Class Schedule

Classroom: ME 3380

Class Times: Mon. & Wed. 8:30-10:00

Course Website: on CULearn

Teaching Assistants

<table>
<thead>
<tr>
<th>TA</th>
<th>Email</th>
<th>Office hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenneth Diamond</td>
<td><a href="mailto:KennethDiamond@cmail.carleton.ca">KennethDiamond@cmail.carleton.ca</a></td>
<td>Tuesday 11:00-13:00</td>
</tr>
<tr>
<td>Eric Adamski</td>
<td><a href="mailto:EricAdamski@cmail.carleton.ca">EricAdamski@cmail.carleton.ca</a></td>
<td>Thursday 14:35-16:35</td>
</tr>
<tr>
<td>Andrew Weylie</td>
<td><a href="mailto:AndrewWylie@cmail.carleton.ca">AndrewWylie@cmail.carleton.ca</a></td>
<td>Monday – after the tutorial</td>
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Course Description

Introduction to system-level programming with fundamental OS concepts, procedures, primitive data types, user defined types. Topics may include process management, memory management, process coordination and synchronization, inter-process communication, file systems, networking, pointers, heap and stack memory management, and system/library calls.

Topics Covered

The following topics will be covered in this course:

- Introduction to Computing – Overview of computer organization, basics of programming
- Data Representation - primitive data types, compound data types, Pointers
- Memory Management - stack and heap, dynamic memory allocation, linked lists
- Program Building – compiling, linking, make program, debugger
- Concurrent Computing - concurrent systems, processes (signals, sockets), threads
File I/O

• Program Structure – i/o, procedural program design, program organization

Prerequisites

COMP 1406 or COMP 1006, with a minimum grade of C

Course Objectives

"Objectivism" is a term that describes a branch of philosophy that originated in the early nineteenth century. Gottlob Frege was the first to apply it, when he expounded an epistemological and metaphysical theory contrary to that of Immanuel Kant. Kant's rationalism attempted to reconcile the failures he perceived in realism, empiricism, and idealism and to establish a critical method of approach in the distinction between epistemology and metaphysics.

Textbook (s)

• Adam Hoover, System Programming with C and Unix, Addison-Wesley, 2010.

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>
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</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>25%</td>
<td>TBA on cuLearn</td>
</tr>
<tr>
<td>Tutorials</td>
<td>10%</td>
<td>weekly</td>
</tr>
<tr>
<td>Tests</td>
<td>25%</td>
<td>TBA</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
<td></td>
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<tr>
<td>Class participation</td>
<td>5%</td>
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Evaluation Note

There will be 5 assignments in this course. Assignments will be announced in class and will be available on cuLearn. Assignments are to be submitted electronically before the due date on cuLearn. No Late Assignments.

Tutorials

There will be 11 tutorials. You can earn 1% for each tutorial attended up to 10% of the final grade. The tutorials provide you with a time to gain experience with the material leaned in class. Use it to gain insight and ask questions if you do not understand the material.

Tutorial rules:
You must attend the tutorial session for which you are registered. The tutorial TA has the discretion to assign you with a grade for the tutorial. In order to earn the grade for the tutorial you must:
- Complete at least 50% of the tutorial during tutorial time.
- Attend the tutorial throughout the session.
- Work on the tutorial material during tutorial time.

In-class Tests

There will be one or two tests during the semester.

Midterm Note

Students must retain all assignments and midterm results in case of questions regarding correctness of recorded marks. The marks will be posted on-line. The students should ensure that the posted marks are correct. Any complaints regarding assignment marks should be brought to the attention of the T.A. who marked it (only if the T.A. does not address the problem to your satisfaction should you bring the matter to the instructor). This should be done no later than one week after the assignment has been marked. After this time no remarking will be done.

Final Exam Note

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. The final for this course will be graded using the Scantron automatic grading system.

Assignments

In computer programming, an assignment statement sets or re-sets the value stored in the storage location(s) denoted by a variable name. In most imperative computer programming languages, assignment statements are one of the basic statements.

Attendance

Class attendance is very important as students will be responsible for all items discussed in class.

Course notes will be provided. However, the course notes cover only the main topics. In class tests and final exam will include all material that is covered during class time, tutorials, and assignments (including material in the course book).

Collaboration Policy

Collaborating on assignments is strictly disallowed. You must complete the work by yourself. 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.
**SCS Computer Accounts**

Any student taking an SCS course qualifies to have an SCS account. SCS accounts can be created at the following URL: http://www.scs.carleton.ca/newacct. SCS students can access one of the designated labs for your course. The labs are operational 7 days a week 24 hours per day, please be advised that the building will be closed overnight, Mon. - Fri. 23:00 - 8:00 and on weekends from 17:00 - 8:00. Technical support is available in room HP5161 Monday to Friday from 9:00 until 17:00. All SCS account related information is accessible at the following URL: http://www.scs.carleton.ca/nethelp.

**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/dates-and-deadlines

Religious Obligation

Write to me 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 me 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