Course Outline
Comp2404 - Introduction to Software Engineering
Winter 2021

Instructor: Dr. Nasser Mustafa
E-mail: nassermustafa@cunet.carleton.ca
Time: Lecture: 19:35 - 20:55 (Tuesday, Thursday)
    Tutorials: 13:05 - 14:25 (Tuesday)
                18:05 - 19:25 (Tuesday)
                11:35 - 12:55 (Friday)
Location: Online (Synchronous and Asynchronous)

Teaching Assistant: The names and emails of the course TA's are provided in Table 1, The TA's office hours will be announced later.

Table 1: Names and Emails of Comp2404 TA's

TA	Email
Bill Zhang	billzzhang@cmail.carleton.ca
Deen Haque	deenhaque@cmail.carleton.ca
Darren Pierre	darrenpierre@cmail.carleton.ca
Matthew Oneill	matthewoneill@cmail.carleton.ca
Max Bobrei	maxdobrei@cmail.carleton.ca
Nick Truong	nicktruong@cmail.carleton.ca
Zhenqing Lang	zhenqinglang@cmail.carleton.ca

Textbook: There is no specific textbook to use for this course, several PDF books are available online for free. However, I recommend this PDF book:
Object Oriented Programming in C++, Fourth Edition, ISBN: 0-672-32308-7 Robert Lafore

Course Description

Introduction to object-oriented software development, with emphasis on design and implementation of medium-sized programs. Topics include object-oriented concepts such as abstraction, modularity, encapsulation, reusability, and design patterns. C++ Language will be used in all lectures, assignments, tutorials, and exams.

Learning Outcomes
By the end of this course students should be able to:
- Understand the main concepts of Object-Oriented Programming (OOP).
- Use C++ programming language to apply the OOP concepts in writing 'real world' applications.
- Utilize modern development IDEs (eg. Eclipse, Papyrus) in the design and development

of OOP applications.
- Design UML class diagrams for real world problems.
- Apply some OOP design patterns in applications development to enhance their maintenance.

Assignments

- There will be 4 assignments in this course, spaced roughly two weeks apart, see **Table 2**

Table 2: Comp2404 Assignments Schedule

Assignment	Posting Date (DD/MM)	Submission Date (DD/MM)	Time
1	28/01	11/02	23:59 pm
2	11/02	25/02	23:59 pm
3	02/03	18/03	23:59 pm
4	18/03	01/04	23:59 pm

- Do not post or share solutions or partial solutions with anyone.
- All assignments are equally weighted. A breakdown of each assignment (due date) will be given when classes start.

- All assignments will be made available on the course web page as they are released.
- All assignments submissions must be your own individual and original work (see plagiarism).

Recommendations

- Do not wait until the last minute to submit your assignments. Start early and keep submitting partially completed versions. That way, if you get sick, your partially completed version will be marked, and you will not get 0.
- Aim to submit your final submission *at least* one hour in advance of the due date and time.
- Being sick on the day an assignment is due is not an excuse for not doing it. Last minute issues (e.g., home internet/device failure, sudden illness) are not considered acceptable excuses for having completed no work over the duration that the assignment was available.
- Always keep a backup of your work, perhaps on a USB flash drive, via Dropbox, or by sending yourself an email with your assignment attached. That way you can access your code from anywhere.
- If any instructions are unclear, please ask for clarification before solving the assignment. Incorrect assumptions or misunderstood directions will not be accepted as valid excuses. It is your responsibility to ensure you understand the question completely.

Submission Guidelines

- You will be using Carleton's cuLearn system to submit your assignments and view your grades throughout the term.
- You should take the time to ensure that assignments are neat, legible and easy to understand. A portion of your grade for assignments will be given for the readability of them and for your demonstration that you have completed the assigned tasks. Often this is in the form of documentation and testing.
- The assignment page will have a section on submission guidelines. Please observe all special requirements placed there as well.

- DO NOT email your assignments to any TAs nor the Instructor unless requested to do so.
- It is your responsibility to ENSURE that your submission was successful. Submitting the wrong file or failure to correctly submit your work will result in a mark of zero for that assignment. Consequently, after you upload your submission to cuLearn you must re-download it immediately and ensure that it is the correct type of file, it has the correct filename, and that it can be opened/run (as appropriate).

