

	 <p>Carleton University School of Computer Science</p> <p><b>COMP 1405</b> Intro. to Computer Science I</p> <p><b>Course Outline (F2015)</b></p>	
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## Course Information

- **Instructor:** Mark Lanthier (Office 5127HP, Phone: 520-2600x8305, Email: [lanthier@scs.carleton.ca](mailto:lanthier@scs.carleton.ca))
- **TAs:** Displayed on the course website: <http://people.scs.carleton.ca/~lanthier/teaching/COMP1405/>
- **Class:** Mondays and Wednesdays from 1:05pm-2:25pm in room 2200 River Building

## Course Description

This is a beginner's course in programming. You will learn the basics of programming in JAVA beginning with simple concepts such as getting user input and displaying output as well as the use of variables, conditionals, iteration, arrays, and functions & procedures. The course will discuss the use of objects as data structures but WILL NOT discuss aspects of object-oriented programming. Instead, the course will emphasize problem solving and computational thinking by touching upon topics such as pseudocode, sorting, searching, recursion and simulation.

## Course Objectives

This course will teach you how to write programs to solve problems in computer science.

## Textbook

There is no textbook assigned to this course. Instead, there is an in-depth set of course notes which are available online.

## Evaluation

Component	Weight	Due Date
Tutorials	10%	one each week starting the week of Monday, September 14th
Assignments	30%	six at 5% each
In-Class Tests	30%	two in class on Monday, Oct 5th and Monday, November 9th
Final Exam	30%	(to be announced)
(Bonus)	3%	Participate (in person, not online) in the following 2 workshops within the first month of class: <ul style="list-style-type: none"> <li>• Time Management (<a href="http://carleton.ca/lss/study-skills-workshops/">http://carleton.ca/lss/study-skills-workshops/</a>)</li> <li>• Managing Procrastination (<a href="http://carleton.ca/lss/study-skills-workshops/">http://carleton.ca/lss/study-skills-workshops/</a>)</li> </ul>

## Laboratory Software

You will be programming using the "Java Development Kit (JDK) SE 7u45" which is available from Oracle. This software is installed on all laboratory computers so if you work at school ... you do not have to do anything tricky. If you work at home, you will probably want to download this free software on your machine there. Go to the following website to download the software:

1. Go to <http://www.oracle.com/technetwork/java/javase/downloads/index.html> and download the latest version of the **Java Platform (JDK)** by clicking on the image from that website that is shown on the right here:



The top gray table shows various versions depending on your operating system. Make sure to accept the licence agreement by clicking the radio button. Then click on the line number that corresponds to your operating system. For windows, the file should be something like this: [jdk-8u51-windows-x64.exe](#). Running the file will install JAVA onto your hard drive. Let it install to the default location ... just keep selecting **Next**.

You will want to likely bookmark the JAVA API documentation in your browser: <http://docs.oracle.com/javase/8/docs/api/>

This link describes all the classes and packages available in the standard JAVA. You may want to use it to look up the functions that are available for use.

2. The above software is simply the JAVA compiler and interpreter (and other tidbits). We will also be using an editor to write/compile/run our JAVA code. There are a few editors (called IDEs - Integrated Development Environments) that you can use. Choose the one that you are most comfortable with. In all cases, make sure that you have already installed JAVA and its documentation as described above.
  - **Dr.Java** - ([www.drjava.org](http://www.drjava.org)) This is an easy-to-use IDE for both MacOS and Windows-based PCs. It is free.
  - **Eclipse** ([www.eclipse.org](http://www.eclipse.org)) - The best IDE to use, but a little advanced for new users. If you are a seasoned programmer and can learn things easily, then this is the best editor for any computer science student.
  - **JCreator LE v4.5** ([www.jcreator.com](http://www.jcreator.com)) - This is a much easier-to-use IDE for Windows-based PC users. I believe only the older LE v4.5 version is free.
  - **JGrasp** - ([www.jgrasp.org](http://www.jgrasp.org)) This is an easy-to-use IDE for both MacOS and Windows-based PCs. It is free.
  - **Others** - you may have your own favorite IDE already.

## In-class Tests

In class tests will be 40 minute closed-book and only cover material discussed since the previous in-class test. Each test must be handed back immediately when completed in order to be graded. Both tests will count in your final grade.

