required</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>30.00</td>
<td>10.00</td>
<td>Y</td>
<td>18 Apr 2003</td>
</tr>
<tr>
<td></td>
<td>(see note)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASSIGNMENT 2</td>
<td>20.00</td>
<td>20.00</td>
<td>Y</td>
<td>06 Jun 2003</td>
</tr>
<tr>
<td>3 HOUR CLOSED EXAMINATION</td>
<td>70.00</td>
<td>70.00</td>
<td>Y</td>
<td>END S1</td>
</tr>
<tr>
<td></td>
<td>(see note)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTES:

- Examination dates will be available during the semester. Please refer to the examination timetable when published.

IMPORTANT ASSESSMENT INFORMATION

1 Attendance requirements:
   It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2 Requirements for students to complete each assessment item satisfactorily:
   To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available for each assessment item.

3 Penalties for late submission of required work:
   If students submit assignments after the due date without prior approval then a penalty of 20% of the total marks gained by the student for the assignment will apply for each working day late.

4 Requirements for student to be awarded a passing grade in the course:
   To be assured of a pass in this course, students must gain at least 50% of the marks for each assessment type, that is, assignments and examination. All assessments must be attempted.

5 Method used to combine assessment results to attain final grade:
Final grades for students will be determined by the addition of the marks obtained in each assessment item, weighted as in the Assessment Details and by considering the students' level of achievement of the objectives of the course.

6 Examination information:
In a Closed Examination, candidates are allowed to bring only writing and drawing instruments into the examination.

7 Examination period when Deferred/Supplementary examinations will be held:
Students who obtain an overall passing mark, but who do not perform satisfactorily, in an examination, may, at the discretion of the Examiner, be granted a supplementary examination. Students will be granted a deferred examination only if they perform satisfactorily in all other assessment items. Any Deferred or Supplementary examinations for this course will be held during the next examination period.

8 University Regulations:
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL http://www.usq.edu.au/SECARIAT/calendar/Part5/ or in the printed version of the current USQ Handbook.

ASSESSMENT NOTES

9 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.

10 Students must retain a copy of each item submitted for assessment. This must be produced within five days if required by the Examiner.

11 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.

12 Students will require access to e-mail and internet access to USQConnect for this course.