

## **SYSC 5103 Software Agents Fall 2010 Course Outline**

Lecturer: Prof Babak Esfandiari, office 4478 ME

Course website: <http://netman.sce.carleton.ca:8080/cgi-bin/agentcourse.cgi>

Office hours: one hour before class

Prerequisite: no course prerequisites, but a good knowledge of an object-oriented programming language, preferably Java, is strongly recommended.

Books: no mandatory books, however the following books are recommended, in decreasing order of importance:

- Artificial Intelligence: a Modern Approach, Russel & Norvig, Prentice Hall (any edition)
- An Introduction to MultiAgent Systems, Michael Wooldridge, Wiley.
- Multiagent Systems: a modern approach to distributed artificial intelligence, Gerhard Weiss, MIT press.

### Tentative Outline:

- Agent Definition and overview
- Agent Knowledge Representation
- Agent Reasoning
- Agent Adaptability
- Interface Agents
- Belief Desire Intentions
- Agent Communication Language
- Multi Agent Systems
- Agent Programming Paradigms, Frameworks and Architectures
- Agent Applications

### Evaluation Scheme:

- Assignments and/or in class exam:

They will count for 50% of the final grade.

The number and nature of assignments (typically two or three) will depend on the number of students enrolled.

- Project:

The project will count for the other 50% of the final grade.

Special Students: if you want to enroll as a special student you must show up at the first day of class with the forms in order to be considered.

### Plagiarism

Plagiarism (copying and handing in for credit someone else's work) is a serious instructional offense that will not be tolerated. Please refer to the section on instructional offenses in the Undergraduate Calendar for additional information.

Health and Safety information: Here is the link to the health and safety manual [www.sce.carleton.ca/courses/health-and-safety.pdf](http://www.sce.carleton.ca/courses/health-and-safety.pdf)

### **Academic Accommodation**

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

**Pregnancy obligation**: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the [Student Guide](#)

**Religious obligation**: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the [Student Guide](#)

### **Students with Disabilities:**

Students with disabilities requiring academic accommodations in this course are encouraged to contact a coordinator at the Paul Menton Centre for Students with Disabilities to complete the necessary letters of accommodation. After registering with the PMC, make an appointment to meet and discuss your needs with me at least two weeks prior to the final exam. This is necessary in order to ensure sufficient time to make the necessary arrangements. Please note the following deadlines for submitting completed forms to the Paul Menton Centre: **March 7, 2012** for the Winter Term.