Class Schedule

<table>
<thead>
<tr>
<th>Classroom:</th>
<th>AT 101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class times:</td>
<td>Wed. and Fri. 11:30 – 13:00</td>
</tr>
<tr>
<td>Course web site:</td>
<td>cuLearn</td>
</tr>
</tbody>
</table>

Instructor Information

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Office</th>
<th>Telephone</th>
<th>Email</th>
<th>Office Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Christine Laurendeau</td>
<td>5376 HP</td>
<td>613-520-2600 x1253</td>
<td><a href="mailto:claurend@scs.carleton.ca">claurend@scs.carleton.ca</a></td>
<td>posted in cuLearn</td>
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</tbody>
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Teaching Assistants

Detailed TA information can be found in cuLearn.

Course Description

Introduction to object-oriented software development, with emphasis on design and implementation of medium-sized programs. Topics include abstraction, modularity, encapsulation, reusability, and design patterns.

Topics Covered

The course will cover the following topics, although some material may be omitted due to time constraints:

- Basics of Object Design
  - Overview of software engineering principles
  - Basics of C++ development
  - Basics of classes
- Data Abstraction
  - Encapsulation
  - Inheritance
  - Design patterns
  - Overloading
  - Polymorphism
- Code Reuse
  - Templates
  - The Standard Template Library
  - Files and streams
- Software Robustness
  - Dealing with faults
  - Exception handling

Prerequisites

COMP 2401

Textbook(s)

**Evaluation**

Students will be evaluated in this course according to the following measures:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>35 %</td>
<td>bi-weekly</td>
</tr>
<tr>
<td>Tutorials</td>
<td>10 %</td>
<td>weekly</td>
</tr>
<tr>
<td>Midterm</td>
<td>15 %</td>
<td>in-class (Mar. 4)</td>
</tr>
<tr>
<td>Final exam</td>
<td>40 %</td>
<td>TBA</td>
</tr>
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</table>

**Evaluation Note**

In order to pass the course, students must obtain a passing grade on the final exam.

**Tutorials**

The Rules:
- Tutorials begin on Jan. 20.
- Tutorial attendance is **mandatory** and will be counted towards your final grade. You must attend the tutorial session for which you are registered.
- During your tutorial session, you **must** work on the assigned tutorial provided. Anyone not working on the tutorial will be asked to leave the room.
- Tutorial TAs will assign you a grade at the end of the tutorial.
- For each tutorial, you get one point (1% of your final grade) if:
  - you work on the tutorial during the entire session
  - you complete at least 50% of the tutorial work
- For each tutorial, you get zero if:
  - you are absent for any reason
  - you do other work during the session
  - you do not complete at least 50% of the tutorial work
  - you complete or even start the tutorial before the session
- Tutorial grading is at the discretion of the TA and is not negotiable.

**Assignments**

There will be five (5) assignments in this course, and they will be accessible in cuLearn. Assignments must be submitted on Carleton’s cuLearn before the due date and time. **NO LATE ASSIGNMENTS WILL BE ACCEPTED.**

**Attendance**

- Lecture recordings may be provided, but **exclusively** as a study aid. They are not a substitute for lecture attendance. Students are responsible for learning the material covered during all lectures.
- All concepts covered in class are part of the course material, including the course notes and annotations, the in-class coding exercises, and the in-class and forum discussions.

**Collaboration Policy**

Collaboration on assignments is restricted to members of the same group, which will consist of no more than two (2) students. Collaboration between groups is **strictly** disallowed. If you need help, please see a TA or your instructor. Posting assignment solutions on discussion boards before the due date and time is also prohibited.

**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 the Writing Tutorial Services.
University Policies

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. Some examples of offences are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

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.

Academic Accommodations for Students with Disabilities

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and 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 me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable) at http://www2.carleton.ca/pmc/new-and-current-students/datesand-deadlines/

Religious Obligation

Write to the 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 the Equity Services website: http://www2.carleton.ca/equity/

Pregnancy Obligation

Write to the 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 the Equity Services website: http://www2.carleton.ca/equity/

Medical Certificate

The following is a link to the official medical certificate accepted by Carleton University for the deferral of final examinations or assignments in undergraduate courses. To access the form, please go to http://www.carleton.ca/registrar/forms