Computer Science 2005

Software Engineering
Fall 2024

MEMORIAL UNIVERSITY

Department of Computer Science

Instructor: Mark Hatcher

Office Hours: Tuesdays 12pm & Fridays 1pm, EN2032

e-mail: mhatcher@mun.ca
- include COMP2005 in the subject line
- note that I do **not** check email via Brightspace
- don't expect replies outside working hours (Monday to Friday 9am to 4:30pm)

Lectures: Monday, Tuesday, Thursday **1-1:50pm**,, EN2040

Course Prerequisite: COMP 2001.

Course Content:
We will cover approaches, documents and tools that can help you to analyse, design, build, test and maintain large software applications. You'll get to apply and develop your learning by working in teams on a multi-stage project.

Topics include: The Unified Process, Project Inception, Requirements Gathering, Domain & Interaction Analysis, Software Design, The Use of Design Patterns, Project Management, Code Maintenance & Testing.

Evaluation Scheme:
There will be a small individual first assignment followed by iterative group work on the project. You will be assigned to a group containing 4 or 5 members and assessed as a group. There will also be two class exams.

Type	%	Approximate Due Dates (these may change)
Individual Assignment	5	September 16th
Group Project (iterative project submission dates listed)	40	October 4th (10%), October 25th (10%), November 8th (10%), November 22nd (10%)
Class Exams	50	October 7th, November 18th (25% each)
Group Project Presentation	5	April 3rd

<u>Full</u> participation in <u>all</u> iterations of the group project is compulsory. If you fail to fully participate in every iteration then you will score zero for the entire project. There is no alternative form of assessment.

You must also obtain a score of at least 50% in each of your class exams to pass this course.

There is no compulsory course text book, but wider reading is recommended:
- Applying UML & Patterns: 4th Edition (Larman)
- O-O Systems Analysis & Design (Bennet, McRobb & Farmer)
- Design Patterns: Elements of Reusable Object-Oriented Software (Gamma et al)

Classes and exams will be delivered on-campus. Class slides and other course materials will be made available in Brightspace on a weekly basis. In the event that on-campus activities are suspended, classes and assessments will be delivered online, as seamless as possible.

Course Schedule (tentative):

Week Beginning	Topics	Readings
September 2nd	Introduction Swing Primer	Class Slides #1, #2
September 9th	Inception and Vision Use Case Diagrams	Class Slides #3, #4, #5
September 16th	Use Case Descriptions Essential UI Prototyping	Class Slides #6, #7
September 23rd	Iterative Planning Domain Modelling	Class Slides #8, #9
September 30th	Sequence Diagrams GRASP Part 1	Class Slides #10
October 7th	**Class Exam 1 October 7th** Eclipse Tutorial	Class Slides #11
October 14th	Midterm Break 14th & 15th Design Class Diagrams	Class Slides #12
October 21st	Design Class Diagrams GRASP Part 2	Class Slides #12, #13
October 28th	More Design Patterns Logical Architecture	Class Slides #14, #15
November 4th	In the lab	none
November 11th	Testing Project Management	Class Slides #16, #17
November 18th	**Class Exam 2 November 18th** In the lab	none
November 25th	Code Maintenance Presentations	Class Slides #18
December 2nd	Presentations	none

Assessment Schedule (tentative):

Type	Item	Due Date
Individual	Individual Assignment	Sep 16th
Group Project	Iteration 0 (unmarked but necessary logistical tasks)	Sep 27th
	Iteration 1	Oct 4th
	Iteration 2	Oct 25th
	Iteration 3	Nov 8th
	Iteration 4	Nov 22nd
	Group Project Presentations	Apr 2nd
Exam	Class Exam 1	Oct 7th
	Class Exam 2	Nov 18th

Important Notes:

1. Memorial University of Newfoundland is committed to supporting inclusive education based on the principles of equity, accessibility and collaboration. Accommodations are provided within the scope of the University Policies for the Accommodations for Students with Disabilities(www.mun.ca/policy/site/policy.php?id=239). Students who may need an academic accommodation are asked to initiate the request with the Glenn Roy Blundon Centre at the earliest opportunity (www.mun.ca/blundon).

2. In the event of university closure on the day of an exam, the exam will be given in the next scheduled class.

3. Assignments will require programming in Java.

4. Assignments and project iterations are due at **11:59 p.m.** on the specified date, in the specified manner. No late assignments will be accepted. **It is your responsibility to make sure that the correct files are actually uploaded or present, so check for the confirmation that your files have been uploaded.** Be aware that the files you submit for evaluation should be uploaded on CITL before the due date and much before the cut off time. Even if you are late by a few seconds you will not be allowed to submit your work; hence you should try to upload the files at least 15 minutes before the cut off time since your system clock is not synchronized with the CITL's system clock and the cutoff time is based on CITL's system clock. Please note that if your files have been correctly uploaded, you will get a confirmation receipt from the Dropbox tool. If you do not receive this receipt, please contact the CITL Support team (https://www.citl.mun.ca/support/).

5. Note that, while the due times are at 11:59pm Newfoundland Time, help is not be available after 4:30pm on the due date, or on weekends. The last few hours from 4:30pm to 11:59pm should be used to finalize your work and submit it. Any questions you may have about the lab exercise, quiz or assignment should be asked well in advance of the due date/time to allow time for help to be given.

6. If, for special circumstances (such as medical or bereavement) you are going to miss an assignment or exam, then you must notify your instructor **as soon as possible**. Unless there is good justification this should happen before the assignment deadline, or before the start of the exam, and you must subsequently provide any related documentation (if required). Failure to do this can result in a mark of 0% for that work. For more information, please see the University Calendar - University Regulations - General Academic Regulations (Undergraduate) 6.7.5 (**Exemptions from Parts of the Evaluation**) and 6.15 (**Appeal of Decisions**) or consult the Registrar's Office. If your reasons for the missed work are acceptable, then your instructor will provide details of any alternate evaluation scheme.

7. **This course does not have an option for writing deferred class exams. If, for any reason, you are going to miss a class exam, you should contact your instructor right away, before the exam begins, giving the reasons for missing the exam, and requesting that the weight of the missed exam be added to the weight of the final exam. If you first contact the instructor after the missed exam, you will have to provide documentation that proves why it was not possible to make contact beforehand. Any change will be subject to approval.**

8. Assignments and class exams must be original and independent work. **Use of AI is forbidden.** Copying someone else's work or allowing your work to be copied is a serious breach of university regulations and ethics. Any and all copied material will receive the mark of 0%. **If your assignments are quite similar then it can be construed as copying.** (Even if you have done your own work but have consulted a friend as you are doing the assignment then the assignment will turn out to be quite similar.) Please see the University Calendar - General Academic Regulations (Undergraduate) - 6.12 (**Academic Misconduct**).

9. The final grade assigned for his course will be numerical. See: https://www.mun.ca/regoff/calendar/sectionNo=REGS-0661