

Overview

Welcome to CSCC40H. This course consists of two lecture hours and one hour of tutorial each week; three assignments; a midterm; a presentation and a final exam.

Topics

1) Theory of systems and organizations: organization theory, systems life-cycle, role of systems analyst, 2) system analysis: data collection, requirements analysis, structured analysis, object-oriented analysis, system modeling, cost-benefit analysis, 3) system design: structured design, object-oriented design, user interface design, file and database design, 4) system implementation: project management, documentation, acceptance testing, hardware and software evaluation.

Course Schedule

Lecture: Wed 10-11AM (BV264) and Fri 10-11AM (BV340), Office Hours: Wed 12-1pm
Tutorials: Wed 2-3PM (BV469), Thur 3-4PM (BV462) [*no tutorial first week*]

Staff Information

Instructor: Wael Aboulsaadat Email: wael@cs.toronto.edu Office: PO103, Office #118

Course Prerequisites

Prerequisite: CSCB63H & [CGPA 3.0 or enrolment in a CSC subject POST]. If you do not have the course prerequisites, confer with instructor to determine if you may remain in the class.

Marking

Item	Weight	Description	Due Date
Assignment 1	10 %	Feasibility Study	Oct 15, 11:59PM
Midterm	15 %		Nov 3
Assignment 2	15 %	Requirements Specification	Nov 10, 11:59PM
Assignment 3	15 %	System Design	Dec 6, 11:59PM
Presentation	10%	Project Overview	Last week of classes
Final exam	35 %	All course material (3 hrs)	

References

There is no text book for this course. The following books are recommended online references:

- Systems analysis and design with UML version 2.0: an object-oriented approach. Alan Dennis, Barbara Haley Wixom, David Tegarden. Hoboken, NJ : J. Wiley, c2005. 2nd ed.
- Object-oriented analysis and design: understanding system development with UML 2.0. Mike O'Docherty. Chichester, England ; Hoboken, N.J. : Wiley, c2005
- Unified modeling language: systems analysis, design and development issues. Keng Siau, Terry Halpin. Hershey, Pa. : Idea Group Pub., c2001
- Applying UML: advanced application. Rob Pooley, Pauline Wilcox. Oxford ; Burlington, MA : Elsevier Butterworth-Heinemann, c2004.

Software

<http://argouml.tigris.org/> or <http://www.visual-paradigm.com>

Topic Schedule

Date	Topic (<i>subject to change</i>)
Sept 13	Introduction, conceptual modeling, class diagrams
Sept 20	State diagrams, goal diagrams
Sept 27	Feasibility study, information acquisition
Oct 4	Interaction diagrams, business rules
Oct 11	Requirements analysis, UML, use cases
Oct 18	Non-functional requirements, software requirements specification
Oct 25	Entity-relationship model, Database design
Nov 1	Information system design, hardware, software architecture
Nov 8	Selecting hardware and software
Nov 15	Object oriented design
Nov 22	User interface design
Nov 29	Project Presentations

Course Website

The course web site is available through the blackboard system at: <http://portal.utoronto.ca>. Files and announcements will be posted there. You are responsible for checking it regularly. You are encouraged to use the Blackboard bulletin board but it will not be monitored. Lecture notes will usually be posted on the course website prior to lecture.

Assignments

The due dates for each assignment will be as listed above. All files must be submitted electronically via blackboard. You have to use one of the following accepted formats: plain ASCII file, Postscript, or PDF. Handwritten assignments will not be marked.

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.
- All assignments will be done in teams of four, where possible!
- Each team member is expected to make an equal contribution for each assignment. Penalties for late homework: 10% for each day (00:01AM counts as one day late and no more than 3 penalty days). If your assignment is late you must submit it electronically via email to the TA and must cc the instructor.

Remarking Requests

For all the assignments, and the midterm: once your assignments/midterm have been marked and distributed in class, you have ONE WEEK to submit a written remarking request.

Academic Offences

<http://www.cs.toronto.edu/~fpitt/documents/plagiarism.html> !