Assignments Grading
- All assignments submitted through cuLearn will be graded by the TAs or the Instructor.
- All assignments are counted towards the final grade, and no extra credit assignments will be provided.
- Grading turn-around is expected to be within one week of the submission deadline, though this may vary depending on the volume and complexity of assignments.
- You will be provided with a mark and feedback on your assignment through cuLearn as well.
- You should ensure that the posted marks are correct.
- Any concerns regarding assignment marks should be brought to the attention of the person who marked it, not the instructor.
- If the TA is unable to reasonably assess your concerns either they or you may contact the instructor to arbitrate the discussion.
- Voicing your concerns must be done **no later than two weeks** after the assignment has been returned to you. After this time, no remarking will be done.

Late Policy & Accommodations
- Assignments must be handed in before the due date and time.
- You will be given 2 weeks time to complete each assignment.
- Any assignments submitted after the deadline will be marked with a late penalty. There is no grace period.
- The standard late penalty is -25% per day. (E.g., if your assignment is 1 second late, your maximum grade is 75%, 24 hours and 1 second late, your maximum possible grade is 50%).
- *Any* changes made to an assignment submission after the deadline (even minor or insubstantial ones) will result in the *entire* submission being considered late.
- Any submissions subject to a 100% late penalty will not be marked.   Being sick on the due date of an assignment (or any other last-minute interruption) is not sufficient cause for accommodation.
- If you are sick for an extended period, please inform the instructor (not the TAs). You will need to have official documentation of illness, which should be submitted as early as possible. Such situations will be handled on a case-by-case basis at the discretion of the instructor.
- Accommodations will not be provided after the due date for any reason.

Mid-term Tests

One mandatory test will be held during regular lecture time. This will be scheduled during the semester. You must attend, write, and submit your test to be graded. The exam will be proctored online, therefore make sure your computer is attached to a camera and

microphone. <mark>No external headphones, ear pods are allowed during the exam</mark>.

It is your responsibility to ensure that your test marks posted to cuLearn are correct, and to do so within two weeks of those marks being made available. Please speak with your grading TA regarding any such concerns or questions.

If you are sick and must miss a scheduled midterm, you must inform the instructor (via email) *before* the time of your missed test. You will be required to submit official documentation to verify your illness. Exceptions are only granted at the discretion of the instructor.

Tutorials

Each student must be registered in a tutorial. Different activities may be assigned in a tutorial. If nothing is assigned, then it will function as office hours with the TA.

Final Exam

The time and place, as well as the format of the final exam will be announced later in the term. Do not make travel plans until the dates are known as no advance exams will be given. Attendance   of this exam is mandatory. The deferral process for formally scheduled exams is handled through the registrar's office, see the registrar's website for more details.

Lectures attendance

A video recording for the lecture will be posted after the class. Additional notes/videos may be posted to CuLearn. We will either use Zoom, BigBlueButton, or other video conferencing services.

Assessment and course passing

Students will be evaluated in this course according to the following measures in **Table *3***

Table 3: Course Evaluation

Component	No. components	Percentage/component	Total
Tutorial	10	8%	8
Assignment	4	7%	28
Midterm	1	20%	20
Final Exam	1	44%	44

Please note This course has timed written assessments, which may consist of tests, midterms and/or final examinations. The Carleton University e-Proctoring system may be used in your assessments, and requires the use of webcams, microphones, and smart phones.

Undergraduate Academic Advisor

The Undergraduate Advisor for the School of Computer Science is available in Room 5302C HP; by telephone at 520-2600, ext. 4364; or by email at undergraduate_advisor@scs.carleton.ca.

The undergraduate advisor can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for

graduation. The undergraduate advisor will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and Writing Tutorial Services.

SCS Computer Laboratory

SCS students can access one of the designated labs for your course. The lab schedule can be found at: https://carleton.ca/scs/tech-support/computer-laboratories/. All SCS computer lab and technical support information can be found at: https://carleton.ca/scs/technical-support/. Technical support is available in room HP5161 Monday to Friday from 9:00 until 17:00 or by emailing support@scs.carleton.ca.

University Policies

For information about Carleton's academic year, including registration and withdrawal dates, see Carleton's Academic Calendar.

Pregnancy Obligation. Please contact your instructor 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, visit Equity Services.

Religious Obligation. Please contact your instructor 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, visit Equity Services.

Academic Accommodations for Students with Disabilities If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website.

Survivors of Sexual Violence. As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities. Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor 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 policy.

Student Academic Integrity Policy. Every student should be familiar with the Carleton University student academic integrity policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of F in the course or even being expelled from the program or University. Examples of punishable offences include: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found here.

Plagiarism. As defined by Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offences will be reviewed by the office of the Dean of Science.

Unauthorized Co-operation or Collaboration. Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis". Please refer to the course outline statement or the instructor concerning this issue.