

## Course Information

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### General Information

<b>Lecturer:</b>	<b>Sheila Mclraith</b>	<b>TA:</b>	<b>Jorge Baier</b>
<b>Office:</b>	Pratt 398D	<b>TA Email:</b>	jabaier@cs.toronto.edu
<b>Office Hour:</b>	By appointment (for now)		
<b>Phone:</b>	416-946-8484		
<b>Email:</b>	sheila@cdf.toronto.edu		
<b>Course Web Page:</b>	<a href="http://www.cs.toronto.edu/~sheila/2502/f06/">http://www.cs.toronto.edu/~sheila/2502/f06/</a>		
<b>Newsgroup:</b>	ut.cdf.csc486h		

ALL ANNOUNCEMENTS WILL BE MADE THROUGH THE COURSE WEB PAGE. (See the log file for updates.)  
IT IS YOUR RESPONSIBILITY TO VISIT IT FREQUENTLY.

<b>Lectures:</b>	Friday	12:00 – 2:00	BAB026
<b>Tutorials:</b>	To be determined.		

### Goal

- Intro to techniques used to represent knowledge & associated methods for automated reasoning
- Foundations for research in KR&R

### Textbook

"*Knowledge Representation and Reasoning*" by Brachman and Levesque (2004)

- Recommended but not required
- Lecture notes (slides) sufficient
- One copy on hold in the library

### Prerequisites

- A course in AI (e.g., CSC384)
- Working knowledge of Prolog or Lisp (e.g., CSC324)
- First-order logic (e.g., CSC330 or CSC2404)

### Marking

- 4 problem sets (60%)
- 2 in-class tests (40%)

### Format

- 2 hour lectures
- 1 hour tutorial (by arrangement – posted weekly on web).

### Important Administrative Dates

Add Deadline:	September 24
Drop Deadline:	November 5
Last day of classes:	December 8
Final exam period:	December 11 – December 21

**Course Topics (and chapters of book):**

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|-------------------------------|---------------------------------|
| 1. introduction               | 9. description logics           |
| 2. first-order logic          | 10. inheritance networks        |
| 3. expressing knowledge       | 11. defaults                    |
| 4. resolution                 | 12. probabilities               |
| 5. horn clauses               | 13. explanation and diagnosis   |
| 6. procedural representations | 14. action                      |
| 7. production systems         | 15. planning                    |
| 8. frames                     | 16. expressiveness/tractability |

**Tests**

- |                      |     |
|----------------------|-----|
| 1. Friday October 27 | 20% |
| 2. Friday December 8 | 20% |

**Assignments Due**

- |                       |     |
|-----------------------|-----|
| 1. Friday October 13  | 15% |
| 2. Friday November 10 | 20% |
| 3. Friday December 1  | 15% |
| 4. Friday December 8+ | 10% |

**Plagiarism**

Plagiarism -- or simply, cheating -- is taken to be the handing in of work not substantially the student's own. It is usually done without reference, but is unacceptable even in the guise of acknowledged copying. It is reprehensible, and the penalty will be severe.

It is not cheating, however, to discuss ideas and approaches to a problem, nor is it cheating to seek or accept help with a program or with writing a paper. Indeed, a moderate form of collaboration is encouraged as a useful part of any educational process. Nevertheless, good judgement must be used, and students are expected to present the results of their own thinking and writing. Never copy another student's work -- it is plagiarism to do so, even if the other student "explains it to you first." Never give your written work to others. Sharing work with others for the purposes of plagiarism is also a violation. Do not work together to form a collective solution, from which the members of the group copy out the final solution. Rather, walk away and recreate your own solution later.

**Late Policy**

- Late assignments will be handled based on a system of "grace days", as follows: Each student begins the term with 3 grace days. An assignment handed in from one minute to 24 hours late uses up one grace day. 24:01 to 48 hours late uses up two grace days, etc..
- Once you have exhausted your grace days, the penalty is 20% of the assignment total grade for each day.

**Silent Policy**

A silent policy will take effect at 6pm on the day before an assignment is due. This means that no question will be answered, whether it is asked on the newsgroup, by email or in person.

**Illness**

In the event of an illness or other catastrophe, get proper documentation (e.g., medical certificate), but if you have grace days left, use them. If you need those days back later, give your documentation to me at that time.