

## School of Computer Science – Coursework Issue Sheet

<b>Session</b>	2014-2015	<b>Semester</b>	Autumn
<b>Module Name</b>	Designing Intelligent Agents	<b>Code</b>	G54DIA
<b>Module Convenor(s) (CW Convenor in Bold)</b>	<b>Natasha Alechina</b>		

<b>Coursework Name</b>	CW2: Multi-Agent System	<b>Weight</b>	50%
<b>Deliverable</b>	Implementation of a simple multi-agent system		
<b>Format</b>	Java source code & pdf report		

<b>Issue Date</b>	10 <sup>th</sup> March
<b>Submission Date</b>	30 <sup>th</sup> March
<b>Submission Mechanism</b>	Online, via Moodle
<b>Late Policy (University of Nottingham default will apply, if blank)</b>	
<b>Feedback Date</b>	11 <sup>th</sup> May
<b>Feedback Mechanism</b>	Verbal feedback will be available in individual tutorials; written feedback via Moodle or email.

<b>Instructions</b>	<p>CW2 builds on CW1 and uses the same 2D environment and task. However in CW2 multiple cooperating agents must collect and deliver water to <i>stations</i> (customers). The goal of the agents is to deliver as much water to as many stations as possible in a fixed period of time.</p> <p>An implementation of the task environment to be used (in Java) and a very basic multi-agent system will be provided as part of the coursework materials. Each student must implement a multi-agent system (consisting of at least two) in which the agents cooperate to complete the water delivery task in the specified task environment. Students may use their solution to CW1 as a starting point for CW2. Guidance software design and implementation strategy, and feedback on partial solutions will be given individual tutorials.</p> <p>Submission consists of the Java code implementing the multi-agent system, together with a short report (5000 words) explaining the design and implementation (number and types of agents and how sub-tasks are allocated to agents, and how the agents achieve their individual tasks). Students must include in their report an evaluation of the performance of their agent in the standard task environment (average score over at least five runs).</p>
<b>Assessment Criteria</b>	<p>Assessment will be based on: the capabilities of the implemented agent system, including the quality of the specification, design and implementation; the degree to which the specification, design and implementation are clearly documented in the report, including any relevant background material used in the design and implementation of the agent(s); and clarity of presentation in general (including grammar, spelling and punctuation). See the attached coursework description for details.</p>