## Assignments

There will be assignments in this course which will be available on the course web page. All assignments are counted towards the final grade. Assignments must be handed in before or on the due date and time. NO LATE ASSIGNMENTS WILL BE ACCEPTED. You will be using Carleton's <https://carleton.ca/culearn/> system to submit your assignments and view your grades throughout the term. For more information about how to do this, please go to <http://carleton.ca/culearnsupport/students/>. Always keep a backup of your work, perhaps on a USB flash drive or by sending yourself an email with your assignment attached. That way you can access your code from anywhere. You should take the time to ensure that assignments are neat, legible and easy to understand. Any instructions required by the teaching assistants (for example any assumptions you made about the assignment) should be clearly indicated on a separate README.TXT file, included with the assignment. Remember, it is YOUR responsibility to demonstrate that you have understood and completed the assignment. 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. The cuLearn system also allows you to view your

marks on-line. You should ensure that the posted marks are correct. Any complaints regarding assignment marks should be brought to the attention of the TA who marked it (only if the TA does not address the problem to your satisfaction should you bring the matter to the instructor). This should be done no later than two weeks after the assignment has been handed graded. After this time, no remarking will be done. Being "sick" on the day an assignment is due is not an excuse for not doing it. You have over two weeks to do each assignment. 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. DO NOT email your assignments to any TAs. If you have problems submitting, it is likely due to the fact that you missed the deadline by a few minutes. You will get 0, despite your hard work. So please, submit at least 15 minutes BEFORE the assignment is due ... consider yourself forewarned. If you are at home trying to submit and you cannot get it to work, again, you will be late with your assignment and it will not be accepted. If you are sick for an extended period of time, please inform the instructor (not the TAs) immediately. You will need to have official documentation of illness. At this point, it will be up to the instructor as to how to handle the situation. In regards to the in-class tests, you must attend and write them. If sick, you must inform the instructor via email the day before and you will need official documentation as well.

## Tutorials

There will be mandatory tutorials in this course which will be counted towards your final grade. You will be assigned 1% of your final grade each time you **attend AND participate** in the tutorial for the full 1.5 hours. While in the tutorial, you must work on the tutorial work provided. You may not work on your assignment in that lab while the tutorial is going on. Also, anyone who is not working on the tutorial must leave the room. Near the end of the tutorial, the TA will make a note of who is working on the tutorial and who is not. If the TA finds that you did not spend your time doing the tutorial work, then you will not get your grade, even if you are there for the full 1.5 hours. Also, you are not allowed to get a hold of the tutorial beforehand to work on it or complete it before your tutorial session. If you show up to the tutorial with it partially or completely done, you will not get your grade. So, to put it simply, come to the tutorial each week, do the work while you are there and then leave. You should plan to stay the full 1.5 hours each week. You **MUST** attend the tutorial that you are registered in. Tutorial take place in 4155HP. Tutorials will begin on the week of Monday, September 14th. There will be no tutorials during the break from October 26th through October 30th.

## 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.
- **Unauthorized Co-operation or Collaboration**  
You are not allowed to work with another student on your assignments. Each assignment must be completed on your own. 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.

- **Intellectual Property**

Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copy protected and remain the intellectual property of their respective author(s). All course materials, including PowerPoint presentations, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s). Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s).

## Equity Statements

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

- **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://carleton.ca/equity/>
- **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://carleton.ca/equity/>
- **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](mailto: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://carleton.ca/pmc/students/dates-and-deadlines/>
- You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://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://carleton.ca/registrar/forms/>

## Learning Support Services Incentive Program

This course has been registered in the study skills Incentive Program offered through Learning Support Services (LSS). Workshops at LSS are designed to help students develop and refine their academic skills for a university environment. **To earn an additional 3.0% bonus towards your final grade** you are expected to attend both the **"Time Management"** and **"Managing Procrastination"** workshops. The workshops for the Fall 2015 term will become **available starting September 14<sup>th</sup>** and **must be completed by October 14<sup>th</sup>** to receive credit for the Incentive Program.

- **you must bring your Carleton ID card with you to each workshop.**
- **completing these workshops online will not entitle you to the bonus marks.**

It is the student's responsibility to ensure that they have signed the attendance sheet at the end of each workshop in order to receive an incentive mark for workshops that they attend. If students leave the workshop early or do not sign the attendance sheet at the end of the workshop, LSS will have no record of their attendance at the workshop and, therefore, the student will not receive any bonus/participation mark for that workshop.

To see the complete workshop schedule and to preregister (not mandatory) please visit the study skills workshop page on the LSS website: <http://carleton.ca/lss/study-skills-workshops/>. As an additional incentive, students who attend 5 or more workshops throughout the academic year can apply to have the Skills for Academic Success Certificate added to their Co-curricular Record. For more information, please contact Learning Support Services at [learningsupport@carleton.ca](mailto:learningsupport@carleton.ca) or 613-520-2600 ext.1125.