


Information Systems Analysis and Design CSC340




## General Information -- Winter 2004

**Lectures, Tutorials**  
**Textbooks, Reading Material**  
**Lecture Notes**  
**Attendance and Tutorials**  
**Requirements and Marking Scheme**  
**Assignments and Teams**  
**Warnings**



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## WWW (Who-Where-When) Course Information

**Instructor:** John Mylopoulos  
 Bahen bldg, room 7266  
**e-mail:** jm@cs.toronto.edu  
**Tutors:** Alexei Lapouchnian (alexei@cs), Shiva Nejati (shiva@cs), Theophanis Tsandilas (fanis@cs), Nan Zhang (nzhang), Dan Zhao (dzhao@cs)  
**Lectures:** M7-9, BA1130  
**Tutorials:** M6, BA1130, BA2139, BA3008, BA3116, BA1240  
**Office hours:** M5 in BA7266, or other times upon request.  
**Assignments:** Students work in teams of three for all assignments.  
**Meetings:** Every team should meet with the instructor at least once during the term.

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## Recommended Texts

**Textbook**


- None

**Supplementary Texts**

- Bennett, S., McRobb, S., Farmer, R., *Object-Oriented Systems Analysis and Design*, McGraw Hill, 1999.
- Maciaszek, L., *Requirements Analysis and System Design*, Addison-Wesley, 2001
- Hawryszkiewicz, I., *Systems Analysis and Design*, Prentice Hall, 1998, 4th edition.
- Coad, P. and Yourdan, E., *Object-Oriented Analysis*, Prentice-Hall, 1991, 2nd edition.
- Dahlbom, B. and Mathiassen, L., *Computers in Context: The Philosophy and Practice of Systems Design*, NCC Blackwell, Cambridge MA, 1993.


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## Course Prerequisites

- **To take this course, you must have completed CSC228 or CSC378 or CSC263 or CSC265, which are prerequisite courses, or get permission from the instructor.**



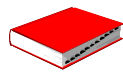
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## Course Material

- A long (...and older!) version of the lecture notes can be downloaded in PDF format from the course website:  
**<http://www.cs.toronto.edu/~jm/340S>**
- **Lecture slides** will be made available *after* each lecture. **Note**, you will have to take class notes because much of the lecture material will only be presented orally.



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## Course News

- **Can also be found at**  
**<http://www.cs.toronto.edu/~jm/340S>**
- **Make sure to check them out regularly.**



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## Slide Presentation Styles

**The Three Perspectives**

- **Technological perspective** -- IT tools, such as hardware, computer networks, databases, compilers, CASE tools,...and methods for using them.
- **Social perspective** -- applied sociology, anthropology, psychology etc., looking at issues such as: how do individuals and organizations use information, how are they affected by increased availability of information,...
- **Professional perspective** -- professional practices and standards in performing information service-related tasks, such as communication protocol standards, software standards, government policies on privacy, security, accuracy etc. of information, professional standards on information acquisition, cataloging, selection,...

**The Three Perspectives**

- **Technological perspective**
- **Social perspective**
- **Professional perspective**

*We'll favour this style this year!*

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## Attendance

- Attendance at lectures is mandatory. Much material and interpretation is covered during lectures that is *not* present in textbooks or notes. Experience has shown that your final exam grade is highly correlated with lecture attendance.
- Your individual TA will be marking your assignments. Therefore, it is wise to attend tutorials as well, and seek help from your TA. The tutorial sections will be covering background material and going into greater depth with worked out examples. To understand what your particular TA expects to see in an assignment, you should attend tutorials.

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## Tutorials

- Each tutorial section will consist of complete teams.
- The first tutorial (on Monday, January 12) will be used to form teams, among other things.
- For the first tutorial (6pm, Monday January 12), go to a tutorial room according to: Born between:
  - ✓ Jan 1 - Mar 15 --> BA1130
  - ✓ Mar 16 - May 31 --> BA2139
  - ✓ June 1 - Aug 15 --> BA3008
  - ✓ Aug 16 - Oct 31 --> BA3116
  - ✓ Nov 1 - Dec 31 --> BA7256 (temporary)
- If you do have partners already for your team, go together to the same tutorial section.

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## What's New, What's Different?

- We will be using UML (the "Unified Modeling Language") for all three assignments of the course.
- Will use OCL (the "Object Constraint Language") to make UML more expressive.
- Will be using goal models for the feasibility study.

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## Tentative Course Outline

**Week 1:** Introduction; Conceptual Modeling, Class Diagrams  
**Week 2:** State Diagrams, Goal Diagrams  
**Week 3:** The Feasibility Study; Information Acquisition;  
**Week 4:** Interaction Diagrams, Business Rules;  
**Week 5:** Requirements Analysis, UML, Use Cases  
**Week 6:** Non-Functional Requirements, Software Requirements Specifications  
**\*\*\*\*\* Reading Week \*\*\*\*\***  
**Week 7:** The Entity-Relationship Model  
**Week 8:** Information System Design, Hardware and Software Architectures  
**Week 9:** Selecting Hardware and Software  
**Week 10:** Database and Website Design  
**Week 11:** Object-Oriented Design  
**Week 12:** User Interface Design;  
**Week 13:** Other Phases; Course Summary

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## Course Requirements

| Task        | %    | Topic                       | Due Date   |
|-------------|------|-----------------------------|------------|
| Assignment1 | 10 % | Feasibility Study           | February 9 |
| Midterm     | 20 % |                             | March 1    |
| Assignment2 | 15 % | Requirements Specification  | March 8    |
| Assignment3 | 20 % | System Design               | April 9    |
| Final exam  | 35 % | All course material (2 hrs) |            |

There will be a 10% deduction for late assignments for each day of delay, to a maximum of 7 days; assignments will not be accepted beyond that point. Assignments must be submitted electronically in MS Word, rtf, postscript, or PDF format on the due date. Saturdays, Sundays and holidays count when calculating late days.

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## Permissions

- Permission to be excused from an assignment deadline or the midterm will only be granted for medical reasons.
- To get such a permission, please have the doctor who examined/treated you fill the "University Of Toronto Student medical certificate", available online at: [www.artsandscience.utoronto.ca/ofr/timetable/winter/](http://www.artsandscience.utoronto.ca/ofr/timetable/winter/)

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## Assignments

- There are three assignments in the course.
- All three assignments will be based on one project of your own choosing.
- The assignments involve doing a feasibility study for your chosen project, then requirements analysis and then design.
- If you do poorly in assignment 1, this may impact your work in assignments 2 & 3.
- Marking of assignments is more subjective than for other DCS courses; make sure to consult regularly with the instructor and your tutor, to make sure that what you doing is consistent with what they expect.

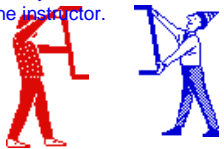
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## Assignments and Teams

- All assignments will be done in teams of three, where possible!
- Each team member is expected to make an equal contribution for each assignment. If contributions are uneven, marks will be adjusted for team members who did more/less work.
- If a team member drops the course, he or she should immediately notify his or her fellow team members, also the tutor or the instructor.




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## Warnings



- ⊗ **Do not use another team's solution** to avoid problems, discuss with fellow students from other teams only general approaches to assignment solutions; do not take notes during such discussions.
- ⊗ **Do not** interfere with the operation of CDF computers, fellow students' files, accounts or programs.
- ⊗ **Punishment** for violations to these rules can range from zero in a course assignment to expulsion from the University.
- ⊗ **Extensions** to assignment deadlines will **not** be granted for personal reasons (e.g., "I was too busy with another assignment").

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## What Did Other Students Say About This Course?

- ☺ The most useful course I have taken so far...
- ⊗ Useless course, all it teaches is common sense techniques which I would have used in the first place anyway!
- ⊗ Boring instructor, all he does is read from his slides...
- ☹ .....
- ☺ Interesting course, very different from others taught in this department.

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## Questions?



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